

Kirtland AFB Bulk Fuels Facility GWTS Expansion/Monitoring - 62599DM01
Daily Quality Control Report - Non-Construction

ROLE: drinking water sampling

DATE: 4/16/2020

WEATHER: Sunny, windy, warm

1. ONSITE PERSONNEL (including subcontractors and government employees)

Name	Organization
G. Bracht	EA - Site Manager/Supervisor
P. Ferari	EA - Site Health and Safety Office
J. Hamm	EA Sample team
	AS

2. OPERATING EQUIPMENT

Team #1		Team #2		Spare	
YSI Professional Plus 15K101396 Wh0003	<input checked="" type="checkbox"/>	YSI Professional Plus 15K101396 Wh0001	<input type="checkbox"/>	YSI Professional Plus 15L100541 Wh0002	<input type="checkbox"/>
MiniRAE 3000 592-915778 Wh0005	<input type="checkbox"/>	MiniRAE 3000 592-915790 Wh0004	<input type="checkbox"/>	MiniRAE 3000 592-915579 Wh0006	<input type="checkbox"/>
Hach 2100Q 15100C045034 Wh0008	<input type="checkbox"/>	Hach 2100Q 15100C044633 Wh0009	<input type="checkbox"/>	Hach 2100Q 15100C045025 Wh0007	<input checked="" type="checkbox"/>
Solinst Water Level Meter 253054	<input type="checkbox"/>	Solinst Water Level Meter 253053	<input type="checkbox"/>	Solinst Water Level Meter 253056	<input type="checkbox"/>

3. DAILY SUMMARY (include QC samples collected, deviations from planning documents, conversations with the public and governmental employees, and problems encountered and remedies applied)

~~AS~~

4. WORK PERFORMED (indicate location, time, and description of work performed by prime and/or subcontractors)

1345	Arrive at KAFB-016
1349	Sample KAFB-016
1405	Arrive at KAFB-003
1415	Sample KAFB-003
1440	Arrive at VA-2

Reviewed by: Amanda Smith

DQCR Page 1 of 2
Initials: AS

Reviewed date: 5/6/2020

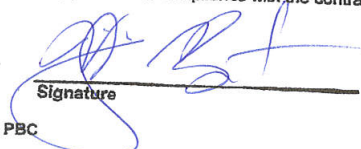
Kirtland AFB Bulk Fuels Facility GWTS Expansion/Monitoring -- 62599DM01
 Daily Quality Control Report - Non-Construction

4. WORK PERFORMED (Continued) DATE: 4/16/2020

1505	Sample VA-2
1530	Return to field trailer for shipping - end of day.

5. CONTRACTOR'S VERIFICATION: I certify that to the best of my knowledge the above report is complete and correct. All equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications above.

GINNY BRACHT
 Name


 Signature

EA Engineering, Science and Technology Inc., PBC

Reviewed by: Amanda Smith

DQCR Page 2 of 2
 Initials: AS

Reviewed date: 5/6/2020

Kirtland AFB Bulk Fuels Facility GWTS Expansion/Monitoring -- 62599DM01
Daily Quality Control Report – Non-Construction

ROLE: Drinking Water Sampling DATE: 5/5/2020

WEATHER: Windy, sunny, warm

1. ONSITE PERSONNEL (including subcontractors and government employees)	
Name	Organization
G. Bucht	EA - Site Manager/Supervisor / <u>sample team</u>
P. Feram	EA - Site Health and Safety Office
N. Peterson	<u>EA - sample team</u>
<u>AS</u>	

2. OPERATING EQUIPMENT		
Team #1	Team #2	Spare
YSI Professional Plus 15K101396 Wh0003 <u>18L100378</u> <input checked="" type="checkbox"/>	YSI Professional Plus 15K101396 Wh0001 <input type="checkbox"/>	YSI Professional Plus 15L100541 Wh0002 <input type="checkbox"/>
MiniRAE 3000 592-915778 Wh0005 <input type="checkbox"/>	MiniRAE 3000 592-915790 Wh0004 <input type="checkbox"/>	MiniRAE 3000 592-915579 Wh0006 <input type="checkbox"/>
Hach 2100Q 15100C045034 Wh0008 <input type="checkbox"/>	Hach 2100Q 15100C044633 Wh0009 <input checked="" type="checkbox"/>	Hach 2100Q 15100C045025 Wh0007 <input type="checkbox"/>
Solinst Water Level Meter 253054 <input type="checkbox"/>	Solinst Water Level Meter 253053 <input type="checkbox"/>	Solinst Water Level Meter 253056 <input type="checkbox"/>

3. DAILY SUMMARY (include QC samples collected, deviations from planning documents, conversations with the public and governmental employees, and problems encountered and remedies applied)	
0933	Collected MS/MSD at KAFB-016
1030	Collected Dup at VAZ
<u>GB 5/5/2020</u>	

4. WORK PERFORMED (Indicate location, time, and description of work performed by prime and/or subcontractors)	
0924	Leaving GWTS trailer for KAFB-016
0925	Arrived at KAFB-016
0949	Leaving KAFB-016 for KAFB-003
0957	Arrived at KAFB-003

Reviewed by: Amanda Smith Initials: AS Reviewed date: 5/6/2020
DQCR Page 1 of 2

Kirtland AFB Bulk Fuels Facility GWTS Expansion/Monitoring - 62735DM02
 Daily Quality Control Report - Non-Construction *jm*

ROLE: Drinking water sampling

DATE: 6/2/2020

WEATHER: Warm, humid, partly cloudy

1. ONSITE PERSONNEL (including subcontractors and government employees)

Name	Organization
<u>Ginny Bracht</u>	<u>EA - Site Manager/Supervisor</u>
<u>Pete Feran</u>	<u>EA - Site Health and Safety Office</u>
<u>Dylan Schneek</u>	<u>EA - Sample Team</u>
<i>jm</i>	

2. OPERATING EQUIPMENT

Team #1		Team #2		Spares	
YSI Professional Plus 15K101396 Wh0002	<input checked="" type="checkbox"/>	YSI Professional Plus 15K101396 Wh0001	<input checked="" type="checkbox"/>	YSI Professional Plus 15L100541 Wh0002	<input type="checkbox"/>
MiniRAE 3000 592-915778 Wh0005	<input type="checkbox"/>	MiniRAE 3000 592-915790 Wh0004	<input checked="" type="checkbox"/>	MiniRAE 3000 592-915579 Wh0006	<input type="checkbox"/>
Hach 2100Q 16100C045034 Wh0008	<input type="checkbox"/>	Hach 2100Q 16100C044633 Wh0009	<input type="checkbox"/>	Hach 2100Q 16100C045026 Wh0007	<input checked="" type="checkbox"/>
Solinst Water Level Meter 253054	<input type="checkbox"/>	Solinst Water Level Meter 253053	<input type="checkbox"/>	Solinst Water Level Meter 253056	<input type="checkbox"/>

3. DAILY SUMMARY (include QC samples collected, deviations from planning documents, conversations with the public and governmental employees, and problems encountered and remedies applied)

1145 Duplicate sample for inorganics only at VA-2

4. WORK PERFORMED (Indicate location, time, and description of work performed by prime and/or subcontractors)

<u>0913</u>	<u>Arrive at KAEB-016</u>
<u>0930</u>	<u>Sample time at KAEB-016</u>
<u>0950</u>	<u>Arrive at KAEB-015</u>
<u>1000</u>	<u>Sample time at KAEB-015</u>
<u>1024</u>	<u>Arrive at KAEB-003; sample at 1040</u>

Reviewed by: J. Messenger

DCQR Page 1 of 2
 Initials: jm

Reviewed date: 6-15-2020



Drinking Water Supply Sampling Log

Year: 2020
 Quarter: 2 - April

Project: Kirtland AFB BFF ST-106/SS-111

Well ID: KAFB-003

Purge Information and Field Parameter

Date: 04/16/2020

Sample Team: Bracht/Hamm

Sample Team Signature: *[Signature]*

Purge Start Time: 1310

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1415	0.58	20.3	44.1	3.96	428.2	7.86	202.1

Sample Time: 1415 Sample Date: 04/16/2020

Bubbles in the vials?: Yes No Where? _____ Amount _____ Size _____
 6mm

Sampled by: Bracht

Sample ID:	GWK003-2021-1	Duplicate Sample ID (if applicable):	GWK003-6021-1
COC:	COC-K003-2021-1		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: _____

Reviewed by: *[Signature]*

Review Date: 5/6/2020



Drinking Water Supply Sampling Log

Year: 2020

Quarter: 2 - April

Project: Kirtland AFB BFF ST-106/SS-111

Well ID: KAFB-016

Purge Information and Field Parameter

Date: 04/16/2020

Sample Team: Bracht/Hamm

Sample Team Signature: [Signature]

Purge Start Time: 1300

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1349	0.30	25.1	41.1	3.23	525	7.77	20.3

Sample Time: 1349 Sample Date: 04/16/2020

Bubbles in the vials?: Yes No Where? Amount Size
6mm

Sampled by: G. Bracht

Sample ID:	GWK016-2021-1	Duplicate Sample ID (if applicable):	GWK016-6021-1
COC:	COC-K016-2021-1		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: _____

Reviewed by: Amanda Smith

Review Date: 5/6/2020



Drinking Water Supply Sampling Log

Year: 2020
 Quarter: 2 - April

Project: Kirtland AFB BFF ST-106/SS-111

Well ID: ST106-VA-2-1

Purge Information and Field Parameter

Date: 04/16/2020

Sample Team: Bracht / Hamm

Sample Team Signature: *[Signature]*

Purge Start Time: 1445

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1305 1505 GB	0.58	22.4	26.4	2.18	442.8	7.83	216.8

Sample Time: ~~1305~~ 1505 GB Sample Date: 04/16/2020

Bubbles in the vials?: Yes No Where? _____ Amount _____ Size _____
 6mm

Sampled by: Bracht

Sample ID:	GWVA2-2021-1	Duplicate Sample ID (if applicable):	GWVA2-6021-1
COC:	COC-VA2-2021-1		

Contact Information


For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876


Comments: _____


Reviewed by: *Amanda Smith*

Review Date: 5/10/2020


 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 594-7000 Fax No: (410) 771-1625		<h2>CHAIN-OF-CUSTODY RECORD</h2>				COC NUMBER COC-K003-2021-1								
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62736DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA Pam Moss: pmoss@eaest.com EA								
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		YEAR: 2020 QUARTER: 2 - April								
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)							COMMENTS			
				Total Number of Bottles	(EPA Method 504.1) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EOB	Total (As, Pb, Cd, K, Na, Mg) (8020A/6010C)	Dissolved Fe, Mn (6010C)		Chloride, bromide, sulfate (300.0A)	Nitrate-Nitrite (353.2)	Alkalinity and Bicarbonate (2320B)
1	GWK003-2021-1	4/16/2020	1415	6	3	3								
2														
3														
4														
5														
6														

SAMPLER(S): G. BRACHT		RELINQUISHED BY:		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7855		TB2021-03	
Printed Name and Signature: Ginny Bracht		DATE: 4/16/2020		TIME: 1730		RECEIVED BY:	
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:	
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:	

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 711-1625		<h2>CHAIN-OF-CUSTODY RECORD</h2>				COC NUMBER COC-K016-2021-1											
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA											
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		YEAR: 2020 QUARTER: 2 - April											
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS			
				Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	Total (As/ Pb, Cd, Ni, Mn, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0A)	Nitrate-Nitrite (353.2)	(3230B) Ammony (Total, Carbonate, and Bicarbonate)		(4500-H39C) Ammonia Nitrogen	(4500-SCC) Sulfide	
1	GWK016-2021-1	4/16/2021	1349	6	-	3	-	3									
2																	
3																	
4																	
5																	
6																	
SAMPLER(S): <i>G. Bracht</i>				RELINQUISHED BY: <i>G. Bracht</i>				COURIER AND SHIPPING NUMBER: FedEx <i>4538 3732 7855</i>				TB2021-03					
Printed Name and Signature: <i>Ginny Bracht</i>		DATE: <i>4/16/2020</i>		TIME: <i>1730</i>		RECEIVED BY:		DATE:		TIME:		Printed Name and Signature:					
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:		DATE:		TIME:		Printed Name and Signature:					
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:		DATE:		TIME:		Printed Name and Signature:					

 225 Schling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		<h2>CHAIN-OF-CUSTODY RECORD</h2>				COC NUMBER COC-VA2-2021-1											
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA											
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		YEAR: 2020 QUARTER: 2 - April											
				ANALYSIS REQUIRED (Specify number of bottles)			COMMENTS										
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX *	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(8020/6010C) Total (As, Pb, Cd, K, Na, Mg)	Dissolved Fe, Mn	(6010C) Chloride, bromide, sulfate	(90.0A) Nitrate-Nitrite	(353.2) Alkalinity (Total, Carbonate, and Bicarbonate)	(2320B) Ammonia Nitrogen	(4500NH3BC) Sulfide	(4500 SCOF)	
1	GWWA2-2021-1	4/16/2020	1505	6	-	3	-	3									
2																	
3																	
4																	
5																	
6																	
*Please report results for BTEX, TCE, PCE, and VC																	
SAMPLER(S): <i>G. Bacht</i>				COURIER AND SHIPPING NUMBER: FedEx <i>4538 3732 7855</i>													
RELINQUISHED BY:				DATE		TIME		RECEIVED BY:				DATE		TIME			
Printed Name and Signature: <i>Ginny Beach</i>				DATE: <i>4/16/2020</i>		TIME: <i>1730</i>		Printed Name and Signature:				DATE:		TIME:			
Printed Name and Signature:				DATE:		TIME:		Printed Name and Signature:				DATE:		TIME:			
Printed Name and Signature:				DATE:		TIME:		Printed Name and Signature:				DATE:		TIME:			

03
TB2021-4 GB

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1825		CHAIN-OF-CUSTODY RECORD						COC NUMBER							
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		COC-TB2021-03							
PROJECT SITE AND PHASE: ST106/SS111				LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		YEAR: 2020 QUARTER: 2 - April							
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)								COMMENTS			
				Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(EPA Method 6010C) Total (As, Pb, Ca, K, Na, Mg)	Disolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0A)		Nitrate-Nitrite (353.2)	Alkalinity (Total, Carbonate, and Bicarbonate) (2320B)	Ammonia Nitrogen (4500NH3B/C) Sulfide (4500 S2CF)
1	TB2021-03	4/16/2020	1617	4	-	2	-	2							
2															
3															
4															
5															
6															
Associated with: GWVA7-2021-1 GWK003-2021-1 GWK016-2021-1															
SAMPLER(S): G. Bracht		RELINQUISHED BY:				DATE		TIME		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7855					
Printed Name and Signature: G. BRACHT		Printed Name and Signature: [Signature]		DATE: 4/16/2020		TIME: 1730		RECEIVED BY:							
Printed Name and Signature:		Printed Name and Signature:		DATE:		TIME:		Printed Name and Signature:							
Printed Name and Signature:		Printed Name and Signature:		DATE:		TIME:		Printed Name and Signature:							



Drinking Water Supply Sampling Log

Year: 2020

Quarter: 2 - May

Project: Kirtland AFB BFF ST-106/SS-111

Well ID: KAFB-003

Purge Information and Field Parameter

Date: 5-5-2020

Sample Team: NP & GB

Sample Team Signature: *Nicole Petros*

Purge Start Time: > 24 hrs

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1003	0.18	19.8	55.1	4.92	422.0	7.75	224.3

Sample Time: 1003 Sample Date: 5-5-2020

Bubbles in the vials?: Yes No Where? _____ Amount _____ Size _____
6mm

Sampled by: GB

Sample ID:	GWK003-2022	Duplicate Sample ID (if applicable):	GWK003-6022
COC:	COC-K003-2022		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: Per Kirtland water plant, KAFB-003 had been running for at least 24 hrs prior to sampling.

Reviewed by: *Amanda Smith*

Review Date: 5/6/2020

Page 1 of 1



Drinking Water Supply Sampling Log

Year: 2020
 Quarter: 2 - May

Project: Kirtland AFB BFF ST-106/SS-111 Well ID: KAFB-016

Purge Information and Field Parameter

Date: 5-5-2020

Sample Team: NP & GB

Sample Team Signature: Nicole Peter

Purge Start Time: 0845

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
0933	0.37	25.4	12.5	1.00	514	7.55	271.3

Sample Time: 0933 Sample Date: 5-5-2020

Bubbles in the vials?: Yes No Where? Amount Size
6mm

Sampled by: GB

Sample ID:	GWK016-2022	Duplicate Sample ID (if applicable):	GWK016-6022
COC:	COC-K016-2022		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: _____

Reviewed by: Aracanda Smith

Review Date: 5/6/2020



Drinking Water Supply Sampling Log

Year: 2020
 Quarter: 2 - May

Project: Kirtland AFB BFF ST-106/SS-111 Well ID: ST106-VA-2

Purge Information and Field Parameter

Date: 5-5-2020

Sample Team: NP & GB

Sample Team Signature: Nicole Peters

Purge Start Time: 0925

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1030	0.16	22.0	29.9	2.61	419.5	7.82	239.7

Sample Time: 1030 Sample Date: 5-5-2020

Bubbles in the vials?: Yes No Where? Amount Size
6mm

Sampled by: GB

Sample ID:	GWVA2-2022	Duplicate Sample ID (if applicable):	GWVA2-6022
COC:	COC-VA2-2022		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595


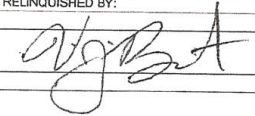
For well ST106-VA-2: Call Tim Melody 505-991-3876


Comments: Pump was already running when we arrived. Per VA personnel, it had been on for at least 1 hour.

Reviewed by: Amber Smith

Review Date: 5/6/2020

EA [®] 226 Schling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		CHAIN-OF-CUSTODY RECORD						COC NUMBER COC-K003-2022									
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020									
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - May									
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)							COMMENTS						
				Total Number of Bottles	(EPA Method 824.2) VOCs	(EPA Method 824.2) BTEX	(EPA Method 824.2) BTEXN	(EPA Method 824.1) EDB	Total (As, Pb, Ca, K, Na, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)		Chloride, Bromide, Sulfate (300.0A)	Nitrate-Nitrite (353.2)	(2320B) Arsenic and Boron (Total, Cadmium, and Bicarbonate)	Ammonia Nitrogen (4500-NH3IC)	(4500 SDC-F) Sulfide	
1	GWK003-2022	5/5/2020	1003	6	-	3	-	3									
2																	
3																	
4																	
5																	
6																	
SAMPLER(S): <i>G. Bracht</i>		RELINQUISHED BY: <i>G. Bracht</i>		DATE: <i>5/5/2020</i>		TIME: <i>1400</i>		COURIER AND SHIPPING NUMBER: <i>FedEx 1483 5473 0800</i>		TB2022- <i>02</i>		RECEIVED BY:		DATE:		TIME:	
Printed Name and Signature:		Printed Name and Signature:		DATE:		TIME:		Printed Name and Signature:		DATE:		TIME:		DATE:		TIME:	

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 524-7000 Fax No: (410) 771-1655		<h2 style="margin: 0;">CHAIN-OF-CUSTODY RECORD</h2>						COC NUMBER <b style="background-color: yellow;">COC-K016-2022								
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404			FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		YEAR: 2020							
PROJECT SITE AND PHASE: ST106/SS111				LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858				QUARTER: 2 - May						
ANALYSIS REQUIRED (Specify number of bottles)																
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(EPA Method 504.1) Total (As, Pb, Cd, Ni, Mn, Mg)	(6010C) Dissolved Fe, Mn	(300.0A) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(Total Carbonate and Bicarbonate)	(2320B) Ammonia Nitrogen	(4500-SCOF) Sulfide	COMMENTS
1	GWK016-2022	5-5-2020	0933	18	9	9										Additional volume provided for MS/MSD
2																
3																
4																
5																
6																
SAMPLER(S): G. Bracht				RELINQUISHED BY: 				COURIER AND SHIPPING NUMBER: FedEx 1483 5473 0800				TB2022- 02				
DATE: 5/5/2020 TIME: 1400				RECEIVED BY:				DATE: TIME:								
PRINTED NAME AND SIGNATURE: GINNY BRACHT				PRINTED NAME AND SIGNATURE:				DATE: TIME:								
PRINTED NAME AND SIGNATURE:				PRINTED NAME AND SIGNATURE:				DATE: TIME:								
PRINTED NAME AND SIGNATURE:				PRINTED NAME AND SIGNATURE:				DATE: TIME:								

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1825		<h2>CHAIN-OF-CUSTODY RECORD</h2>				COC NUMBER COC-VA2-2022								
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA								
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		YEAR: 2020 QUARTER: 2 - May								
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)							COMMENTS			
				Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EOB	(EPA Method 504.1) Total (As, Pb, Cd, Ni, Mn, Mg)	(9020/00100) Dissolved Fe, Mn (6010C)		Chloride, bromide, sulfate (300.0A)	Nitrate-Nitrite (353.2)	(Total, Carbonate, and Bicarbonate) Alkalinity (2320B) Ammonia Nitrogen (4500NH3B/C) (4500S2CF) Solids
1	GWVA2-2022	5-5-2020	1030	6	-	3	-	3						* Please also report results for TCE, PCE, and VC
2	GWVA2-6022	5-5-2020	1030	6	-	3	-	3						* Please also report results for TCE, PCE, and VC
3														
4														
5														
6														
SAMPLER(S): G. Bracht				RELINQUISHED BY: GUNN BRACHT <i>G. Bracht</i>				COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7844				TB2022-01		
Printed Name and Signature:		DATE: 5/5/2020		TIME: 1400		RECEIVED BY:		DATE:		TIME:				
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:		DATE:		TIME:				
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:		DATE:		TIME:				
Printed Name and Signature:		DATE:		TIME:		RECEIVED BY:		DATE:		TIME:				

EA		225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		CHAIN-OF-CUSTODY RECORD				COC NUMBER COC-TB2022-01						
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020						
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - May						
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)							COMMENTS			
				Total Number of Bottles	VOCS (EPA Method 824.2) BTEx	(EPA Method 824.2) BTEx	(EPA Method 824.2) BTExN	EDB (EPA Method 824.1)	Total (As, Pb, Cd, Ni, Mn, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)		Chloride, bromide, sulfate (300.04)	Nitrate-Nitrite (353.2)	
1	TB2022-01	5/5/2020	0900	4	2	2	2							
2														
3														
4														
5														
6														
Associated with: GWVAZ-2022 GWVAZ-6022														
SAMPLER(S): G. BRACHT				COURIER AND SHIPPING NUMBER: FedEx 4538 373 2 7844										
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME							
Printed Name and Signature: GINNY BRACHT <i>G. Bracht</i>		5/5/2020	1400	Printed Name and Signature:										
Printed Name and Signature:				Printed Name and Signature:										
Printed Name and Signature:				Printed Name and Signature:										

EA 225 Schling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1825		CHAIN-OF-CUSTODY RECORD						COC NUMBER COC-TB2022-02											
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020											
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - May											
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)								COMMENTS							
				Total Number of Bottles	VOCs (EPA Method 524.2)	BTEX (EPA Method 524.2)	EDB (EPA Method 524.2)	BTXN (EPA Method 504.1)	Total (As P, O, C, N, H, Mg) (EPA Method 504.1)	Disolved Fe, Mn (6010C) (6020A/6010C)	Chloride, bromide, sulfate (300.0A)		Nitrate-Nitrite (351.2)	Alkalinity (Total Carbonate and Bicarbonate) (232.0B)	Ammonia Nitrogen (450NH ₃ B/C) (450 S2CF) Sulfide				
1	TB2022-02	5/5/2020	0800	4	-	2	-	2											
2																			
3																			
4																			
5																			
6																			
Associated with: GWK003-2022 GWK010-2022																			
SAMPLER(S): G. BRACHT				COURIER AND SHIPPING NUMBER: FedEx 1483 5473 0800															
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME												
Printed Name and Signature: GINNY BRACHT <i>G. Bracht</i>		5/5/2020	1400	Printed Name and Signature:															
Printed Name and Signature:				Printed Name and Signature:															
Printed Name and Signature:				Printed Name and Signature:															



Drinking Water Supply Sampling Log

Year: 2020

Quarter: 2 - June

Project: Kirtland AFB BFF ST-106/SS-111

Well ID: KAFB-003

Purge Information and Field Parameter

Date: 6/2/2020

Sample Team: GB, DS

Sample Team Signature

Purge Start Time: 6/1/2020 0800*

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1040	0.19	21.9	49.6	4.33	407.4	7.74	285.3

Sample Time: 1040 Sample Date: 6-2-2020

 Bubbles in the vials?: Yes No Where? _____ Amount _____ Size _____
 6mm

Sampled by: GB

Sample ID:	GWK003-2023	Duplicate Sample ID (if applicable):	GWK003-6023
COC:	COC-K003-2023		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: *Well KAFB-003 has been running for at least 24 hrs, per Kirtland Water Plant

Reviewed by: J. Messenger

Review Date: 6-15-2020

Page 1 of 1



Drinking Water Supply Sampling Log

Year: 2020

Quarter: 2 - June

Project: Kirtland AFB BFF ST-106/SS-111Well ID: KAFB-015

Purge Information and Field Parameter

Date: 6/2/2020Sample Team: GB, DS

Sample Team Signature

Purge Start Time: 0830

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1000	0.39	26.6	15.0	1.20	468.1	7.84	266.7

Sample Time: 1000 Sample Date: 6-2-2020Bubbles in the vials?: Yes No Where? Amount Size

6mm

Sampled by: GB

Sample ID:	GWK015-2023	Duplicate Sample ID (if applicable):	GWK015-6023
COC:	COC-K015-2023		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: _____

Reviewed by: J. MessengerReview Date: 6-15-2020

Page 1 of 1



Drinking Water Supply Sampling Log

Year: 2020

Quarter: 2 - June

Project: Kirtland AFB BFF ST-106/SS-111Well ID: KAFB-016

Purge Information and Field Parameter

Date: 6/2/2020Sample Team: GB, DS

Sample Team Signature

Purge Start Time: 0835

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
0930	0.50	26.6	38.6 14.4	2.57 1.17	576	6.95	331.1

Sample Time: 0930 Sample Date: 6/2/2020Bubbles in the vials?: Yes No Where? Amount Size

6mm

Sampled by: GBSample ID: GWK016-2023

Duplicate Sample ID (if applicable):

GWK016-6023COC: COC-K016-2023

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595

For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: _____

Reviewed by: J. MessengerReview Date: 6-15-2020

Page 1 of 1



Drinking Water Supply Sampling Log

Year: 2020

Quarter: 2 - June

Project: Kirtland AFB BFF ST-106/SS-111

Well ID: ST106-VA-2

Purge Information and Field Parameter

Date: 6-2-2020

Sample Team: GB, DS

Sample Team Signature:

Purge Start Time: 1106

Time	Turbidity (NTU)	Temp. (°C)	Saturated DO (%)	DO (mg/L)	Specific Conductance (µS/cm)	pH	ORP (mV)
1130	0.45	22.9	13.4	1.15	430.6	7.73	275.4

Sample Time: 1130 Sample Date: 6-2-2020

Bubbles in the vials?: Yes No Where? _____ Amount _____ Size _____

6mm

Sampled by: GB

Sample ID:	GWVA2-2023	Duplicate Sample ID (if applicable):	GWVA2-6023
COC:	COC-VA2-2023		

Contact Information

For wells KAFB-003, KAFB-015, and KAFB-016: Call Mark Dalzell at 505-228-8595


For well ST106-VA-2: Call Tim Melody 505-991-3876

Comments: _____

Reviewed by: J. Messenger


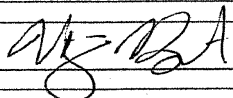
Review Date: 6-15-2020

Page 1 of 1

		225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 694-7000 Fax No: (410) 774-1625		CHAIN-OF-CUSTODY RECORD				COC NUMBER COC-TB2023-1						
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020						
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858		FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - June						
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)								COMMENTS		
				Total Number of Bottles	VOCs (EPA Method 824.2)	BTX (EPA Method 824.2)	BTXN (EPA Method 824.2)	EDS (EPA Method 804.1)	Total (As, Pb, Cd, Ni, Mn, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0A)		Nitrate-Nitrite (353.2)	Alkalinity (Total, Carbonate, and Bicarbonate) (2320B)
1	TB2023-1	6/2/2020	0800	4	2	2								
2														
3														
4														
5														
6														

Associated with:
 GWVA2-2023
 GWK015-2023

SAMPLER(S): G. Bracht				COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7822			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME
Printed Name and Signature: GINNY BRACHT <i>G. Bracht</i>		6/2/2020	1500	Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			

		225 Schilling Creek Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		<h2 style="margin: 0;">CHAIN-OF-CUSTODY RECORD</h2>						COC NUMBER COC-TB2023-2					
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020							
PROJECT SITE AND PHASE: IT106/SS111		LAB PO NUMBER: 18065		LAB CONTACT: 1 (912) 354-7858						QUARTER: 2 - June					
				ANALYSIS REQUIRED (Specify number of bottles)											
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	VOCs (EPA Method 524.2)	BTEX (EPA Method 524.2)	EDB (EPA Method 504.1)	Total (As, Pb, Cd, Cu, Ni, Mn) (EPA Method 601.0)	Dissolved Fe, Mn (601.0)	Chloride, bromide, sulfide (300.0A)	Nitrate-Nitrite (353.2)	Ammonia Nitrogen (2320B)	Alkalinity (4500 sCaF) Sulfide	COMMENTS	
1	TB2023-2	6/2/2020	0800	4	-	2	-	2							
2															
3															
4															
5															
6															
Associated with: GWK016-2023 GWK003-2023															
SAMPLER(S): G. Bracht				COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7833											
RELINQUISHED BY:				DATE		TIME		RECEIVED BY:				DATE		TIME	
Printed Name and Signature: GINNY BRACHT 				6/2/2020		1500		Printed Name and Signature:				DATE		TIME	
Printed Name and Signature:				DATE		TIME		Printed Name and Signature:				DATE		TIME	
Printed Name and Signature:				DATE		TIME		Printed Name and Signature:				DATE		TIME	

225 Schling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1025		CHAIN-OF-CUSTODY RECORD			COC NUMBER
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		COC-K003-2023
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		YEAR: 2020
			LAB CONTACT: 1 (912) 354-7858		QUARTER: 2 - June

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS			
				Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(EPA Method 6010C) Total (As, Pb, Cd, K, Na, Mg)	(6010C) Dissolved Fe, Mn	Chloride, bromide, sulfate (300.0A)	Nitrate-Nitrite (353.2)	Alkalinity (Total, Carbonate, and Bicarbonate)		(2320B) Ammonia Nitrogen	(4500-S201) Sulfide	
1	GWK003-2023	6/2/2020	1040	6	-	3	-	3									
2																	
3																	
4																	
5																	
6																	

SAMPLER(S): G. Bracht		RELINQUISHED BY:		DATE		TIME		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7833			TB2023- 2	
Printed Name and Signature:		DATE		TIME		RECEIVED BY:			DATE		TIME	
GINNY BRACHT		6/2/2020		1500								
Printed Name and Signature:		DATE		TIME		Printed Name and Signature:			DATE		TIME	
Printed Name and Signature:		DATE		TIME		Printed Name and Signature:			DATE		TIME	

225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		CHAIN-OF-CUSTODY RECORD					COC NUMBER													
		PROJECT NAME: Kirtland AFB Bulk Fuels Facility					PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		COC-K015-2023							
PROJECT SITE AND PHASE: ST106/SS111			LAB PO NUMBER: 16065			LAB CONTACT: 1 (912) 354-7858			YEAR: 2020		QUARTER: 2 - June									
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS						
				Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(6020A/6010C) Total (As, Pb, Ca, K, Na, Mg)	(6010C) Dissolved Fe, Mn	Chloride, bromide, sulfate (300.0A)	Nitrate-Nitrite (353.2)	(Total, Carbonate, and Bicarbonate) Alkalinity (2320B)		Ammonia Nitrogen (4500NH ₃ B/C) Sulfide (4500 S ₂ C/F)					
1	GWK015-2023	6/2/2020	1000	6	-	3	-	3												
2																				
3																				
4																				
5																				
6																				

AMPLER(S): <i>G. Bracht</i>				TB2023- 1			
RELINQUISHED BY:		DATE		TIME		COURIER AND SHIPPING NUMBER:	
Printed Name and Signature:		6/2/2020		1500		FedEx 4538 3732 7822	
Printed Name and Signature:						RECEIVED BY:	
Printed Name and Signature:						DATE	
Printed Name and Signature:						TIME	

225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		CHAIN-OF-CUSTODY RECORD					COC NUMBER								
							COC-K016-2023								
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020							
						FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - June							
PROJECT SITE AND PHASE: ST106/SS111			LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7858										
				ANALYSIS REQUIRED (Specify number of bottles)											
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(EPA Method 6010C) Total (As, Pb, Cd, K, Na, Mg)	Dissolved Fe, Mn	Chloride, bromide, sulfate (300.0A) (6010C)	Nitrate-nitrite (353.2)	Alkalinity (Total, Carbonate, and Bicarbonate) (2320B)	Ammonia Nitrogen (4500NH3BC) Sulfide (4500 S2CF)	COMMENTS
1	GWK016-2023	6/2/2020	0930	15	-	3	-	2							
2															
3															
4															
5															
6															
										TB2023- 2					
SAMPLER(S): G. Bacht					COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7833										
RELINQUISHED BY:				DATE		TIME		RECEIVED BY:				DATE		TIME	
GINNY BRACHT				6/2/2020		1500									
Printed Name and Signature:								Printed Name and Signature:							
Printed Name and Signature:								Printed Name and Signature:							
Printed Name and Signature:								Printed Name and Signature:							

225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1825	CHAIN-OF-CUSTODY RECORD			COC NUMBER
	PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	FAX AND MAIL REPORTSEDD TO: Tara Lamond: tlamond@east.com EA Amanda Smith: asmith@east.com EA FAX AND MAIL REPORTSEDD TO: Pam Moss: pmoss@east.com EA
PROJECT SITE AND PHASE: ST106/SS111	LAB PO NUMBER: 16065	LAB CONTACT: 1 (912)354-7858		YEAR: 2020 QUARTER: 2 - June

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS				
				Total Number of Bottles	(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 524.2) EDB	Total (As, Pb, Cd, Ni, Mn) (EPA Method 504.1)	Dissolved Fe, Mn (60100)	Chloride, bromide, sulfate (300.0A)	Nitrate-Nitrite (353.2)	(450.0) SPCF Sludge		(450.0) HBCI Ammonia Nitrogen (23209) Alkalinity (Total, Carbonate, and Bicarbonate)			
1	GWVA2-2023	6/2/2020	1130	6	*	3	-	3										*Please also report results for TCE, PCE, and VC
2																		
3																		
4																		
5																		
6																		

APLER(S): G. Bracht				TB2023- 1			
RELINQUISHED BY:		DATE		TIME		COURIER AND SHIPPING NUMBER:	
Name and Signature: GINNY BRACHT <i>[Signature]</i>		6/2/2020		1500		FedEx 4388 3732 7822	
Name and Signature:		DATE		TIME		RECEIVED BY:	
Name and Signature:		DATE		TIME		Name and Signature:	
Name and Signature:		DATE		TIME		Name and Signature:	

225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 594-7000 Fax No: (410) 771-1625		CHAIN-OF-CUSTODY RECORD				COC NUMBER
						COC-K016-2023
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Eurofins Lancaster Laboratories 2425 New Holland Pike Lancaster PA 17601	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA	FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA	YEAR: 2020	
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 14800	LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258			QUARTER: 2 - June

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS	
					VOCs (2260C)	BTEX (2260C)	BTEXN (2260C)	EDB (2011)	Total (As, Pb, Cd, K, Na, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, Bromide, Sulfate (300.0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3)	Sulfide (SM4500S2CF)	Alkalinity (SM2320B)		
1	GWK016-2023	6/12/2020	0930	7						1	1*	1	1	1	1	1	
2																	
3																	
4																	
5																	
6																	

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): <u>G. Bracht</u>				COURIER AND SHIPPING NUMBER: FedEx <u>8155 3312 8164</u>			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME
Printed Name and Signature: <u>GINNY BRACHT</u>		<u>6/12/2020</u>	<u>1500</u>	Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			

225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 594-7000 Fax No: (410) 771-1625		CHAIN-OF-CUSTODY RECORD				COC NUMBER
						COC-K003-2023
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Eurofins Lancaster Laboratories 2425 New Holland Pike Lancaster PA 17601	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020	
			FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - June	
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 14800	LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258			

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS	
					(9280C) VOCs	(9280C) BTEX	(9280C) BTEXN	(9280C) EDB	(9011) Total (As, Pb, Ca, K, Na, Mg)	(6020A,6010C) Dissolved Fe, Mn	(6010C) Chloride, bromide, sulfate	(300.0) Nitrate-Nitrite	(353.2) Ammonia	(SM4500NH3) Sulfide	(SM4500SCF) Alkalinity		(SM2320B) Alkalinity
1	GWK003-2023	6/21/2020	1040	7						1	1*	1	1	1	1	1	
2																	
3																	
4																	
5																	
6																	

*Dissolved Fe, Mn aliquot was field filtered


SAMPLER(S): <u>G. Bracht</u>				COURIER AND SHIPPING NUMBER: <u>FedEx 8155 3312 8164</u>			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME
<u>GINNY BRACHT</u> <i>G. Bracht</i>		<u>6/21/2020</u>	<u>1500</u>				
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			

<div style="display: inline-block; vertical-align: middle; font-size: 8px;"> 225 Schilling Circle, Suite 400 Hunt Valley, MD Tel No. (410) 584-7000 Fax No. (410) 771-1625 </div>		CHAIN-OF-CUSTODY RECORD				COC NUMBER	
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Eurofins Lancaster Laboratories 2425 New Holland Pike Lancaster PA 17601		COC-VA2-2023	
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 14800		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		YEAR: 2020	
				LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258		QUARTER: 2 - June	

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS
					VOCs (8280C)	BTEX (8280C)	BTEXN (8280C)	EDB (8011)	Total (As, Pb, Cd, K, Na, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3)	Sulfide (SM4500S2CF)	Alkalinity (SM2320B)	
1	GWVA2-2023	6/2/2020	1130	7	---	---	---	---	1	1*	1	1	1	1	1	
2	GWVA2-6023	6/2/2020	1130	7	---	---	---	---	1	1*	1	1	1	1	1	
3																
4																
5																
6																

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): <i>G. Bracht</i>				COURIER AND SHIPPING NUMBER: FedEx 8155 3312 8175			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME
<i>Ginny Bracht</i>		6/2/2020	1500				
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No. (410) 771-1625		CHAIN-OF-CUSTODY RECORD						COC NUMBER							
COC-K015-2023		PROJECT NAME: Kirtland AFB Bulk Fuels Facility		PROJECT NUMBER: 62735DM02		LABORATORY NAME AND CONTACT: Eurofins Lancaster Laboratories 2425 New Holland Pike Lancaster PA 17601		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA		YEAR: 2020					
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 14800		LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258				FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA		QUARTER: 2 - June					
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)								COMMENTS		
					VOCs (9280C)	BTEX (9280C)	BTEXN (9280C)	EDB (9011)	Total (As Pb, Cd, K, Na, Mg) (6020A, 6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)		Ammonia (SM4500NH3) Sulfide	(SM4500SCF) Alkalinity
1	GWK015-2023	6/2/2020	1000	7					1	1*	1	1	1	1	
2															
3															
4															
5															
6															

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): <i>G. Badd</i>			COURIER AND SHIPPING NUMBER: FedEx <i>8155 3312 8175 GB 8137 2565 9507</i>		
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
<i>Ginny Brachi</i>	6/2/2020	1500			
Printed Name and Signature:			Printed Name and Signature:		

APPENDIX H-1

Data Quality Evaluation Report – Drinking Water Supply Well Samples (April–June 2020)

LIST OF ACRONYMS AND ABBREVIATIONS

%	percent
AFB	Air Force Base
BTEX	benzene, toluene, ethylbenzene, and xylenes
DL	detection limit
DoD	Department of Defense
EDB	ethylene dibromide
ELLE	Eurofins Lancaster Laboratories Environmental, LLC
EPA	U.S. Environmental Protection Agency
ICP	inductively coupled plasma
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LOD	limit of detection
LOQ	limit of quantitation
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
Q2	second quarter of the year (April 1 – June 30)
QAPjP	Quality Assurance Project Plan
QC	quality control
RL	reporting limit
RPD	relative percent different
SDG	sample delivery group
SM	Standard Method
SW	Solid Waste
TA	Eurofins TestAmerica Laboratories, Inc.
VOA	volatile organic analysis
VOC	volatile organic compound

DATA QUALITY EVALUATION REPORT – DRINKING WATER SUPPLY WELL SAMPLES (April–June 2020)

1. LABORATORY DATA QUALITY SUMMARY

This Data Quality Evaluation Report describes the findings of the data validation performed for the analysis of drinking water supply well samples collected during April–June 2020 (quarter 2 [Q2]). These data were collected in support of the Work Plan for Vadose Zone Coring, Vapor Monitoring, and Water Supply Sampling, Bulk Fuels Facility, Solid Waste Management Units ST-106 and SS-111, Kirtland Air Force Base (AFB), New Mexico (Kirtland AFB, 2017). Sampling and analysis for the April–June 2020 events were conducted in accordance with the procedures and overall quality control (QC) and quality assurance protocols presented in the Work Plan and Quality Assurance Project Plan (QAPjP) for Bulk Fuels Facility Vadose Zone Treatability Studies, Solid Waste Management Units ST-106/SS-111, Kirtland AFB, New Mexico (Kirtland AFB, 2017).

Samples discussed in this report were collected on April 16, May 5, and June 2 in association with the Kirtland AFB drinking water supply wells KAFB-003, and KAFB-016 and the Raymond G. Murphy Veterans Affairs Medical Center drinking water supply well ST106-VA-2. Water supply well samples were collected at KAFB-015 on June 2 only as this well was undergoing repair in April and May. Field QC samples were collected in association with the monthly sampling events and included two field duplicates and five trip blank samples.

Drinking water samples were shipped to Eurofins TestAmerica Laboratories, Inc. (TA), Savannah, Georgia for analysis. TA Savannah maintains a current New Mexico Environment Department Drinking Water Laboratory Certification Program accreditation to perform the analyses required for this project. Sample analyses were performed in accordance with the U.S. Environmental Protection Agency (EPA) Methods for the Determination of Organic Compounds in Drinking Water, 1988 and Supplements.

The April-June 2020 drinking water samples were analyzed for the following parameters and methods:

- *Benzene, toluene, ethylbenzene, and total xylenes (BTEX)*—EPA Method 524.2
- *Ethylene dibromide (EDB)*—EPA Method 504.1.

Drinking water samples were also shipped to Eurofins Lancaster Laboratories Environmental, LLC (ELLE), Lancaster, Pennsylvania, for metals and inorganics analyses. ELLE maintains a current Department of Defense (DoD) Environmental Laboratory Accreditation Program certification to perform the analyses required for this project. Sample analyses were performed in accordance with the following guidance documents:

- DoD Quality Systems Manual, Version 5.1.1 (2018)
- EPA Solid Waste (SW) 846 – Test Methods for Evaluating Solid Waste, Third Edition and Updates (1986)
- Standard Methods (SM) for the Examination of Water and Wastewater, 22nd Edition (American Public Health Association, 2005)
- EPA Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020 (1983).

In addition, the June 2020 drinking water samples were analyzed for the following parameters and methods at ELLE:

- **Total Arsenic and Lead**—Method SW6020A.
- **Total Calcium, Magnesium, Potassium, and Sodium; Dissolved Iron; and Manganese**—Method SW6010C.
- **Anions (Bromide, Chloride, and Sulfate)**—EPA Method 300.0A.
- **Nitrate/Nitrite Nitrogen**—EPA Method 353.2.
- **Total Alkalinity (Bicarbonate and Carbonate)**—Method SM2320 B.
- **Ammonia nitrogen**—SM4500 NH3B/C.
- **Sulfide**—SM4500 S2F.

Chemical analytical data for the Q2 2020 events were reported by TA in sample delivery groups (SDGs) 680-182910-1, 680-183527-1, 680-184595-1 and 680-184600-1; and by ELLE in SDG 410-3144-1. Appendix H-1 – Table 1 summarizes samples collected from the production wells and the associated field QC samples, collection date, laboratory SDG, and analytical parameters for the monthly events.

A third-party subcontractor (Environmental Data Services, Inc., Virginia Beach, Virginia) conducted EPA Stage 3 data validation on 100 percent (%) of the April–June 2020 sample data. Analytical data validation was performed using the quality criteria specified in the following documents, analytical guidelines, and methods:

- Work Plan and QAPP (Kirtland AFB, 2017)
- EPA Contract Laboratory Program, National Functional Guidelines for Superfund Organic Methods Data Review (EPA, 2014a)
- EPA Contract Laboratory Program, National Functional Guidelines for Inorganic Superfund Data Review (EPA, 2014b)
- EPA Test Methods for Evaluating Solids Waste, Physical/Chemical Methods (SW 846, Third Edition and updates) (1986)
- American Public Health Association, Standard Methods for the Examination of Water and Wastewater, 22nd Edition (2005)
- EPA Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020 (1983)
- EPA Methods for the Determination of Organic Compounds in Drinking Water, 1988 and Supplements.

The following QC criteria were included in the EPA Stage 3 validation as applicable to the analytical method:

- Sample preservation and extraction and analysis holding times
- Laboratory method blank contamination
- Surrogate spike recoveries
- Laboratory control sample (LCS) and LCS duplicate (LCSD) recoveries
- Matrix spike (MS) and matrix spike duplicate (MSD) sample recoveries
- Relative percent difference (RPD)
- Initial and continuing calibrations
- Inductively coupled plasma (ICP) interference check sample (metals)
- ICP serial dilution (metals)
- Second column confirmation (for EDB analysis only)
- Trip blank results
- Field duplicate sample precision.

Analytical data were reviewed to evaluate precision, accuracy (bias), representativeness, comparability, completeness, and sensitivity as defined below:

- *Precision* is expressed as the RPD between the results of replicate sample analyses: sample duplicates, LCSDs, and MSDs. When analyte RPDs exceed the acceptance criteria, the data are qualified accordingly.
- *Accuracy (bias)* is demonstrated by recovery of target analytes from fortified blank and sample matrices, LCS/LCSD, and MS/MSD, respectively. For organic methods, bias is also demonstrated through recovery of surrogates from each field and QC sample. A comparison was made from the recovery of target analytes from fortified samples to the acceptance criteria defined in the QAPjP (Kirtland AFB, 2017). When the acceptance criteria are not available in the QAPjP, results are compared with the laboratory in-house control limits. When these criteria are not met, the data are qualified accordingly. Bias may be indicated as high or low.
- *Representativeness* of the samples submitted for analysis is ensured by adherence to standard sampling techniques and standard analytical method protocols.
- *Comparability* of sample results is ensured through the use of approved sampling and analysis methods and comparison of sample results to historical sample data.
- *Completeness* of data is evaluated based on contractual, analytical, and technical completeness for the monthly supply well data. Technical completeness of data is used to assess overall project completeness and is expressed as a percentage of the ratio of the number of usable data results to the total number of analytical data results. Only rejected data (R-qualified) are considered not usable to achieve project objectives.
- *Sensitivity* for the BTEX and EDB is determined by the ability to achieve the established method specific reporting limits (RLs) in accordance with the method detection limit (MDL) study and includes establishing the MDL. The MDL and RL for EPA drinking water methods are similar to the DoD detection limit (DL) and limit of quantitation (LOQ), respectively. For this project, the laboratory will report positive results to the MDL and results between the MDL and RL will be flagged with a J-qualifier and reported as estimated data. Sensitivity is evaluated based on comparison of the sample RLs to the project screening levels.
- *Sensitivity* for the metals and inorganics is determined by the ability to achieve the established method-specific reporting limits in accordance with DoD Quality Systems Manual requirements

and includes establishing the DL, limit of detection (LOD), and LOQ. For this project, the laboratory reported positive results to the DL and flagged with a “J” qualifier, signifying estimated data. Non-detect results were reported at the LOD with a “U” qualifier per the QAPjP. Sensitivity will be evaluated based on comparison of the sample reporting limits to the project screening levels.

The following sections present the EPA Stage 3 data validation findings for the Q2 2020 monthly drinking water supply well data. Appendix H-1 – Table 2 presents the data qualification flags and reason codes to be applied to analytical data, if required.

1.1 DATA QUALITY FINDINGS

1.1.1 Sample Preservation and Sample Extraction and Analysis Holding Times (Reason Code HT)

The sample coolers and samples contained within the coolers were received intact at the laboratories below 6 degrees Celsius, per EPA guidelines. All samples were preserved appropriately per the requirements of EPA method guidelines, with no exceptions. Sample holding times were evaluated by comparing the (1) sample collection date to the sample extraction date, and (2) extraction date to the analysis date to determine if the method-specified holding times were exceeded. Sample extraction and analysis holding times were met for all samples with the exception of the reanalysis performed for all bromide samples due to exceedance of the calibration criteria, and the reanalysis and dilution of one sample for sulfate and chloride. The bromide and sulfate results for all samples were reported from the analysis performed within hold time and the dilution for the chloride result for well KAFB-015 for the July sampling event was “J” qualified due to analysis outside of hold time.

1.1.2 Laboratory Method Blanks (Reason Code MB)

The drinking water supply sample results were evaluated with respect to the laboratory method blank prepared and analyzed for each analytical batch for each analytical method. No detections of analytes were reported in method blank samples for the water supply well samples.

1.1.3 Initial and Continuing Calibration Blanks (Reason Code CB/CCB)

Initial and continuing calibration blank criteria were reviewed to ensure that the instruments were free of contamination prior to sample analysis. Calibration blank concentrations are considered acceptable when contaminant levels in the blank are less than one-half the RL or LOQ for target analytes and less than the RL or LOQ for common laboratory contaminants. Initial and continuing calibration blank data were within control criteria for the drinking water supply sample analyses.

1.1.4 Surrogate Recoveries (Reason Code SURR)

Surrogate compounds are added to field and laboratory QC samples for organic analysis to evaluate the matrix effect and method performance on an individual sample basis. All surrogate compound recoveries for the drinking water supply well sample data were within method control criteria or did not result in data qualification since results were non-detect.

1.1.5 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries and Precision (Reason Codes LCS/RPD)

The LCS is an aliquot of an analyte-free matrix spiked with target analytes that are prepared with each analytical batch for each analytical method. The recovery of target analytes from the LCS analysis is a measurement of method performance in an interference-free sample matrix. All LCS recoveries for the drinking water supply well data were within method control limits, although the RPD slightly exceeded criteria. No sample data were qualified based on LCS recoveries.

1.1.6 Matrix Spike/Matrix Spike Duplicate Recoveries and Precision (Reason Codes MS/MSD and RPD)

The MS and MSD samples are a portion of a field sample or a standard reference material spiked with target analytes that are prepared with each analytical batch and method as appropriate. The MS/MSD results are used to evaluate any bias introduced to the method due to matrix interference, and to measure bias and precision for each analytical batch.

One MS/MSD was collected during the May 2020 sampling event to achieve the QAPjP requirement of one per 20 samples for the monthly monitoring program. MS/MSD recoveries were within control limits or were not used to qualify data if data were previously qualified. No data were qualified based on MS/MSD recoveries for the Q2 2020 events.

1.1.7 Initial and Continuing Calibration Verification (Reason Code CCV)

Instrument calibration is performed for all analyses in accordance with method requirements. The linear analytical range is established for each method by analysis of calibration standards prepared at increasing concentrations that cover the expected sample concentration range. The acceptability of the initial calibration is determined by calculation of a percent relative standard deviation or coefficient. The stability of the analytical system is monitored by analysis of continuing calibration standards at concentrations near the mid-point of the instrument calibration range. The percent difference values between the relative response factor in the initial calibration and the relative response factor in the continuing calibration are reviewed to ensure instrument calibration criteria are within method control limits. Initial and continuing calibration verification met the method-specific control criteria for the drinking water supply well analytical data with the exception of the calibration verification for bromide for the July event. Sample results qualified based on continuing calibration verification are provided in Appendix H-1 – Table 3.

1.1.8 Sample Confirmation (Reason Code RPD)

As required by EPA analytical method guidance, sample detections for EDB require confirmation using a second column analysis. No EDB sample detections were reported for the drinking water supply well samples analyzed using EPA Method 504.1 and, therefore, second column confirmation was not evaluated for the samples.

1.1.9 Trip Blanks for Volatile Organic Compounds (Reason Code TB)

Trip blank samples were prepared by the laboratory and stored with the groundwater samples collected for volatile organic compound (VOC) analyses (BTEX and EDB). In accordance with the QAPjP requirements, trip blank samples are to be included at a rate of one per cooler when sampling groundwater samples for VOC analysis. A trip blank sample was included with each drinking water supply well

sample shipment. No detections of VOCs were reported in trip blank samples. Appendix H-1 – Table 4 summarizes the results for trip blank samples associated with the drinking water supply well samples.

1.1.10 Equipment Rinse Blanks (Reason Code EB)

No equipment rinse blank samples are required to be collected in conjunction with the water supply well samples since samples are collected directly from a designated sampling port using dedicated sampling equipment.

1.1.11 Field Duplicate Samples

In accordance with the project QAPjP requirements (Kirtland AFB, 2017), field duplicate samples are collected at a frequency of one field duplicate for every 10 monthly samples collected (10%). For the Q2 2020 sampling events, one field duplicate sample was collected in association with the drinking water supply wells for the May event and analyzed for BTEX and EDB. In addition, one field duplicate was collected for the June event for the metals and inorganic parameters. The field duplicate sample frequency for the Q2 2020 sampling was 10% for the organics and 25% for the metals and inorganics.

For field duplicate samples, RPD was evaluated by calculating the RPD between the parent sample and the duplicate sample. The RPD was calculated using the following equation:

$$RPD = \frac{|S-D|}{[(S+D)/2]} \times 100$$

where

- S = Sample result.
- D = Duplicate result.

Acceptable precision control criteria are established at less than or equal to 35% for water samples. The RPD was calculated between pairs of field duplicate samples when both results are reported at or above the RL (BTEX and EDB) or LOQ (metals and inorganics). The results for the drinking water supply well and associated field duplicate samples are provided in Appendix H-1 – Table 5. All field duplicate results are either non-detect or less than 35% RPD.

1.1.12 Professional Judgement

Professional judgement may be applied by a third-party data validation subcontractor or the project chemist during the data review process to apply validation qualifiers based on site-specific and project-specific knowledge, historical data, comparability of data, and analytical expertise. Two chloride detections for wells KAFB-016 and ST106-VA2 for the July event were “J” qualified during validation based on exceedance of the calibration range and the laboratory did not re-analyze these at a dilution since the hold time was expired. There were no exceptions to the validation qualifiers as applied to the data in accordance with the project QAPjP and other guidelines used in the validation review for the Q2 2020 data.

1.2 COMPLETENESS

The following sections present a discussion of contractual, analytical, and technical completeness for the monthly drinking water supply well analytical data completeness.

1.2.1 Contractual Completeness

Contractual completeness is a quantitative determination of the number of unqualified results compared to the total number of sample results expressed as a percentage, based on data qualified for QC outliers related to analytical method performance. These include data qualified for calibration or method blank contamination, missed holding times, LCS recovery, and/or precision. The contractual completeness goal is 95% per each event. Contractual completeness was calculated as follows:

$$\text{Percent Contractual Completeness} = \frac{\text{Number of Unqualified Results}}{\text{Total Number of Results}} \times 100$$

For the monthly drinking water supply well sample results, the contractual completeness was 99.2% for all analytical methods due to one reported chloride result qualified for hold time. The 95% contractual completeness objective was achieved for all of the methods for the sampling event.

1.2.2 Analytical Completeness

Analytical completeness is a quantitative measure of the number of unqualified data results compared to the total number of results expressed as a percentage, based on the target analytes qualified for exceedances of QC requirements from calibration, LCS, MS/MSD, surrogate, method precision, and laboratory method blank contamination results. The analytical completeness goal is 90% for the project. Analytical completeness was calculated as follows:

$$\text{Percent Analytical Completeness} = \frac{\text{Number of Unqualified Results}}{\text{Total Number of Results}} \times 100 =$$

Overall analytical completeness for Q2 2020 is 95% due to the calibration and compound quantitation exceedances for anions (chloride, bromide).

1.2.3 Technical Completeness

Technical completeness is a quantitative measure of the data usability based on the number of rejected data compared to the total number of sample results. The technical completeness goal for each method is equal to or greater than 95%. The technical completeness calculation considers all data that are not rejected (R-qualified) to be usable data to achieve project objectives. The technical completeness was calculated as follows:

$$\text{Percent Technical Completeness} = \frac{\text{Number of Usable Results}}{\text{Total Number of Results}} \times 100$$

The project data quality objectives were achieved for all methods and samples for the monthly drinking water supply well sampling events. The technical completeness for the Q2 2020 data is 100%. Technical completeness is provided in Appendix H-1 – Table 6.

1.2.4 Data Analysis Completeness

As a part of the data review process, chain-of-custody forms and project data deliverables are reviewed against the project requirements in the Work Plan (Kirtland AFB, 2017) to ensure compliance with the sampling plan and that analytical results were reported for all planned methods and samples. Data

completeness for the monthly drinking water supply well data deliverables was determined to be 100% complete. Analytical data packages are provided in Appendix H-2.

1.3 REPRESENTATIVENESS AND COMPARABILITY

Monthly drinking water supply well sampling was conducted in accordance with the sampling and analysis protocols and standard operating procedures documented in the Work Plan (Kirtland AFB, 2017). Approved procedures were used to collect, preserve, document, and ship samples to TA Savannah and ELLE laboratories, thus ensuring the samples collected were representative of the drinking water supply wells.

Water samples for BTEX and EDB were collected in 40-milliliter volatile organic analysis (VOA) vials preserved with ascorbic acid and hydrochloric acid (BTEX) and sodium thiosulfate (EDB), and received at TA Savannah at less than 6 degrees Celsius. Samples received in VOA vials were inspected to evaluate the presence or absence of any headspace (estimated in millimeters) and documented as sample condition on the laboratory sample receipt report. No VOA vials presented headspace greater than 6 millimeters for the monthly drinking water supply well samples. Samples for metals and inorganics were collected in appropriate containers with required preservative as applicable and received at ELLE at less than 6 degrees Celsius.

The TA Savannah laboratory maintains current New Mexico Environment Department Drinking Water accreditation and adhered to the analytical methods documented in the project QAPjP to prepare and analyze samples and report the data. ELLE maintains current DoD Environmental Laboratory Accreditation Program certification and adhered to the analytical methods documented in the project QAPjP and DoD Quality Systems Manual requirements to prepare and analyze samples and report the data. These certifications ensure the comparability of the analytical results between different samples and different sampling events.

EPA Stage 3 validation was performed on 100% of the analytical data to verify that the laboratory complied with the project QAPjP and method requirements. QC results that exceeded method control criteria resulted in data qualification as presented in the previous sections. Based on a review of the completed sample collection logs, chain-of-custody forms, sample receipt forms, and laboratory data packages, the analytical data reported for the monthly drinking water supply well sampling achieved the project data representativeness and comparability requirements.

1.4 SENSITIVITY

Data sensitivity for the monthly drinking water supply well analytical data was achieved by complying with the analytical method guidelines and RLs specified in the project QAPjP. The analytical methods used for supply well sample analysis achieved the EPA Maximum Contaminant Level screening value. Project screening levels are presented in the QAPjP, Attachment 1, Table 1-1a. For the monthly drinking water supply well analytical results, non-detect analytes are reported at the method RL (BTEX and EDB) and LOD (metals and inorganics) and flagged "U." Detections of target analytes below the method RL or LOQ are flagged "J" as estimated values per the project requirements.

1.5 CONCLUSIONS

The analytical data reported for the monthly drinking water supply well samples have been reviewed for precision, accuracy (bias), representativeness, comparability, completeness, and sensitivity. Data quality criteria exceedances were noted for (1) continuing calibration verification for bromide, (2) compound

quantitation for chloride, and (3) hold time exceedance for chloride. Data quality exceedances resulted in “J” and “UJ” qualified (estimated) sample results. Estimated data are usable to achieve project objectives. The 95% technical completeness goal was achieved for all analytical methods for the Q2 2020 sampling event. All data are usable to achieve the project data quality objectives.

REFERENCES

- American Public Health Association. 2005. *Standard Methods for the Examination of Water and Wastewater, 22nd Edition*.
- Department of Defense (DoD). 2018. *Quality Systems Manual for Environmental Laboratories, Version 5.1.1*. February.
- (U.S.) Environmental Protection Agency (EPA). 1983. *Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020*. March.
- EPA. 1986. *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, Third Edition and Updates*. September.
- EPA. 1988. *EPA Methods for the Determination of Organic Compounds in Drinking Water, EPA-600/4-88/039 and Supplements*. December.
- EPA. 2014a. *EPA Contract Laboratory Program, National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. Office of Superfund Remediation and Technology Innovation. August.
- EPA. 2014b. *EPA Contract Laboratory Program, National Functional Guidelines for Inorganic Superfund Data Review, EPA-540-R-014-001*. Office of Superfund Remediation and Technology Innovation. August.
- Kirtland Air Force Base. 2017. *Work Plan for Vadose Zone Coring, Vapor Monitoring, and Water Supply Sampling, Bulk Fuels Facility, Solid Waste Management Units ST-106 and SS-111, Kirtland Air Force Base, Albuquerque, New Mexico*. Prepared for U.S. Army Corps of Engineers–Albuquerque District under Contract W9128F-13-D-0006 DM02. December.

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**Table 1
Production Well Sample Collection Summary Q2 2020**

Sample Location ID	Field Sample ID	Sample Date	Sample Delivery Group	Analytical Parameter ^a	Comments
KAFB-003	GWK003-2021-1	4/16/2020	680-182910-1	EDB, BTEX	—
KAFB-016	GWK016-2021-1	4/16/2020	680-182910-1	EDB, BTEX	—
ST106-VA2	GWVA2-2021-1	4/16/2020	680-182910-1	EDB, BTEX	—
Trip Blank	TB2021-03	4/16/2020	680-182910-1	EDB, BTEX	—
KAFB-003	GWK003-2022	5/5/2020	680-183527-1	EDB, BTEX	—
KAFB-016	GWK016-2022	5/5/2020	680-183527-1	EDB, BTEX	MS/MSD
ST106-VA2	GWVA2-2022	5/5/2020	680-183527-1	EDB, BTEX	—
ST106-VA2	GWVA2-6022	5/5/2020	680-183527-1	EDB, BTEX	Field Duplicate
Trip Blank	TB2022-01	5/5/2020	680-183527-1	EDB, BTEX	—
Trip Blank	TB2022-02	5/5/2020	680-183527-1	EDB, BTEX	—
KAFB-015	GWK015-2023	6/2/2020	680-184595-1/ 410-3144-1	EDB, BTEX, metals, anions, alkalinity	—
ST106-VA2	GWVA2-2023	6/2/2020	680-184595-1/ 410-3144-1	EDB, BTEX, metals, anions, alkalinity	—
ST106-VA2	GWVA2-6023	6/2/2020	680-184595-1/ 410-3144-1	Metals, anions, alkalinity	Field Duplicate
KAFB-003	GWK003-2023	6/2/2020	680-184600-1/ 410-3144-1	EDB, BTEX, metals, anions, alkalinity	—
KAFB-016	GWK016-2023	6/2/2020	680-184600-1/ 410-3144-1	EDB, BTEX, metals, anions, alkalinity	—
Trip Blank	TB2023-1	6/2/2020	680-184595-1/ 410-3144-1	EDB, BTEX	—
Trip Blank	TB2023-2	6/2/2020	680-184600-1/ 410-3144-1	EDB, BTEX	—

^aAnalytical methods include: Method E524.2 for BTEX; Method E504.1 for EDB; Methods SW6010C/6020A for total metals (calcium, potassium, magnesium, sodium /arsenic and lead); Method SW6010C for dissolved iron and manganese. Anions analyses include Method SM4500 NH3B for ammonia; Method E300.0 for bromide, chloride and sulfate; Method E353.2 for nitrate/nitrite; Method SM4500 S2F for sulfide. Alkalinity is analyzed using Method

— = no comments

BTEX = benzene, toluene, ethylbenzene, and total xylenes

EDB = ethylene dibromide

ID = identification

MS = matrix spike

MSD = matrix spike duplicate

Q2 = second quarter

**Table 2
Data Qualification Flags and Reason Codes**

Data Qualifier Definitions for Data Validation

Qualifier	Definition
	No Qualifier indicates that the data are acceptable both qualitatively and quantitatively.
U	The analyte was analyzed for but was not detected above the detection limit. The value associated with the U-qualifier is the limit of detection.
J	The analyte was analyzed for and was positively identified, but the reported numerical value may not be consistent with the amount actually present in the environmental sample. Results are estimated, although the data are considered usable and may be used as appropriate to meet project objectives. Results are qualitatively acceptable and quantitatively uncertain.
J-	The analyte was positively identified; the associated numerical value is its approximate concentration with a low bias in the sample.
J+	The analyte was positively identified; the associated numerical value is its approximate concentration with a high bias in the sample.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The analyte was analyzed for, but the presence or absence of the analyte has not been verified. Re-sampling and re-analysis may be necessary to confirm or deny the presence of the analyte. Results are rejected, and data are unusable for any purposes.

Reason Codes for Data Validation

Reason Code	Description
CB/CCB	Calibration blank or continuing calibration blank outside of control limits
CCV	Calibration verification outside of control limits
EB	Equipment rinse blank contamination
FB	Field blank contamination
FD	Field duplicate sample results out of control criteria
HT	Holding time exceedance
ICS	Interference check sample
LCS	Laboratory control sample recovery out of control criteria
MB	Method blank contamination
MS/MSD	Matrix spike/matrix spike duplicate recovery outside of control criteria
RPD	Relative percent difference outside of control limits
SD	ICP serial dilution out of control criteria
SURR	Surrogate recovery outside of control limits
TB	Trip blank contamination

**Table 3
Qualified Sample Results Q2 2020**

Well Location ID	Sample Name	Sample Delivery Group	Collection Method	Sample Type	Analyte	Data Qualifier	Validation Reason Code
KAFB-015	GWK015-2023	410-3144-1	Grab	N	Bromide	UJ	Continuing Calibration Verification
KAFB-015	GWK015-2023	410-3144-1	Grab	N	Chloride	J	Hold Time
ST106-VA2	GWVA2-2023	410-3144-1	Grab	N	Bromide	UJ	Continuing Calibration Verification
KAFB-003	GWK003-2023	410-3144-1	Grab	N	Bromide	UJ	Continuing Calibration Verification
KAFB-016	GWK016-2023	410-3144-1	Grab	N	Chloride	J	Compound Quantitation
KAFB-016	GWK016-2023	410-3144-1	Grab	N	Bromide	UJ	Continuing Calibration Verification
ST106-VA2	GWVA2-6023	410-3144-1	Grab	FD	Chloride	J	Compound Quantitation
ST106-VA2	GWVA2-6023	410-3144-1	Grab	FD	Bromide	UJ	Continuing Calibration Verification

FD = field duplicate

ID = identification

N = normal field sample

Qualifiers:

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit.

**Table 4
Field Quality Control Sample Results Q2 2020**

Field Sample ID:			TB2021-03			TB2022-01			TB2022-02			TB2023-1			TB2023-2		
Sample Date:			4/16/2020			5/5/2020			5/5/2020			6/2/2020			6/2/2020		
Sample Type:			TB			TB			TB			TB			TB		
Parameter	Analytical Method	Analyte	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ	Result	Val Qual	LOQ
EDB	Method SW8011 (µg/L)	1,2-Dibromoethane	ND	U	0.017	ND	U	0.018	ND	U	0.018	ND	U	0.018	ND	U	0.018
VOCs	Method SW8260C (µg/L)	Benzene	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Ethylbenzene	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Toluene	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5
		Xylenes, Total	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5	ND	U	0.5

µg/L = microgram per liter

EDB = ethylene dibromide (1,2-dibromoethane)

ID = identification

LOQ = Limit of quantitation (method reporting limit).

ND = not detected

Q2 = second quarter

TB = trip blank

Val Qual = validation qualifier

VOC = volatile organic compound

Shading = detected concentrations above the detection limit

Qualifiers:

Val Quals based on independent data validation

U = Qualifier denotes the analyte was analyzed but not detected above the method detection limit. The value associated with the U-qualifier is the LOQ.

**Table 5
Field Duplicate Sample Results Q2 2020**

			Location ID:			ST106-VA2	ST106-VA2	ST106-VA2	ST106-VA2									
			Field Sample ID:			GWVA2-2022	GWVA2-6022	GWVA2-2023	GWVA2-6023									
			Sample Date:			5/5/2020	5/5/2020	6/2/2020	6/2/2020									
			Sample Type:			REG	Field Duplicate	REG	Field Duplicate									
Parameter	Analytical Method	Analyte	NMAC NMWQCC ^a	EPA MCL ^b	EPA RSL ^c	Project Screening Level ^d	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD	Result	Val Qual	LOD
EDB	Method E504.1 (µg/L)	1,2-Dibromoethane	0.05	0.05	0.075	0.05	ND	U	0.017	ND	U	0.018	ND	U	0.018	—	—	—
BTEX	Method E524.2 (µg/L)	Benzene	5	5	4.6	5	ND	U	0.5	ND	U	0.5	ND	U	0.5	—	—	—
		Ethylbenzene	700	700	15	700	ND	U	0.5	ND	U	0.5	ND	U	0.5	—	—	—
		Toluene	1,000	1,000	1,100	1,000	ND	U	0.5	ND	U	0.5	ND	U	0.5	—	—	—
		Xylenes, total	620	10,000	190	620	ND	U	0.5	ND	U	0.5	ND	U	0.5	—	—	—
Total Metals	Method SW6010C (mg/L)	Calcium	NS	NS	NS	NS	—	—	—	—	—	—	40	--	0.15	40	--	0.15
		Iron, dissolved	1.0	NS	NS	1	—	—	—	—	—	—	ND	U	100	ND	U	100
		Magnesium	NS	NS	NS	NS	—	—	—	—	—	—	8	--	0.075	8.1	--	0.075
		Manganese, dissolved	0.2	NS	NS	0.2	—	—	—	—	—	—	ND	U	5.2	ND	U	5.2
		Potassium	NS	NS	NS	NS	—	—	—	—	—	—	4.1	--	0.38	4	--	0.38
		Sodium	NS	NS	NS	NS	—	—	—	—	—	—	24	--	0.5	23	--	0.5
	Method SW6020A (mg/L)	Arsenic	0.01	0.01	0.0005	0.01	—	—	—	—	—	—	0.0029	--	0.0016	0.0028	--	0.0016
		Lead	0.015	0.015	0.015	0.015	—	—	—	—	—	—	0.00027	J	0.00025	0.00023	J	0.00025
Anions	Method E300.0 (mg/L)	Bromide	NS	NS	NS	NS	—	—	—	—	—	—	ND	UJ	2	ND	UJ	2
		Chloride	250	250	NS	250	—	—	—	—	—	—	40	--	15	38	J	1.5
		Sulfate	600	250	NS	250	—	—	—	—	—	—	27	--	4.5	26	--	4.5
	Method SM4500S2F (mg/L)	Sulfide	NS	NS	NS	NS	—	—	—	—	—	—	ND	U	1.5	ND	U	1.5
	Method SM4500NH3B/C (mg/L)	Nitrogen, ammonia	NS	NS	NS	NS	—	—	—	—	—	—	ND	U	0.6	ND	U	0.6
	Method E353.2 (mg/L)	Nitrate/Nitrite Nitrogen	10 ^e	10 ^e	NS	10 ^e	—	—	—	—	—	—	ND	U	0.09	ND	U	0.09
Alkalinity	Method SM2320B (mg/L)	Alkalinity, bicarbonate (as CaCO ₃)	NS	NS	NS	NS	—	—	—	—	—	—	100	--	6	100	--	6
		Alkalinity, carbonate (as CaCO ₃)	NS	NS	NS	NS	—	—	—	—	—	—	ND	U	6	ND	U	6
		Alkalinity, total (as CaCO ₃)	NS	NS	NS	NS	—	—	—	—	—	—	100	--	6	100	--	6

Table 5
Field Duplicate Sample Results Q2 2020

^a NMWQCC numeric standards per the NMAC Title 20.6.2.3101A, Standards for Ground Water of 10,000 mg/L Total Dissolved Solids Concentration or Less (NMAC 2018).

^b EPA National Primary Drinking Water Regulations, MCLs and Secondary MCLs, Title 40CFR Part 141, 143 (May 2018).

^c EPA Region 6 RSL for Tapwater (May 2020) for hazard index = 1.0 for non-carcinogens and a 10-5 cancer risk level for carcinogens.

^d The project screening level was selected to satisfy the requirements of the Kirtland AFB Hazardous Waste Permit Number NM9570024423 as the lowest of (1) NMWQCC numeric standard or (2) EPA MCL. If no NMWQCC numeric standard or MCL exists for any analyte, then the project screening level will be the EPA RSL.

^e Based on the geochemical equilibrium of the site groundwater and previous site data analyses, nitrate/nitrite results represent nitrate concentrations.

— = Compound not analyzed for.

µg/L = micrograms per liter

BTEX = benzene, toluene, ethylbenzene, and total xylenes

CFR = Code of Federal Regulations

EDB = ethylene dibromide (1,2-dibromoethane)

EPA = U.S. Environmental Protection Agency

GW = groundwater

ID = identification

LOQ = limit of quantitation

MCL = maximum contaminant level

mg/L = milligram per liter

ND = nondetect

NMAC = New Mexico Administrative Code

NMWQCC = New Mexico Water Quality Control Commission

NS = not specified

Q2 = second quarter

REG = normal field sample

RSL = regional screening level

VA = U.S. Department of Veterans Affairs

Val Qual = validation qualifier

Shading = detected concentrations above the detection limit

Shading = detected concentrations above the detection limit
Bold/Shading = reported concentrations exceed the project screen

Val Quals based on independent data validation

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOQ.

-- = Validation qualifier not assigned.

Table 6
Technical Data Completeness Q2 2020

Analytical Parameter	Field/Field Duplicate Sample Analytes	Quality Control Sample Analytes (TB)	Qualified Analytes	Percent Technical Completeness^a
VOCs (E524.2) ^b	44	20	0	100
Ethylene dibromide (E504.1)	11	5	0	100
Total metals (SW6010C) ^c	20	0	0	100
Dissolved metals (SW6010C) ^d	10	0	0	100
Total metals (SW6020A) ^e	10	0	0	100
Anions (E300.0) ^f	15	0	8	100
Nitrate/nitrite nitrogen (E353.2)	5	0	0	100
Nitrogen, ammonia (SM4500NH3CM)	5	0	0	100
Sulfide (SM4500S2F)	5	0	0	100
Alkalinity (SM2320B)	15	0	0	100

^a Percent technical completeness including analytes qualified as estimated data. No data were rejected.

^b Samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes.

^c Total metals (SW6010C) = calcium, magnesium, potassium, sodium.

^d Dissolved metals (SW6010C) = dissolved iron, manganese.

^e Total metals (SW6020A) = arsenic, lead.

^f Anions = bromide, chloride, sulfate.

TB = trip blank

VOC = volatile organic compound



Environment Testing
America

ANALYTICAL REPORT

Job Number: 410-3144-1

Job Description: Kirtland AFB

For:

EA Engineering, Science, and Technology
405 S. Highway 121 bypass
Building C
Suite 100
Lewisville, TX 75067

Attention: Pamela J Moss

A handwritten signature in black ink that reads "Kay Hower". The signature is fluid and cursive.

Approved for release.
Kay G Hower
Principal Project Manager
7/24/2020 5:34 PM

Kay G Hower, Principal Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
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07/24/2020
Revision: 1

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike, Lancaster, PA 17601
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Job Number: 410-3144-1
Job Description: Kirtland AFB

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Definitions/Glossary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
E	Result exceeded calibration range.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Eurofins Lancaster Laboratories Env, LLC

Definitions/Glossary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

**Job Narrative
410-3144-1****Receipt**

The samples were received on 6/3/2020 10:44 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.4° C, 0.5° C and 1.0° C.

HPLC/IC

Method 300.0: Reanalysis for bromide on the following samples were performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. GWVA2-2023 (410-3144-1), GWVA2-6023 (410-3144-2), GWK015-2023 (410-3144-3), GWK016-2023 (410-3144-4) and GWK003-2023 (410-3144-5)

Method 300.0: The continuing calibration verification (CCV) analyzed in 410-12842 was outside the method criteria for the following analyte(s): Bromide. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWVA2-2023

Lab Sample ID: 410-3144-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40	D	20	10	mg/L	50		300.0	Total/NA
Sulfate	27	D	5.0	1.5	mg/L	5		300.0	Total/NA
Calcium	40		0.20	0.096	mg/L	1		6010C	Total Recoverable
Magnesium	8.0		0.10	0.040	mg/L	1		6010C	Total Recoverable
Potassium	4.1		0.50	0.20	mg/L	1		6010C	Total Recoverable
Sodium	24		1.0	0.24	mg/L	1		6010C	Total Recoverable
Arsenic	0.0029		0.0020	0.00068	mg/L	1		6020A	Total/NA
Lead	0.00027	J	0.00050	0.000071	mg/L	1		6020A	Total/NA
Bicarbonate Alkalinity as CaCO ₃	100		8.0	8.0	mg/L	1		SM2320 B	Total/NA
Total Alkalinity as CaCO ₃ to pH 4.5	100		8.0	8.0	mg/L	1		SM2320 B	Total/NA

Client Sample ID: GWVA2-6023

Lab Sample ID: 410-3144-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloride	38	D E	2.0	1.0	mg/L	5		300.0	Total/NA
Sulfate	26	D	5.0	1.5	mg/L	5		300.0	Total/NA
Calcium	40		0.20	0.096	mg/L	1		6010C	Total Recoverable
Magnesium	8.1		0.10	0.040	mg/L	1		6010C	Total Recoverable
Potassium	4.0		0.50	0.20	mg/L	1		6010C	Total Recoverable
Sodium	23		1.0	0.24	mg/L	1		6010C	Total Recoverable
Arsenic	0.0028		0.0020	0.00068	mg/L	1		6020A	Total/NA
Lead	0.00023	J	0.00050	0.000071	mg/L	1		6020A	Total/NA
Bicarbonate Alkalinity as CaCO ₃	100		8.0	8.0	mg/L	1		SM2320 B	Total/NA
Total Alkalinity as CaCO ₃ to pH 4.5	100		8.0	8.0	mg/L	1		SM2320 B	Total/NA

Client Sample ID: GWK015-2023

Lab Sample ID: 410-3144-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloride	49	D E	2.0	1.0	mg/L	5		300.0	Total/NA
Sulfate	31	D	5.0	1.5	mg/L	5		300.0	Total/NA
Calcium	32		0.20	0.096	mg/L	1		6010C	Total Recoverable
Magnesium	8.3		0.10	0.040	mg/L	1		6010C	Total Recoverable
Potassium	7.2		0.50	0.20	mg/L	1		6010C	Total Recoverable
Sodium	40		1.0	0.24	mg/L	1		6010C	Total Recoverable
Manganese	25		10	3.1	ug/L	1		6010C	Dissolved
Arsenic	0.017		0.0020	0.00068	mg/L	1		6020A	Total/NA
Lead	0.00011	J	0.00050	0.000071	mg/L	1		6020A	Total/NA
Bicarbonate Alkalinity as CaCO ₃	93		8.0	8.0	mg/L	1		SM2320 B	Total/NA
Total Alkalinity as CaCO ₃ to pH 4.5	93		8.0	8.0	mg/L	1		SM2320 B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWK016-2023

Lab Sample ID: 410-3144-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloride	59	D E	2.0	1.0	mg/L	5		300.0	Total/NA
Sulfate	32	D	5.0	1.5	mg/L	5		300.0	Total/NA
Calcium	50		0.20	0.096	mg/L	1		6010C	Total Recoverable
Magnesium	5.9		0.10	0.040	mg/L	1		6010C	Total Recoverable
Potassium	4.0		0.50	0.20	mg/L	1		6010C	Total Recoverable
Sodium	31		1.0	0.24	mg/L	1		6010C	Total Recoverable
Manganese	6.4	J	10	3.1	ug/L	1		6010C	Dissolved
Arsenic	0.024		0.0020	0.00068	mg/L	1		6020A	Total/NA
Lead	0.0037		0.00050	0.000071	mg/L	1		6020A	Total/NA
Bicarbonate Alkalinity as CaCO ₃	94		8.0	8.0	mg/L	1		SM2320 B	Total/NA
Total Alkalinity as CaCO ₃ to pH 4.5	94		8.0	8.0	mg/L	1		SM2320 B	Total/NA

Client Sample ID: GWK003-2023

Lab Sample ID: 410-3144-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24	D	2.0	1.0	mg/L	5		300.0	Total/NA
Sulfate	31	D	5.0	1.5	mg/L	5		300.0	Total/NA
Calcium	43		0.20	0.096	mg/L	1		6010C	Total Recoverable
Magnesium	5.9		0.10	0.040	mg/L	1		6010C	Total Recoverable
Potassium	2.4		0.50	0.20	mg/L	1		6010C	Total Recoverable
Sodium	23		1.0	0.24	mg/L	1		6010C	Total Recoverable
Arsenic	0.00095	J	0.0020	0.00068	mg/L	1		6020A	Total/NA
Nitrate Nitrite as N	0.48		0.10	0.040	mg/L	1		353.2	Total/NA
Bicarbonate Alkalinity as CaCO ₃	110		8.0	8.0	mg/L	1		SM2320 B	Total/NA
Total Alkalinity as CaCO ₃ to pH 4.5	110		8.0	8.0	mg/L	1		SM2320 B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWVA2-2023

Lab Sample ID: 410-3144-1

Date Collected: 06/02/20 11:30

Matrix: Water

Date Received: 06/03/20 10:44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	2.0	U Q	2.5	1.3	mg/L			06/14/20 04:22	5
Chloride	40	D	20	10	mg/L			06/14/20 04:39	50
Sulfate	27	D	5.0	1.5	mg/L			06/14/20 04:22	5

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	40		0.20	0.096	mg/L		06/04/20 17:38	06/11/20 17:09	1
Magnesium	8.0		0.10	0.040	mg/L		06/04/20 17:38	06/11/20 17:09	1
Potassium	4.1		0.50	0.20	mg/L		06/04/20 17:38	06/11/20 17:09	1
Sodium	24		1.0	0.24	mg/L		06/04/20 17:38	06/11/20 17:09	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	210	41	ug/L		06/08/20 09:35	06/12/20 16:23	1
Manganese	5.2	U	10	3.1	ug/L		06/08/20 09:35	06/12/20 16:23	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0029		0.0020	0.00068	mg/L		06/04/20 17:18	06/08/20 12:34	1
Lead	0.00027	J	0.00050	0.000071	mg/L		06/04/20 17:18	06/08/20 12:34	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.090	U	0.10	0.040	mg/L			06/08/20 11:49	1
Sulfide	1.5	U	2.0	0.70	mg/L			06/08/20 12:35	1
Bicarbonate Alkalinity as CaCO3	100		8.0	8.0	mg/L			06/06/20 09:47	1
Carbonate Alkalinity as CaCO3	6.0	U	8.0	8.0	mg/L			06/06/20 09:47	1
Total Alkalinity as CaCO3 to pH 4.!	100		8.0	8.0	mg/L			06/06/20 09:47	1
Ammonia-N	0.60	U	0.75	0.25	mg/L		06/11/20 08:39	06/11/20 09:33	1

Client Sample ID: GWVA2-6023

Lab Sample ID: 410-3144-2

Date Collected: 06/02/20 11:30

Matrix: Water

Date Received: 06/03/20 10:44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	2.0	U Q	2.5	1.3	mg/L			06/14/20 05:31	5
Chloride	38	D E	2.0	1.0	mg/L			06/14/20 05:31	5
Sulfate	26	D	5.0	1.5	mg/L			06/14/20 05:31	5

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	40		0.20	0.096	mg/L		06/04/20 17:08	06/07/20 19:12	1
Magnesium	8.1		0.10	0.040	mg/L		06/04/20 17:08	06/07/20 19:12	1
Potassium	4.0		0.50	0.20	mg/L		06/04/20 17:08	06/07/20 19:12	1
Sodium	23		1.0	0.24	mg/L		06/04/20 17:08	06/07/20 19:12	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	210	41	ug/L		06/08/20 09:35	06/12/20 16:20	1
Manganese	5.2	U	10	3.1	ug/L		06/08/20 09:35	06/12/20 16:20	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWVA2-6023

Lab Sample ID: 410-3144-2

Date Collected: 06/02/20 11:30

Matrix: Water

Date Received: 06/03/20 10:44

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0028		0.0020	0.00068	mg/L		06/04/20 17:18	06/08/20 12:27	1
Lead	0.00023	J	0.00050	0.000071	mg/L		06/04/20 17:18	06/08/20 12:27	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.090	U	0.10	0.040	mg/L			06/08/20 11:51	1
Sulfide	1.5	U	2.0	0.70	mg/L			06/08/20 12:35	1
Bicarbonate Alkalinity as CaCO3	100		8.0	8.0	mg/L			06/06/20 09:54	1
Carbonate Alkalinity as CaCO3	6.0	U	8.0	8.0	mg/L			06/06/20 09:54	1
Total Alkalinity as CaCO3 to pH 4.!	100		8.0	8.0	mg/L			06/06/20 09:54	1
Ammonia-N	0.60	U	0.75	0.25	mg/L		06/11/20 08:39	06/11/20 09:33	1

Client Sample ID: GWK015-2023

Lab Sample ID: 410-3144-3

Date Collected: 06/02/20 10:00

Matrix: Water

Date Received: 06/03/20 10:44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	2.0	U Q	2.5	1.3	mg/L			06/14/20 06:05	5
Chloride	49	D E	2.0	1.0	mg/L			06/14/20 06:05	5
Sulfate	31	D	5.0	1.5	mg/L			06/14/20 06:05	5

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	32		0.20	0.096	mg/L		06/04/20 17:38	06/11/20 16:59	1
Magnesium	8.3		0.10	0.040	mg/L		06/04/20 17:38	06/11/20 16:59	1
Potassium	7.2		0.50	0.20	mg/L		06/04/20 17:38	06/11/20 16:59	1
Sodium	40		1.0	0.24	mg/L		06/04/20 17:38	06/11/20 16:59	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	210	41	ug/L		06/09/20 10:30	06/09/20 16:33	1
Manganese	25		10	3.1	ug/L		06/09/20 10:30	06/09/20 16:33	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017		0.0020	0.00068	mg/L		06/04/20 17:18	06/08/20 12:32	1
Lead	0.00011	J	0.00050	0.000071	mg/L		06/04/20 17:18	06/08/20 12:32	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.090	U J1	0.10	0.040	mg/L			06/08/20 11:52	1
Sulfide	1.5	U	2.0	0.70	mg/L			06/08/20 12:35	1
Bicarbonate Alkalinity as CaCO3	93		8.0	8.0	mg/L			06/06/20 09:25	1
Carbonate Alkalinity as CaCO3	6.0	U	8.0	8.0	mg/L			06/06/20 09:25	1
Total Alkalinity as CaCO3 to pH 4.!	93		8.0	8.0	mg/L			06/06/20 09:25	1
Ammonia-N	0.60	U	0.75	0.25	mg/L		06/11/20 08:39	06/11/20 09:33	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWK016-2023

Lab Sample ID: 410-3144-4

Date Collected: 06/02/20 09:30

Matrix: Water

Date Received: 06/03/20 10:44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	2.0	U Q	2.5	1.3	mg/L			06/14/20 06:39	5
Chloride	59	D E	2.0	1.0	mg/L			06/14/20 06:39	5
Sulfate	32	D	5.0	1.5	mg/L			06/14/20 06:39	5

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	50		0.20	0.096	mg/L		06/04/20 17:38	06/11/20 16:56	1
Magnesium	5.9		0.10	0.040	mg/L		06/04/20 17:38	06/11/20 16:56	1
Potassium	4.0		0.50	0.20	mg/L		06/04/20 17:38	06/11/20 16:56	1
Sodium	31		1.0	0.24	mg/L		06/04/20 17:38	06/11/20 16:56	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	210	41	ug/L		06/09/20 09:25	06/12/20 11:27	1
Manganese	6.4	J	10	3.1	ug/L		06/09/20 09:25	06/12/20 11:27	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.024		0.0020	0.00068	mg/L		06/04/20 17:18	06/08/20 12:30	1
Lead	0.0037		0.00050	0.000071	mg/L		06/04/20 17:18	06/08/20 12:30	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.090	U	0.10	0.040	mg/L			06/08/20 11:56	1
Sulfide	1.5	U	2.0	0.70	mg/L			06/08/20 12:35	1
Bicarbonate Alkalinity as CaCO3	94		8.0	8.0	mg/L			06/06/20 09:40	1
Carbonate Alkalinity as CaCO3	6.0	U	8.0	8.0	mg/L			06/06/20 09:40	1
Total Alkalinity as CaCO3 to pH 4.!	94		8.0	8.0	mg/L			06/06/20 09:40	1
Ammonia-N	0.86	U	1.1	0.36	mg/L		06/11/20 08:39	06/11/20 09:33	1

Client Sample ID: GWK003-2023

Lab Sample ID: 410-3144-5

Date Collected: 06/02/20 10:40

Matrix: Water

Date Received: 06/03/20 10:44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	2.0	U Q	2.5	1.3	mg/L			06/14/20 07:13	5
Chloride	24	D	2.0	1.0	mg/L			06/14/20 07:13	5
Sulfate	31	D	5.0	1.5	mg/L			06/14/20 07:13	5

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	43		0.20	0.096	mg/L		06/04/20 17:08	06/07/20 19:15	1
Magnesium	5.9		0.10	0.040	mg/L		06/04/20 17:08	06/07/20 19:15	1
Potassium	2.4		0.50	0.20	mg/L		06/04/20 17:08	06/07/20 19:15	1
Sodium	23		1.0	0.24	mg/L		06/04/20 17:08	06/07/20 19:15	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	210	41	ug/L		06/09/20 09:25	06/12/20 11:24	1
Manganese	5.2	U	10	3.1	ug/L		06/09/20 09:25	06/12/20 11:24	1

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWK003-2023

Lab Sample ID: 410-3144-5

Date Collected: 06/02/20 10:40

Matrix: Water

Date Received: 06/03/20 10:44

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00095	J	0.0020	0.00068	mg/L		06/04/20 17:18	06/08/20 12:29	1
Lead	0.00025	U	0.00050	0.000071	mg/L		06/04/20 17:18	06/08/20 12:29	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.48		0.10	0.040	mg/L			06/08/20 11:57	1
Sulfide	1.5	U	2.0	0.70	mg/L			06/08/20 12:35	1
Bicarbonate Alkalinity as CaCO3	110		8.0	8.0	mg/L			06/06/20 09:33	1
Carbonate Alkalinity as CaCO3	6.0	U	8.0	8.0	mg/L			06/06/20 09:33	1
Total Alkalinity as CaCO3 to pH 4.!	110		8.0	8.0	mg/L			06/06/20 09:33	1
Ammonia-N	0.60	U	0.75	0.25	mg/L		06/11/20 08:39	06/11/20 09:33	1

Default Detection Limits

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 300.0 - Anions, Ion Chromatography

Analyte	LOQ	DL	Units
Bromide	0.50	0.25	mg/L
Chloride	0.40	0.20	mg/L
Sulfate	1.0	0.30	mg/L

Method: 6010C - Metals (ICP) - Total Recoverable

Prep: 3005A

Analyte	LOQ	DL	Units
Calcium	0.20	0.096	mg/L
Magnesium	0.10	0.040	mg/L
Potassium	0.50	0.20	mg/L
Sodium	1.0	0.24	mg/L

Method: 6010C - Metals (ICP) - Dissolved

Prep: Non-Digest Prep

Analyte	LOQ	DL	Units
Iron	200	40	ug/L
Manganese	10	3.0	ug/L

Method: 6020A - Metals (ICP/MS)

Prep: 3020A

Analyte	LOQ	DL	Units
Arsenic	0.0020	0.00068	mg/L
Lead	0.00050	0.000071	mg/L

General Chemistry

Analyte	LOQ	DL	Units
Nitrate Nitrite as N	0.10	0.040	mg/L
Sulfide	2.0	0.70	mg/L
Bicarbonate Alkalinity as CaCO ₃	8.0	8.0	mg/L
Carbonate Alkalinity as CaCO ₃	8.0	8.0	mg/L
Total Alkalinity as CaCO ₃ to pH 4.5	8.0	8.0	mg/L

General Chemistry

Prep: SM 4500 NH₃ B

Analyte	LOQ	DL	Units
Ammonia-N	0.75	0.25	mg/L

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 410-12842/4

Matrix: Water

Analysis Batch: 12842

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.40	U	0.50	0.25	mg/L			06/13/20 19:32	1
Chloride	0.30	U	0.40	0.20	mg/L			06/13/20 19:32	1
Sulfate	0.90	U	1.0	0.30	mg/L			06/13/20 19:32	1

Lab Sample ID: LCS 410-12842/3

Matrix: Water

Analysis Batch: 12842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	7.50	7.06		mg/L		94	90 - 110
Chloride	3.00	2.89		mg/L		96	90 - 110
Sulfate	7.50	7.30		mg/L		97	90 - 110

Lab Sample ID: MB 410-21417/20

Matrix: Water

Analysis Batch: 21417

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.40	U	0.50	0.25	mg/L			07/11/20 04:33	1
Chloride	0.30	U	0.40	0.20	mg/L			07/11/20 04:33	1
Sulfate	0.90	U	1.0	0.30	mg/L			07/11/20 04:33	1

Lab Sample ID: MB 410-21417/24

Matrix: Water

Analysis Batch: 21417

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.40	U	0.50	0.25	mg/L			07/11/20 05:41	1
Chloride	0.30	U	0.40	0.20	mg/L			07/11/20 05:41	1
Sulfate	0.90	U	1.0	0.30	mg/L			07/11/20 05:41	1

Lab Sample ID: LCS 410-21417/19

Matrix: Water

Analysis Batch: 21417

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	7.50	6.94		mg/L		92	90 - 110
Chloride	3.00	2.81		mg/L		94	90 - 110
Sulfate	7.50	7.67		mg/L		102	90 - 110

Lab Sample ID: LCS 410-21417/23

Matrix: Water

Analysis Batch: 21417

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	7.50	6.91		mg/L		92	90 - 110
Chloride	3.00	2.81		mg/L		94	90 - 110
Sulfate	7.50	7.59		mg/L		101	90 - 110

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 410-3144-3 MS

Matrix: Water

Analysis Batch: 21417

Client Sample ID: GWK015-2023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	2.0	U H	25.0	24.6	D	mg/L		99	90 - 110
Sulfate	30	H D J1	25.0	59.3	J1 D	mg/L		117	90 - 110

Lab Sample ID: 410-3144-3 MS

Matrix: Water

Analysis Batch: 21417

Client Sample ID: GWK015-2023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	200	U H	2500	2500	D	mg/L		100	90 - 110
Chloride	190	H J1 D	1000	1040	J1 D	mg/L		85	90 - 110
Sulfate	450	U H	2500	2710	D	mg/L		108	90 - 110

Lab Sample ID: 410-3144-3 DU

Matrix: Water

Analysis Batch: 21417

Client Sample ID: GWK015-2023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bromide	2.0	U H	2.0	U	mg/L		NC	15
Sulfate	30	H D J1	29.8	D	mg/L		0.7	15

Lab Sample ID: 410-3144-3 DU

Matrix: Water

Analysis Batch: 21417

Client Sample ID: GWK015-2023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Bromide	200	U H	200	U	mg/L		NC	15
Chloride	190	H J1 D	190	J D	mg/L		1	15
Sulfate	450	U H	450	U	mg/L		NC	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 410-11136/1-A

Matrix: Water

Analysis Batch: 12755

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11136

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	100	U	210	41	ug/L		06/08/20 09:35	06/12/20 15:38	1
Manganese	5.2	U	10	3.1	ug/L		06/08/20 09:35	06/12/20 15:38	1

Lab Sample ID: LCS 410-11136/2-A

Matrix: Water

Analysis Batch: 12755

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11136

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	400	395		ug/L		99	87 - 115
Manganese	20.0	20.0		ug/L		100	90 - 114

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-11456/1-A

Matrix: Water

Analysis Batch: 12678

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11456

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	100	U	210	41	ug/L		06/09/20 09:25	06/12/20 09:50	1
Manganese	5.2	U	10	3.1	ug/L		06/09/20 09:25	06/12/20 09:50	1

Lab Sample ID: LCS 410-11456/2-A

Matrix: Water

Analysis Batch: 12678

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11456

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	Limits
Iron	400	424		ug/L		106	87 - 115	
Manganese	20.0	20.9		ug/L		104	90 - 114	

Lab Sample ID: MB 410-11479/1-A

Matrix: Water

Analysis Batch: 11592

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 11479

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Iron	100	U	210	41	ug/L		06/09/20 10:30	06/09/20 15:09	1
Manganese	5.2	U	10	3.1	ug/L		06/09/20 10:30	06/09/20 15:09	1

Lab Sample ID: LCS 410-11479/2-A

Matrix: Water

Analysis Batch: 11592

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 11479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	Limits
Iron	400	408		ug/L		102	87 - 115	
Manganese	20.0	21.4		ug/L		107	90 - 114	

Lab Sample ID: MB 410-10573/1-A

Matrix: Water

Analysis Batch: 11232

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 10573

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	0.15	U	0.20	0.096	mg/L		06/04/20 17:08	06/07/20 17:38	1
Magnesium	0.075	U	0.10	0.040	mg/L		06/04/20 17:08	06/07/20 17:38	1
Potassium	0.38	U	0.50	0.20	mg/L		06/04/20 17:08	06/07/20 17:38	1
Sodium	0.50	U	1.0	0.24	mg/L		06/04/20 17:08	06/07/20 17:38	1

Lab Sample ID: LCS 410-10573/2-A

Matrix: Water

Analysis Batch: 11232

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 10573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	Limits
Calcium	0.400	0.415		mg/L		104	87 - 113	
Magnesium	0.200	0.212		mg/L		106	85 - 113	
Potassium	5.60	5.93		mg/L		106	86 - 114	
Sodium	2.00	2.05		mg/L		103	87 - 115	

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 410-10582/1-A

Matrix: Water

Analysis Batch: 12396

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 10582

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	0.15	U	0.20	0.096	mg/L		06/04/20 17:38	06/11/20 16:29	1
Magnesium	0.075	U	0.10	0.040	mg/L		06/04/20 17:38	06/11/20 16:29	1
Potassium	0.38	U	0.50	0.20	mg/L		06/04/20 17:38	06/11/20 16:29	1
Sodium	0.50	U	1.0	0.24	mg/L		06/04/20 17:38	06/11/20 16:29	1

Lab Sample ID: LCS 410-10582/2-A

Matrix: Water

Analysis Batch: 12396

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 10582

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Calcium	0.400	0.424		mg/L		106	87 - 113	
Magnesium	0.200	0.216		mg/L		108	85 - 113	
Potassium	5.60	6.14		mg/L		110	86 - 114	
Sodium	2.00	2.17		mg/L		109	87 - 115	

Lab Sample ID: LRC 410-11232/14

Matrix: Water

Analysis Batch: 11232

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Calcium	500000	509000		ug/L		102	90 - 110	
Magnesium	500000	502000		ug/L		100	90 - 110	
Potassium	500000	511000		ug/L		102	90 - 110	
Sodium	500000	496000		ug/L		99	90 - 110	

Lab Sample ID: LRC 410-11232/16

Matrix: Water

Analysis Batch: 11232

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Calcium	250000	251000		ug/L		100	90 - 110	
Magnesium	250000	249000		ug/L		100	90 - 110	
Potassium	250000	251000		ug/L		100	90 - 110	
Sodium	250000	245000		ug/L		98	90 - 110	

Lab Sample ID: LRC 410-11592/13

Matrix: Water

Analysis Batch: 11592

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Manganese	20000	19300		ug/L		96	90 - 110	

Lab Sample ID: LRC 410-11592/14

Matrix: Water

Analysis Batch: 11592

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Iron	300000	295000		ug/L		98	90 - 110	

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LRC 410-11592/15

Matrix: Water

Analysis Batch: 11592

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	10000	10200		ug/L		102	90 - 110

Lab Sample ID: LRC 410-11592/16

Matrix: Water

Analysis Batch: 11592

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	150000	149000		ug/L		99	90 - 110

Lab Sample ID: LRC 410-12396/14

Matrix: Water

Analysis Batch: 12396

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	500000	516000		ug/L		103	90 - 110
Magnesium	500000	509000		ug/L		102	90 - 110
Potassium	500000	525000		ug/L		105	90 - 110
Sodium	500000	511000		ug/L		102	90 - 110

Lab Sample ID: LRC 410-12396/16

Matrix: Water

Analysis Batch: 12396

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	250000	258000		ug/L		103	90 - 110
Magnesium	250000	257000		ug/L		103	90 - 110
Potassium	250000	262000		ug/L		105	90 - 110
Sodium	250000	259000		ug/L		104	90 - 110

Lab Sample ID: LRC 410-12678/14

Matrix: Water

Analysis Batch: 12678

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	20000	18300		ug/L		92	90 - 110

Lab Sample ID: LRC 410-12678/15

Matrix: Water

Analysis Batch: 12678

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	300000	327000		ug/L		109	90 - 110

Lab Sample ID: LRC 410-12678/16

Matrix: Water

Analysis Batch: 12678

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	10000	9800		ug/L		98	90 - 110

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LRC 410-12678/17

Matrix: Water

Analysis Batch: 12678

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	150000	152000		ug/L		101	90 - 110

Lab Sample ID: LRC 410-12755/14

Matrix: Water

Analysis Batch: 12755

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	20000	18600		ug/L		93	90 - 110

Lab Sample ID: LRC 410-12755/15

Matrix: Water

Analysis Batch: 12755

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	300000	300000		ug/L		100	90 - 110

Lab Sample ID: LRC 410-12755/16

Matrix: Water

Analysis Batch: 12755

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	10000	9840		ug/L		98	90 - 110

Lab Sample ID: LRC 410-12755/17

Matrix: Water

Analysis Batch: 12755

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	150000	149000		ug/L		100	90 - 110

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 410-10576/1-A

Matrix: Water

Analysis Batch: 11423

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10576

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0016	U	0.0020	0.00068	mg/L		06/04/20 17:18	06/08/20 12:03	1
Lead	0.00025	U	0.00050	0.000071	mg/L		06/04/20 17:18	06/08/20 12:03	1

Lab Sample ID: LCS 410-10576/2-A

Matrix: Water

Analysis Batch: 11423

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10576

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00989	0.0104		mg/L		105	84 - 116
Lead	0.00492	0.00513		mg/L		104	88 - 115

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LRC 410-11423/10

Matrix: Water

Analysis Batch: 11423

Client Sample ID: Lab Control Sample

Analyte	Spike Added	LRC Result	LRC Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	500	489		ug/L		98	90 - 110
Lead	500	504		ug/L		101	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 410-11207/67

Matrix: Water

Analysis Batch: 11207

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.090	U	0.10	0.040	mg/L			06/08/20 11:31	1

Lab Sample ID: LCS 410-11207/68

Matrix: Water

Analysis Batch: 11207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	2.50	2.53		mg/L		101	90 - 110

Lab Sample ID: 410-3144-3 MS

Matrix: Water

Analysis Batch: 11207

Client Sample ID: GWK015-2023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.090	U J1	1.00	1.28	J1	mg/L		128	90 - 110

Lab Sample ID: 410-3144-3 DU

Matrix: Water

Analysis Batch: 11207

Client Sample ID: GWK015-2023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate Nitrite as N	0.090	U J1	0.090	U	mg/L		NC	10

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 410-11194/1

Matrix: Water

Analysis Batch: 11194

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.5	U	2.0	0.70	mg/L			06/08/20 12:35	1

Lab Sample ID: LCS 410-11194/2

Matrix: Water

Analysis Batch: 11194

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	20.1	19.0		mg/L		95	80 - 120

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 410-11240/113

Matrix: Water

Analysis Batch: 11240

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bicarbonate Alkalinity as CaCO ₃	6.0	U	8.0	8.0	mg/L			06/06/20 06:40	1
Carbonate Alkalinity as CaCO ₃	6.0	U	8.0	8.0	mg/L			06/06/20 06:40	1
Total Alkalinity as CaCO ₃ to pH 4.5	6.0	U	8.0	8.0	mg/L			06/06/20 06:40	1

Lab Sample ID: MB 410-11240/97

Matrix: Water

Analysis Batch: 11240

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Bicarbonate Alkalinity as CaCO ₃	6.0	U	8.0	8.0	mg/L			06/06/20 04:53	1
Carbonate Alkalinity as CaCO ₃	6.0	U	8.0	8.0	mg/L			06/06/20 04:53	1
Total Alkalinity as CaCO ₃ to pH 4.5	6.0	U	8.0	8.0	mg/L			06/06/20 04:53	1

Lab Sample ID: LCS 410-11240/114

Matrix: Water

Analysis Batch: 11240

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO ₃ to pH 4.5	189	172		mg/L		91	82 - 106		

Lab Sample ID: LCS 410-11240/98

Matrix: Water

Analysis Batch: 11240

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO ₃ to pH 4.5	189	169		mg/L		89	82 - 106		

Lab Sample ID: LCSD 410-11240/115

Matrix: Water

Analysis Batch: 11240

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO ₃ to pH 4.5	189	177		mg/L		94	82 - 106	4	10

Method: SM4500 NH₃ - Ammonia

Lab Sample ID: MB 410-12163/1-A

Matrix: Water

Analysis Batch: 12212

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 12163

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia-N	0.60	U	0.75	0.25	mg/L		06/11/20 08:39	06/11/20 09:33	1

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method: SM4500 NH3 - Ammonia (Continued)

Lab Sample ID: LCS 410-12163/2-A

Matrix: Water

Analysis Batch: 12212

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 12163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia-N	500	497		mg/L		99	93 - 100

Lab Sample ID: LCSD 410-12163/3-A

Matrix: Water

Analysis Batch: 12212

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 12163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia-N	500	494		mg/L		99	93 - 100	1	5

Lab Sample ID: 410-3144-4 DU

Matrix: Water

Analysis Batch: 12212

Client Sample ID: GWK016-2023

Prep Type: Total/NA

Prep Batch: 12163

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia-N	0.86	U	0.86	U	mg/L		NC	6

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

HPLC/IC

Analysis Batch: 12842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	300.0	
410-3144-1	GWVA2-2023	Total/NA	Water	300.0	
410-3144-2	GWVA2-6023	Total/NA	Water	300.0	
410-3144-3	GWK015-2023	Total/NA	Water	300.0	
410-3144-4	GWK016-2023	Total/NA	Water	300.0	
410-3144-5	GWK003-2023	Total/NA	Water	300.0	
MB 410-12842/4	Method Blank	Total/NA	Water	300.0	
LCS 410-12842/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 21417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	300.0	
410-3144-2	GWVA2-6023	Total/NA	Water	300.0	
410-3144-3	GWK015-2023	Total/NA	Water	300.0	
410-3144-3	GWK015-2023	Total/NA	Water	300.0	
410-3144-4	GWK016-2023	Total/NA	Water	300.0	
410-3144-5	GWK003-2023	Total/NA	Water	300.0	
MB 410-21417/20	Method Blank	Total/NA	Water	300.0	
MB 410-21417/24	Method Blank	Total/NA	Water	300.0	
LCS 410-21417/19	Lab Control Sample	Total/NA	Water	300.0	
LCS 410-21417/23	Lab Control Sample	Total/NA	Water	300.0	
410-3144-3 MS	GWK015-2023	Total/NA	Water	300.0	
410-3144-3 MS	GWK015-2023	Total/NA	Water	300.0	
410-3144-3 DU	GWK015-2023	Total/NA	Water	300.0	
410-3144-3 DU	GWK015-2023	Total/NA	Water	300.0	

Metals

Prep Batch: 10573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-2	GWVA2-6023	Total Recoverable	Water	3005A	
410-3144-5	GWK003-2023	Total Recoverable	Water	3005A	
MB 410-10573/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-10573/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 10576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	3020A	
410-3144-2	GWVA2-6023	Total/NA	Water	3020A	
410-3144-3	GWK015-2023	Total/NA	Water	3020A	
410-3144-4	GWK016-2023	Total/NA	Water	3020A	
410-3144-5	GWK003-2023	Total/NA	Water	3020A	
MB 410-10576/1-A	Method Blank	Total/NA	Water	3020A	
LCS 410-10576/2-A	Lab Control Sample	Total/NA	Water	3020A	

Prep Batch: 10582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total Recoverable	Water	3005A	
410-3144-3	GWK015-2023	Total Recoverable	Water	3005A	
410-3144-4	GWK016-2023	Total Recoverable	Water	3005A	
MB 410-10582/1-A	Method Blank	Total Recoverable	Water	3005A	

Eurofins Lancaster Laboratories Env, LLC

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Metals (Continued)

Prep Batch: 10582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-10582/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 11136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Dissolved	Water	Non-Digest Prep	
410-3144-2	GWVA2-6023	Dissolved	Water	Non-Digest Prep	
MB 410-11136/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-11136/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Analysis Batch: 11232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-2	GWVA2-6023	Total Recoverable	Water	6010C	10573
410-3144-5	GWK003-2023	Total Recoverable	Water	6010C	10573
MB 410-10573/1-A	Method Blank	Total Recoverable	Water	6010C	10573
LCS 410-10573/2-A	Lab Control Sample	Total Recoverable	Water	6010C	10573
LRC 410-11232/13	Lab Control Sample		Water	6010C	
LRC 410-11232/14	Lab Control Sample		Water	6010C	
LRC 410-11232/15	Lab Control Sample		Water	6010C	
LRC 410-11232/16	Lab Control Sample		Water	6010C	

Analysis Batch: 11423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	6020A	10576
410-3144-2	GWVA2-6023	Total/NA	Water	6020A	10576
410-3144-3	GWK015-2023	Total/NA	Water	6020A	10576
410-3144-4	GWK016-2023	Total/NA	Water	6020A	10576
410-3144-5	GWK003-2023	Total/NA	Water	6020A	10576
MB 410-10576/1-A	Method Blank	Total/NA	Water	6020A	10576
LCS 410-10576/2-A	Lab Control Sample	Total/NA	Water	6020A	10576
LRC 410-11423/10	Lab Control Sample		Water	6020A	

Prep Batch: 11456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-4	GWK016-2023	Dissolved	Water	Non-Digest Prep	
410-3144-5	GWK003-2023	Dissolved	Water	Non-Digest Prep	
MB 410-11456/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-11456/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Prep Batch: 11479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-3	GWK015-2023	Dissolved	Water	Non-Digest Prep	
MB 410-11479/1-A	Method Blank	Total/NA	Water	Non-Digest Prep	
LCS 410-11479/2-A	Lab Control Sample	Total/NA	Water	Non-Digest Prep	

Analysis Batch: 11592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-3	GWK015-2023	Dissolved	Water	6010C	11479
MB 410-11479/1-A	Method Blank	Total/NA	Water	6010C	11479
LCS 410-11479/2-A	Lab Control Sample	Total/NA	Water	6010C	11479
LRC 410-11592/13	Lab Control Sample		Water	6010C	
LRC 410-11592/14	Lab Control Sample		Water	6010C	

Eurofins Lancaster Laboratories Env, LLC

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Metals (Continued)

Analysis Batch: 11592 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LRC 410-11592/15	Lab Control Sample		Water	6010C	
LRC 410-11592/16	Lab Control Sample		Water	6010C	

Analysis Batch: 12396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total Recoverable	Water	6010C	10582
410-3144-3	GWK015-2023	Total Recoverable	Water	6010C	10582
410-3144-4	GWK016-2023	Total Recoverable	Water	6010C	10582
MB 410-10582/1-A	Method Blank	Total Recoverable	Water	6010C	10582
LCS 410-10582/2-A	Lab Control Sample	Total Recoverable	Water	6010C	10582
LRC 410-12396/13	Lab Control Sample		Water	6010C	
LRC 410-12396/14	Lab Control Sample		Water	6010C	
LRC 410-12396/15	Lab Control Sample		Water	6010C	
LRC 410-12396/16	Lab Control Sample		Water	6010C	

Analysis Batch: 12678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-4	GWK016-2023	Dissolved	Water	6010C	11456
410-3144-5	GWK003-2023	Dissolved	Water	6010C	11456
MB 410-11456/1-A	Method Blank	Total/NA	Water	6010C	11456
LCS 410-11456/2-A	Lab Control Sample	Total/NA	Water	6010C	11456
LRC 410-12678/14	Lab Control Sample		Water	6010C	
LRC 410-12678/15	Lab Control Sample		Water	6010C	
LRC 410-12678/16	Lab Control Sample		Water	6010C	
LRC 410-12678/17	Lab Control Sample		Water	6010C	

Analysis Batch: 12755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Dissolved	Water	6010C	11136
410-3144-2	GWVA2-6023	Dissolved	Water	6010C	11136
MB 410-11136/1-A	Method Blank	Total/NA	Water	6010C	11136
LCS 410-11136/2-A	Lab Control Sample	Total/NA	Water	6010C	11136
LRC 410-12755/14	Lab Control Sample		Water	6010C	
LRC 410-12755/15	Lab Control Sample		Water	6010C	
LRC 410-12755/16	Lab Control Sample		Water	6010C	
LRC 410-12755/17	Lab Control Sample		Water	6010C	

General Chemistry

Analysis Batch: 11194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	SM 4500 S2 F	
410-3144-2	GWVA2-6023	Total/NA	Water	SM 4500 S2 F	
410-3144-3	GWK015-2023	Total/NA	Water	SM 4500 S2 F	
410-3144-4	GWK016-2023	Total/NA	Water	SM 4500 S2 F	
410-3144-5	GWK003-2023	Total/NA	Water	SM 4500 S2 F	
MB 410-11194/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 410-11194/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Eurofins Lancaster Laboratories Env, LLC

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

General Chemistry

Analysis Batch: 11207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	353.2	
410-3144-2	GWVA2-6023	Total/NA	Water	353.2	
410-3144-3	GWK015-2023	Total/NA	Water	353.2	
410-3144-4	GWK016-2023	Total/NA	Water	353.2	
410-3144-5	GWK003-2023	Total/NA	Water	353.2	
MB 410-11207/67	Method Blank	Total/NA	Water	353.2	
LCS 410-11207/68	Lab Control Sample	Total/NA	Water	353.2	
410-3144-3 MS	GWK015-2023	Total/NA	Water	353.2	
410-3144-3 DU	GWK015-2023	Total/NA	Water	353.2	

Analysis Batch: 11240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	SM2320 B	
410-3144-2	GWVA2-6023	Total/NA	Water	SM2320 B	
410-3144-3	GWK015-2023	Total/NA	Water	SM2320 B	
410-3144-4	GWK016-2023	Total/NA	Water	SM2320 B	
410-3144-5	GWK003-2023	Total/NA	Water	SM2320 B	
MB 410-11240/113	Method Blank	Total/NA	Water	SM2320 B	
MB 410-11240/97	Method Blank	Total/NA	Water	SM2320 B	
LCS 410-11240/114	Lab Control Sample	Total/NA	Water	SM2320 B	
LCS 410-11240/98	Lab Control Sample	Total/NA	Water	SM2320 B	
LCSD 410-11240/115	Lab Control Sample Dup	Total/NA	Water	SM2320 B	

Prep Batch: 12163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	SM 4500 NH3 B	
410-3144-2	GWVA2-6023	Total/NA	Water	SM 4500 NH3 B	
410-3144-3	GWK015-2023	Total/NA	Water	SM 4500 NH3 B	
410-3144-4	GWK016-2023	Total/NA	Water	SM 4500 NH3 B	
410-3144-5	GWK003-2023	Total/NA	Water	SM 4500 NH3 B	
MB 410-12163/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 410-12163/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
LCSD 410-12163/3-A	Lab Control Sample Dup	Total/NA	Water	SM 4500 NH3 B	
410-3144-4 DU	GWK016-2023	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 12212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-3144-1	GWVA2-2023	Total/NA	Water	SM4500 NH3	12163
410-3144-2	GWVA2-6023	Total/NA	Water	SM4500 NH3	12163
410-3144-3	GWK015-2023	Total/NA	Water	SM4500 NH3	12163
410-3144-4	GWK016-2023	Total/NA	Water	SM4500 NH3	12163
410-3144-5	GWK003-2023	Total/NA	Water	SM4500 NH3	12163
MB 410-12163/1-A	Method Blank	Total/NA	Water	SM4500 NH3	12163
LCS 410-12163/2-A	Lab Control Sample	Total/NA	Water	SM4500 NH3	12163
LCSD 410-12163/3-A	Lab Control Sample Dup	Total/NA	Water	SM4500 NH3	12163
410-3144-4 DU	GWK016-2023	Total/NA	Water	SM4500 NH3	12163

Eurofins Lancaster Laboratories Env, LLC

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWVA2-2023**Lab Sample ID: 410-3144-1****Date Collected: 06/02/20 11:30****Matrix: Water****Date Received: 06/03/20 10:44**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	12842	06/14/20 04:22	GJ35	ELLE
Total/NA	Analysis	300.0		50	12842	06/14/20 04:39	GJ35	ELLE
Total/NA	Analysis	300.0		5	21417	07/11/20 03:08	UCLW	ELLE
Dissolved	Prep	Non-Digest Prep			11136	06/08/20 09:35	UAMX	ELLE
Dissolved	Analysis	6010C		1	12755	06/12/20 16:23	UPJE	ELLE
Total Recoverable	Prep	3005A			10582	06/04/20 17:38	UAMX	ELLE
Total Recoverable	Analysis	6010C		1	12396	06/11/20 17:09	UCIG	ELLE
Total/NA	Prep	3020A			10576	06/04/20 17:18	UAMX	ELLE
Total/NA	Analysis	6020A		1	11423	06/08/20 12:34	UPJE	ELLE
Total/NA	Analysis	353.2		1	11207	06/08/20 11:49	P684	ELLE
Total/NA	Analysis	SM 4500 S2 F		1	11194	06/08/20 12:35	USE1	ELLE
Total/NA	Analysis	SM2320 B		1	11240	06/06/20 09:47	DI9Q	ELLE
Total/NA	Prep	SM 4500 NH3 B			12163	06/11/20 08:39	UYB0	ELLE
Total/NA	Analysis	SM4500 NH3		1	12212	06/11/20 09:33	UYB0	ELLE

Client Sample ID: GWVA2-6023**Lab Sample ID: 410-3144-2****Date Collected: 06/02/20 11:30****Matrix: Water****Date Received: 06/03/20 10:44**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	12842	06/14/20 05:31	GJ35	ELLE
Total/NA	Analysis	300.0		5	21417	07/11/20 03:42	UCLW	ELLE
Dissolved	Prep	Non-Digest Prep			11136	06/08/20 09:35	UAMX	ELLE
Dissolved	Analysis	6010C		1	12755	06/12/20 16:20	UPJE	ELLE
Total Recoverable	Prep	3005A			10573	06/04/20 17:08	UAMX	ELLE
Total Recoverable	Analysis	6010C		1	11232	06/07/20 19:12	UCIG	ELLE
Total/NA	Prep	3020A			10576	06/04/20 17:18	UAMX	ELLE
Total/NA	Analysis	6020A		1	11423	06/08/20 12:27	UPJE	ELLE
Total/NA	Analysis	353.2		1	11207	06/08/20 11:51	P684	ELLE
Total/NA	Analysis	SM 4500 S2 F		1	11194	06/08/20 12:35	USE1	ELLE
Total/NA	Analysis	SM2320 B		1	11240	06/06/20 09:54	DI9Q	ELLE
Total/NA	Prep	SM 4500 NH3 B			12163	06/11/20 08:39	UYB0	ELLE
Total/NA	Analysis	SM4500 NH3		1	12212	06/11/20 09:33	UYB0	ELLE

Client Sample ID: GWK015-2023**Lab Sample ID: 410-3144-3****Date Collected: 06/02/20 10:00****Matrix: Water****Date Received: 06/03/20 10:44**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	12842	06/14/20 06:05	GJ35	ELLE
Total/NA	Analysis	300.0		5	21417	07/11/20 05:58	UCLW	ELLE
Total/NA	Analysis	300.0		500	21417	07/11/20 06:49	UCLW	ELLE

Eurofins Lancaster Laboratories Env, LLC

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWK015-2023**Lab Sample ID: 410-3144-3****Date Collected: 06/02/20 10:00****Matrix: Water****Date Received: 06/03/20 10:44**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	Non-Digest Prep			11479	06/09/20 10:30	UAMX	ELLE
Dissolved	Analysis	6010C		1	11592	06/09/20 16:33	UCIG	ELLE
Total Recoverable	Prep	3005A			10582	06/04/20 17:38	UAMX	ELLE
Total Recoverable	Analysis	6010C		1	12396	06/11/20 16:59	UCIG	ELLE
Total/NA	Prep	3020A			10576	06/04/20 17:18	UAMX	ELLE
Total/NA	Analysis	6020A		1	11423	06/08/20 12:32	UPJE	ELLE
Total/NA	Analysis	353.2		1	11207	06/08/20 11:52	P684	ELLE
Total/NA	Analysis	SM 4500 S2 F		1	11194	06/08/20 12:35	USE1	ELLE
Total/NA	Analysis	SM2320 B		1	11240	06/06/20 09:25	DI9Q	ELLE
Total/NA	Prep	SM 4500 NH3 B			12163	06/11/20 08:39	UYB0	ELLE
Total/NA	Analysis	SM4500 NH3		1	12212	06/11/20 09:33	UYB0	ELLE

Client Sample ID: GWK016-2023**Lab Sample ID: 410-3144-4****Date Collected: 06/02/20 09:30****Matrix: Water****Date Received: 06/03/20 10:44**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	12842	06/14/20 06:39	GJ35	ELLE
Total/NA	Analysis	300.0		5	21417	07/11/20 07:40	UCLW	ELLE
Dissolved	Prep	Non-Digest Prep			11456	06/09/20 09:25	UAMX	ELLE
Dissolved	Analysis	6010C		1	12678	06/12/20 11:27	UPJE	ELLE
Total Recoverable	Prep	3005A			10582	06/04/20 17:38	UAMX	ELLE
Total Recoverable	Analysis	6010C		1	12396	06/11/20 16:56	UCIG	ELLE
Total/NA	Prep	3020A			10576	06/04/20 17:18	UAMX	ELLE
Total/NA	Analysis	6020A		1	11423	06/08/20 12:30	UPJE	ELLE
Total/NA	Analysis	353.2		1	11207	06/08/20 11:56	P684	ELLE
Total/NA	Analysis	SM 4500 S2 F		1	11194	06/08/20 12:35	USE1	ELLE
Total/NA	Analysis	SM2320 B		1	11240	06/06/20 09:40	DI9Q	ELLE
Total/NA	Prep	SM 4500 NH3 B			12163	06/11/20 08:39	UYB0	ELLE
Total/NA	Analysis	SM4500 NH3		1	12212	06/11/20 09:33	UYB0	ELLE

Client Sample ID: GWK003-2023**Lab Sample ID: 410-3144-5****Date Collected: 06/02/20 10:40****Matrix: Water****Date Received: 06/03/20 10:44**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	12842	06/14/20 07:13	GJ35	ELLE
Total/NA	Analysis	300.0		5	21417	07/11/20 08:48	UCLW	ELLE
Dissolved	Prep	Non-Digest Prep			11456	06/09/20 09:25	UAMX	ELLE
Dissolved	Analysis	6010C		1	12678	06/12/20 11:24	UPJE	ELLE
Total Recoverable	Prep	3005A			10573	06/04/20 17:08	UAMX	ELLE
Total Recoverable	Analysis	6010C		1	11232	06/07/20 19:15	UCIG	ELLE
Total/NA	Prep	3020A			10576	06/04/20 17:18	UAMX	ELLE
Total/NA	Analysis	6020A		1	11423	06/08/20 12:29	UPJE	ELLE

Eurofins Lancaster Laboratories Env, LLC

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Client Sample ID: GWK003-2023

Lab Sample ID: 410-3144-5

Date Collected: 06/02/20 10:40

Matrix: Water

Date Received: 06/03/20 10:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	11207	06/08/20 11:57	P684	ELLE
Total/NA	Analysis	SM 4500 S2 F		1	11194	06/08/20 12:35	USE1	ELLE
Total/NA	Analysis	SM2320 B		1	11240	06/06/20 09:33	DI9Q	ELLE
Total/NA	Prep	SM 4500 NH3 B			12163	06/11/20 08:39	UYB0	ELLE
Total/NA	Analysis	SM4500 NH3		1	12212	06/11/20 09:33	UYB0	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
353.2		Water	Nitrate Nitrite as N
SM4500 NH3	SM 4500 NH3 B	Water	Ammonia-N

Method Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	ELLE
6010C	Metals (ICP)	SW846	ELLE
6020A	Metals (ICP/MS)	SW846	ELLE
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	ELLE
SM 4500 S2 F	Sulfide, Total	SM	ELLE
SM2320 B	Alkalinity, Total	SM18	ELLE
SM4500 NH3	Ammonia	SM	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3020A	Preparation, Total Metals	SW846	ELLE
Non-Digest Prep	Preparation, Non-Digested Aqueous Metals	EPA	ELLE
SM 4500 NH3 B	Distillation, Ammonia	SM	ELLE

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-3144-1	GWVA2-2023	Water	06/02/20 11:30	06/03/20 10:44	
410-3144-2	GWVA2-6023	Water	06/02/20 11:30	06/03/20 10:44	
410-3144-3	GWK015-2023	Water	06/02/20 10:00	06/03/20 10:44	
410-3144-4	GWK016-2023	Water	06/02/20 09:30	06/03/20 10:44	
410-3144-5	GWK003-2023	Water	06/02/20 10:40	06/03/20 10:44	

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 12115 Analysis Batch Number: 13072Lab Sample ID: IC 410-13072/2 Client Sample ID: _____Date Analyzed: 06/01/20 13:19 Lab File ID: 2015315C_2.d GC Column: IC15-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.17	Peak not integrated	litwak	06/15/20 09:35
Chloride	4.58	Peak assignment corrected	litwak	06/15/20 09:34

300.0

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-3144-1

SDG No.:

Instrument ID: 19052 Analysis Batch Number: 21417

Lab Sample ID: CCVRT 410-21417/1 Client Sample ID:

Date Analyzed: 07/10/20 23:09 Lab File ID: 2019213A_1.d GC Column: IC06-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.03	Incomplete Integration	wilsonc	07/13/20 12:10

Lab Sample ID: CCV 410-21417/13 Client Sample ID:

Date Analyzed: 07/11/20 02:33 Lab File ID: 2019213A_13.d GC Column: IC06-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.03	Incomplete Integration	wilsonc	07/13/20 12:10

Lab Sample ID: CCV 410-21417/21 Client Sample ID:

Date Analyzed: 07/11/20 04:50 Lab File ID: 2019213A_21.d GC Column: IC06-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.03	Incomplete Integration	wilsonc	07/13/20 12:11

Lab Sample ID: CCB 410-21417/22 Client Sample ID:

Date Analyzed: 07/11/20 05:07 Lab File ID: 2019213A_22.d GC Column: IC06-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.99	Peak not integrated	gerhardtd	07/14/20 13:18

Lab Sample ID: CCV 410-21417/33 Client Sample ID:

Date Analyzed: 07/11/20 08:14 Lab File ID: 2019213A_33.d GC Column: IC06-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.03	Incomplete Integration	wilsonc	07/13/20 12:14

300.0

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19052 Analysis Batch Number: 21417Lab Sample ID: CCV 410-21417/39 Client Sample ID: _____Date Analyzed: 07/11/20 09:56 Lab File ID: 2019213A_39.d GC Column: IC06-AS14 ID: 4 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.03	Incomplete Integration	wilsonc	07/13/20 12:39

300.0

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MP_1:1HCl_00003	10/13/20	04/14/20	DI Water, Lot DI04142020	20000 mL	MT_HCl_JT_00003	10000 mL	Hydrogen Chloride	188500 ug/mL
.MT_HCl_JT_00003	11/11/23		J.T.Baker, Lot 0000217157		(Purchased Reagent)		Hydrogen Chloride	37.7 %
MP_1:1HCl_00004	12/08/20	06/08/20	DI Water, Lot DI06082020	20000 mL	MT_HCl_JT_00003	10000 mL	Hydrogen Chloride	188500 ug/mL
.MT_HCl_JT_00003	11/11/23		J.T.Baker, Lot 0000217157		(Purchased Reagent)		Hydrogen Chloride	37.7 %
MP_1:1HNO3_00003	10/23/20	04/23/20	DI Water, Lot DI004232020	20000 mL	MT_HNO3_JT_00003	10000 mL	Nitric acid	349000 ug/mL
.MT_HNO3_JT_00003	06/09/24		J.T.Baker, Lot 0000234822		(Purchased Reagent)		Nitric acid	69.8 %
							Nitric acid	69.8 %
MT_IA_CCV_00042	07/04/20	06/04/20	A 1% HNO3 5% HCL, Lot 062154	1000 mL	MT_S_901S1_VH_00005	5 mL	Calcium	25 ug/mL
							Iron	25.02 ug/mL
							Magnesium	25.005 ug/mL
							Potassium	25 ug/mL
							Sodium	25 ug/mL
					MT_S_S2_VH_00002	1 mL	Manganese	0.5001 ug/mL
.MT_S_901S1_VH_00005	03/04/21		VHG Labs, Lot 10037608-30		(Purchased Reagent)		Calcium	5000 ug/mL
							Iron	5004 ug/mL
							Magnesium	5001 ug/mL
							Potassium	5000 ug/mL
							Sodium	5000 ug/mL
.MT_S_S2_VH_00002	07/18/20		VHG Labs, Lot 10040609-9		(Purchased Reagent)		Manganese	500.1 ug/mL
MT_IA_CCV_00043	07/08/20	06/10/20	A 1% HNO3 5% HCL, Lot 078331	1000 mL	MT_S_901S1_VH_00005	5 mL	Calcium	25 ug/mL
							Iron	25.02 ug/mL
							Magnesium	25.005 ug/mL
							Potassium	25 ug/mL
							Sodium	25 ug/mL
					MT_S_S2_VH_00002	1 mL	Manganese	0.5001 ug/mL
.MT_S_901S1_VH_00005	03/04/21		VHG Labs, Lot 10037608-30		(Purchased Reagent)		Calcium	5000 ug/mL
							Iron	5004 ug/mL
							Magnesium	5001 ug/mL
							Potassium	5000 ug/mL
							Sodium	5000 ug/mL
.MT_S_S2_VH_00002	07/18/20		VHG Labs, Lot 10040609-9		(Purchased Reagent)		Manganese	500.1 ug/mL
MT_IA_ICSA_00015	06/09/20	05/10/20	A 1% HNO3 5% HCL, Lot 051219	1000 mL	MT_S_INF1_SC_00009	100 mL	Al	501.2 ug/mL
							Calcium	505.3 ug/mL
							Iron	201.2 ug/mL
							Magnesium	501.2 ug/mL
.MT_S_INF1_SC_00009	02/28/21		SCP Science, Lot S200217031		(Purchased Reagent)		Al	5012 ug/mL
							Calcium	5053 ug/mL
							Iron	2012 ug/mL
							Magnesium	5012 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MT_IA_ICSA_00017	07/04/20	06/04/20	A 1% HNO3 5% HCL, Lot 62154	1000 mL	MT_S_INF1_SC_00008	40 mL	Al	501.2 ug/mL
							Calcium	505.3 ug/mL
							Iron	201.2 ug/mL
					MT_S_INF1_SC_00009	60 mL	Al	501.2 ug/mL
							Calcium	505.3 ug/mL
							Iron	201.2 ug/mL
.MT_S_INF1_SC_00008	02/28/21	SCP Science, Lot S200217031	(Purchased Reagent)	Al	5012 ug/mL			
				Calcium	5053 ug/mL			
				Iron	2012 ug/mL			
.MT_S_INF1_SC_00009	02/28/21	SCP Science, Lot S200217031	(Purchased Reagent)	Al	5012 ug/mL			
				Calcium	5053 ug/mL			
				Iron	2012 ug/mL			
MT_IA_ICSAB_00016	07/02/20	06/02/20	A 1% HNO3 5% HCL, Lot 062154	1000 mL	MT_S_INF1_SC_00009	100 mL	Al	501.2 ug/mL
							Calcium	505.3 ug/mL
							Iron	201.2 ug/mL
							Magnesium	501.2 ug/mL
					MT_S_LAN13_IV_00003	10 mL	Ag	0.2 ug/mL
							Arsenic	0.1 ug/mL
							Ba	0.4997 ug/mL
							Be	0.4998 ug/mL
							Cd	1 ug/mL
							Co	0.5001 ug/mL
							Cr	0.4995 ug/mL
							Cu	0.4997 ug/mL
							Lead	0.5496 ug/mL
							Manganese	0.4997 ug/mL
							Ni	1 ug/mL
							Sb	0.599 ug/mL
							Se	0.5494 ug/mL
							Tl	0.1001 ug/mL
							V	0.4997 ug/mL
							Zn	1 ug/mL
							.MT_S_INF1_SC_00009	02/28/21
Calcium	5053 ug/mL							
Iron	2012 ug/mL							
Magnesium	5012 ug/mL							
.MT_S_LAN13_IV_00003	02/12/21	Inorganic Ventures, Lot P2-MEB687710	(Purchased Reagent)	Ag	20 ug/mL			
				Arsenic	10 ug/mL			
				Ba	49.97 ug/mL			
				Be	49.98 ug/mL			
				Cd	100 ug/mL			
				Co	50.01 ug/mL			

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cr	49.95 ug/mL
							Cu	49.97 ug/mL
							Lead	54.96 ug/mL
							Manganese	49.97 ug/mL
							Ni	100 ug/mL
							Sb	59.9 ug/mL
							Se	54.94 ug/mL
							Tl	10.01 ug/mL
							V	49.97 ug/mL
							Zn	100 ug/mL
MT_IA_ICV_00023	06/25/20	05/26/20	A 1% HNO3 5% HCL, Lot 051219	1000 mL	MT_S_CCV1_HP_00002	6 mL	Calcium	30 ug/mL
							Iron	30 ug/mL
							Magnesium	30 ug/mL
							Potassium	30 ug/mL
							Sodium	30 ug/mL
					MT_S_CCV2_HP_00004	6 mL	Manganese	0.6 ug/mL
.MT_S_CCV1_HP_00002	07/31/20	High-Purity Standards, Lot 1920562			(Purchased Reagent)		Calcium	5000 ug/mL
							Iron	5000 ug/mL
							Magnesium	5000 ug/mL
							Potassium	5000 ug/mL
							Sodium	5000 ug/mL
.MT_S_CCV2_HP_00004	03/04/21	High-Purity Standards, Lot 2005715			(Purchased Reagent)		Manganese	100 ug/mL
MT_IA_ICV_00024	07/01/20	06/01/20	A 1% HNO3 5% HCL, Lot 062154	1000 mL	MT_S_CCV1_HP_00002	6 mL	Calcium	30 ug/mL
							Magnesium	30 ug/mL
							Potassium	30 ug/mL
							Sodium	30 ug/mL
.MT_S_CCV1_HP_00002	07/31/20	High-Purity Standards, Lot 1920562			(Purchased Reagent)		Calcium	5000 ug/mL
							Magnesium	5000 ug/mL
							Potassium	5000 ug/mL
							Sodium	5000 ug/mL
MT_IA_LLC_00015	06/19/20	05/20/20	A 1% HNO3 5% HCL, Lot 057092	1000 mL	MT_S_LLC_HP_00002	2 mL	Calcium	0.2 ug/mL
							Iron	0.2 ug/mL
							Magnesium	0.1 ug/mL
							Manganese	0.01 ug/mL
							Potassium	0.3 ug/mL
							Sodium	1 ug/mL
.MT_S_LLC_HP_00002	08/31/20	High-Purity Standards, Lot 1922825			(Purchased Reagent)		Calcium	100 ug/mL
							Iron	100 ug/mL
							Magnesium	50 ug/mL
							Manganese	5 ug/mL
							Potassium	150 ug/mL
							Sodium	500 ug/mL
MT_IA_LLC_00016	07/04/20	06/04/20	A 1% HNO3 5% HCL, Lot 62154	1000 mL	MT_S_LLC_HP_00002	2 mL	Iron	0.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MT_S_LLC_HP_00002	08/31/20	High-Purity Standards, Lot 1922825			(Purchased Reagent)		Manganese Iron Manganese	0.01 ug/mL 100 ug/mL 5 ug/mL
MT_IA_LRS2_00023	07/04/20	06/05/20	A 1% HNO3 5% HCL, Lot 078331	500 mL	MT_S_SOL1A_IV_00002	25 mL	Manganese	20 ug/mL
.MT_S_SOL1A_IV_00002	05/20/21	Inorganic Ventures, Lot P2-MEB678440			(Purchased Reagent)		Manganese	400 ug/mL
MT_IA_LRS3_00022	07/05/20	06/05/20	A 1% HNO3 5% HCL, Lot 078331	500 mL	MT_S_SOL1A_IV_00002	12.5 mL	Manganese	10 ug/mL
.MT_S_SOL1A_IV_00002	05/20/21	Inorganic Ventures, Lot P2-MEB678440			(Purchased Reagent)		Manganese	400 ug/mL
MT_IA_LRS4_00019	07/05/20	06/05/20	A 1% HNO3 5% HCL, Lot 078331	500 mL	MT_S_SOL2A_HP_00002	25 mL	Calcium Iron Magnesium Potassium Sodium	500 ug/mL 300 ug/mL 500 ug/mL 500 ug/mL 500 ug/mL
.MT_S_SOL2A_HP_00002	10/23/20	High-Purity Standards, Lot 1928901			(Purchased Reagent)		Calcium Iron Magnesium Potassium Sodium	10000 ug/mL 6000 ug/mL 10000 ug/mL 10000 ug/mL 10000 ug/mL
MT_IA_LRS5_00019	07/05/20	06/05/20	A 1% HNO3 5% HCL, Lot 078331	500 mL	MT_S_SOL2A_HP_00002	12.5 mL	Calcium Iron Magnesium Potassium Sodium	250 ug/mL 150 ug/mL 250 ug/mL 250 ug/mL 250 ug/mL
.MT_S_SOL2A_HP_00002	10/23/20	High-Purity Standards, Lot 1928901			(Purchased Reagent)		Calcium Iron Magnesium Potassium Sodium	10000 ug/mL 6000 ug/mL 10000 ug/mL 10000 ug/mL 10000 ug/mL
MT_KNiZn_IV_00008	05/15/21	Inorganic Ventures, Lot R2-MEB690016			(Purchased Reagent)		Ni Potassium Zn	199.8 ug/mL 500.1 ug/mL 39.94 ug/mL
MT_MD_CCV_00022	06/24/20	05/28/20	D 6% HNO3 0% HCL, Lot 58667	500 mL	MT_S_C1001_SC_00002	0.75 mL	Arsenic Lead	0.29835 ug/mL 0.029955 ug/mL
.MT_S_C1001_SC_00002	04/30/21	SCP Science, Lot S200325039			(Purchased Reagent)		Arsenic Lead	198.9 ug/mL 19.97 ug/mL
MT_MD_CTS1_00008	06/20/20	06/08/20	D 6% HNO3 0% HCL, Lot 058667	200 mL	MT_MD_S1_00009	50 mL	Arsenic Lead	24862.5 ug/mL 2496.25 ug/mL
.MT_MD_S1_00009	06/20/20	05/21/20	D 6% HNO3 0% HCL, Lot 058667	500 mL	MT_S_C1001_SC_00002	2.5 l/cm	Arsenic Lead	99450 ug/mL 9985 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MT_S_C1001_SC_00002	04/30/21		SCP Science, Lot S200325039			(Purchased Reagent)	Arsenic	198.9 ug/mL
							Lead	19.97 ug/mL
MT_MD_CTS2_00005	06/24/20	06/05/20	D_6% HNO3 0% HCL, Lot 058667	200 mL	MT_S_C1001_SC_00002	0.5 mL	Arsenic	0.49725 ug/mL
							Lead	0.049925 ug/mL
.MT_S_C1001_SC_00002	04/30/21		SCP Science, Lot S200325039			(Purchased Reagent)	Arsenic	198.9 ug/mL
							Lead	19.97 ug/mL
MT_MD_ICSA_00009	06/17/20	05/18/20	D_6% HNO3 0% HCL, Lot 042839	500 mL	MT_S_ICSA2A_HP_00005	50 mL	Al	100 ug/mL
							Arsenic	0.0003 ug/mL
							Ba	0.0008 ug/mL
							Calcium	300 ug/mL
							Co	0.001 ug/mL
							Cr	0.0007 ug/mL
							Cu	0.0006 ug/mL
							Iron	250 ug/mL
							Lead	0.0004 ug/mL
							Magnesium	100 ug/mL
							Manganese	0.0028 ug/mL
							Mo	2 ug/mL
							Ni	0.0009 ug/mL
							Potassium	100 ug/mL
							Sb	0.0004 ug/mL
							Sodium	250 ug/mL
							Ti	2 ug/mL
							V	0.0001 ug/mL
							Zn	0.0011 ug/mL
.MT_S_ICSA2A_HP_00005	02/28/21		High-Purity Standards, Lot 1908821			(Purchased Reagent)	Al	1000 ug/mL
							Arsenic	0.003 ug/mL
							Ba	0.008 ug/mL
							Calcium	3000 ug/mL
							Co	0.01 ug/mL
							Cr	0.007 ug/mL
							Cu	0.006 ug/mL
							Iron	2500 ug/mL
							Lead	0.004 ug/mL
							Magnesium	1000 ug/mL
							Manganese	0.028 ug/mL
							Mo	20 ug/mL
							Ni	0.009 ug/mL
							Potassium	1000 ug/mL
							Sb	0.004 ug/mL
							Sodium	2500 ug/mL
							Ti	20 ug/mL
							V	0.001 ug/mL
							Zn	0.011 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration				
					Reagent ID	Volume Added						
MT_MD_IC SAB_00012	06/18/20	05/19/20	D_6% HNO3 0% HCL, Lot 042839	500 mL	MT_S_IC S2A_HP_00005	50 mL	Al	100 ug/mL				
							Arsenic	0.1003 ug/mL				
							Ba	0.0008 ug/mL				
							Calcium	300 ug/mL				
							Co	0.201 ug/mL				
							Cr	0.2007 ug/mL				
							Cu	0.2006 ug/mL				
							Iron	250 ug/mL				
							Lead	0.0004 ug/mL				
							Magnesium	100 ug/mL				
							Manganese	0.2028 ug/mL				
							Mo	2 ug/mL				
							Ni	0.2009 ug/mL				
							Potassium	100 ug/mL				
							Sb	0.0004 ug/mL				
							Sodium	250 ug/mL				
							Sr	0.0058 ug/mL				
							Ti	2 ug/mL				
					V	0.2001 ug/mL						
					Zn	0.1011 ug/mL						
					MT_S_IC S2B_HP_00003					5 mL	Ag	0.05 ug/mL
											Arsenic	0.1003 ug/mL
											Cd	0.1 ug/mL
											Co	0.201 ug/mL
											Cr	0.2007 ug/mL
											Cu	0.2006 ug/mL
Manganese	0.2028 ug/mL											
Ni	0.2009 ug/mL											
Se	0.1 ug/mL											
V	0.2001 ug/mL											
Zn	0.1011 ug/mL											
.MT_S_IC S2A_HP_00005	02/28/21		High-Purity Standards, Lot 1908821			(Purchased Reagent)	Al	1000 ug/mL				
							Arsenic	0.003 ug/mL				
							Ba	0.008 ug/mL				
							Calcium	3000 ug/mL				
							Co	0.01 ug/mL				
							Cr	0.007 ug/mL				
							Cu	0.006 ug/mL				
							Iron	2500 ug/mL				
							Lead	0.004 ug/mL				
							Magnesium	1000 ug/mL				
							Manganese	0.028 ug/mL				
							Mo	20 ug/mL				
							Ni	0.009 ug/mL				
							Potassium	1000 ug/mL				
							Sb	0.004 ug/mL				
							Sodium	2500 ug/mL				

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sr	0.058 ug/mL
							Ti	20 ug/mL
							V	0.001 ug/mL
							Zn	0.011 ug/mL
.MT_S_IC2B_HP_00003	09/30/20		High-Purity Standards, Lot 1811324		(Purchased Reagent)		Ag	5 ug/mL
							Arsenic	10 ug/mL
							Cd	10 ug/mL
							Co	20 ug/mL
							Cr	20 ug/mL
							Cu	20 ug/mL
							Manganese	20 ug/mL
							Ni	20 ug/mL
							Se	10 ug/mL
							V	20 ug/mL
							Zn	10 ug/mL
MT_MD_ICV_00013	06/25/20	05/26/20	D 6% HNO3 0% HCL, Lot 58667	500 mL	MT_S_MSCCV_SP_00001	0.75 mL	Arsenic	0.3 ug/mL
							Lead	0.030105 ug/mL
.MT_S_MSCCV_SP_00001	05/26/21		SCP Science, Lot S200507006		(Purchased Reagent)		Arsenic	200 ug/mL
							Lead	20.07 ug/mL
MT_MD_LLC_00012	06/13/20	05/20/20	DI Water, Lot di052020	500 mL	MT_S_MWLLC_HP_00002	0.5 mL	Arsenic	0.002 ug/mL
							Lead	0.0005 ug/mL
.MT_S_MWLLC_HP_00002	08/31/20		High-Purity Standards, Lot 1922619		(Purchased Reagent)		Arsenic	2 ug/mL
							Lead	0.5 ug/mL
MT_MD_LRS3_00006	06/18/20	05/19/20	D 6% HNO3 0% HCL, Lot 049951	500 mL	MT_S_CCV2_HP_00002	2.5 mL	Arsenic	0.5 ug/mL
							Lead	0.5 ug/mL
.MT_S_CCV2_HP_00002	07/31/20		High-Purity Standards, Lot 1920564		(Purchased Reagent)		Arsenic	100 ug/mL
							Lead	100 ug/mL
MT_MD_S1_00009	06/20/20	05/21/20	D 6% HNO3 0% HCL, Lot 058667	500 mL	MT_S_C1001_SC_00002	2.5 1/cm	Arsenic	99450 ug/mL
							Lead	9985 ug/mL
.MT_S_C1001_SC_00002	04/30/21		SCP Science, Lot S200325039		(Purchased Reagent)		Arsenic	198.9 ug/mL
							Lead	19.97 ug/mL
MT_MSSPK_SCP_00002	10/31/20		SCP Science, Lot S200325060		(Purchased Reagent)		Ag	5.03 ug/mL
							Al	19.91 ug/mL
							Arsenic	0.989 ug/mL
							B	24.99 ug/mL
							Ba	4.96 ug/mL
							Be	0.402 ug/mL
							Calcium	403.1 ug/mL
							Cd	0.5 ug/mL
							Co	24.98 ug/mL
							Cr	5.02 ug/mL
							Cu	5 ug/mL
							Iron	30.09 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Lead	0.492 ug/mL
							Li	50 ug/mL
							Magnesium	199.8 ug/mL
							Manganese	5.02 ug/mL
							Mo	4.95 ug/mL
							Ni	5.02 ug/mL
							Potassium	996 ug/mL
							Sb	0.602 ug/mL
							Se	1 ug/mL
							Si	49.4 ug/mL
							Sn	5.01 ug/mL
							Sodium	998 ug/mL
							Sr	3.98 ug/mL
							Sulfur	49.95 ug/mL
							Ti	25.03 ug/mL
							Tl	0.2 ug/mL
							V	5 ug/mL
							Zn	50.2 ug/mL
MT_S_ILC_HP_00003	10/16/20		High-Purity Standards, Lot 1922825			(Purchased Reagent)	Ag	5 ug/mL
							Al	100 ug/mL
							Arsenic	15 ug/mL
							B	15 ug/mL
							Ba	2.5 ug/mL
							Be	2.5 ug/mL
							Calcium	100 ug/mL
							Cd	2.5 ug/mL
							Co	2.5 ug/mL
							Cr	7.5 ug/mL
							Cu	10 ug/mL
							Iron	100 ug/mL
							Lead	7.5 ug/mL
							Li	25 ug/mL
							Magnesium	50 ug/mL
							Manganese	5 ug/mL
							Mo	5 ug/mL
							Ni	5 ug/mL
							P	50 ug/mL
							Potassium	150 ug/mL
							Sb	25 ug/mL
							Se	25 ug/mL
							Si	250 ug/mL
							Sn	25 ug/mL
							Sodium	500 ug/mL
							Sr	2.5 ug/mL
							Sulfur	250 ug/mL
							Ti	5 ug/mL
							Tl	15 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							V	5 ug/mL
							W	15 ug/mL
							Zn	10 ug/mL
							Zr	25 ug/mL
WC 500mg/LNH3 00001	09/24/20		fisher, Lot 186905		(Purchased Reagent)		Ammonia-N	500 mg/L
WC_Alk_LCS_00002	07/23/20	05/12/20	DI Water, Lot 4/23/2020	1000 mL	WC_Alk_Std_00002	20 mL	Bicarbonate Alkalinity as CaCO3	188.869 mg/L
							Carbonate Alkalinity as CaCO3	188.869 mg/L
							Total Alkalinity as CaCO3 to pH 4.5	188.869 mg/L
.WC_Alk_Std_00002	07/23/20		Fisher, Lot 186237		(Purchased Reagent)		Bicarbonate Alkalinity as CaCO3	9443.43 mg/L
							Carbonate Alkalinity as CaCO3	9443.43 mg/L
							Total Alkalinity as CaCO3 to pH 4.5	9443.43 mg/L
WC_FL_CCV_NO3_00013	06/09/20	06/07/20	DI Water, Lot 13347	200 mL	WC_FL_Q_NO2St_00002	1.2 mL	Nitrate Nitrite as N	2.49975 mg/L
					WC_FL_Q_NO3St_00003	3.8 mL	Nitrate Nitrite as N	2.49975 mg/L
.WC_FL_Q_NO2St_00002	09/18/20	03/10/20	DI Water, Lot 13347	1000 mL	WC_FL_NaNO2_00001	0.4924 g	Nitrate Nitrite as N	99.9644 mg/L
..WC_FL_NaNO2_00001	12/09/20		Sigma-Aldrich, Lot MKBV1410V		(Purchased Reagent)		Nitrate Nitrite as N	0.203015 g/g
.WC_FL_Q_NO3St_00003	10/24/20	04/24/20	DI Water, Lot 13347	1000 mL	WC_FL_KNO3_00003	0.7218 g	Nitrate Nitrite as N	99.9982 mg/L
..WC_FL_KNO3_00003	02/20/25		Sigma-Aldrich, Lot MKCL6190		(Purchased Reagent)		Nitrate Nitrite as N	0.13854 g/g
WC_FL_LCS_NO3_00013	06/09/20	06/07/20	DI Water, Lot 13347	100 mL	WC_FL_Q_NO2St_00002	0.7 mL	Nitrate Nitrite as N	2.49972 mg/L
					WC_FL_Q_NO3St_00003	1.8 mL	Nitrate Nitrite as N	2.49972 mg/L
.WC_FL_Q_NO2St_00002	09/18/20	03/10/20	DI Water, Lot 13347	1000 mL	WC_FL_NaNO2_00001	0.4924 g	Nitrate Nitrite as N	99.9644 mg/L
..WC_FL_NaNO2_00001	12/09/20		Sigma-Aldrich, Lot MKBV1410V		(Purchased Reagent)		Nitrate Nitrite as N	0.203015 g/g
.WC_FL_Q_NO3St_00003	10/24/20	04/24/20	DI Water, Lot 13347	1000 mL	WC_FL_KNO3_00003	0.7218 g	Nitrate Nitrite as N	99.9982 mg/L
..WC_FL_KNO3_00003	02/20/25		Sigma-Aldrich, Lot MKCL6190		(Purchased Reagent)		Nitrate Nitrite as N	0.13854 g/g
WC_FL_SpK_NO3_00013	06/09/20	06/07/20	DI Water, Lot 13347	100 mL	WC_FL_Q_NO2St_00002	4 mL	Nitrate Nitrite as N	19.9983 mg/L
					WC_FL_Q_NO3St_00003	16 mL	Nitrate Nitrite as N	19.9983 mg/L
.WC_FL_Q_NO2St_00002	09/18/20	03/10/20	DI Water, Lot 13347	1000 mL	WC_FL_NaNO2_00001	0.4924 g	Nitrate Nitrite as N	99.9644 mg/L
..WC_FL_NaNO2_00001	12/09/20		Sigma-Aldrich, Lot MKBV1410V		(Purchased Reagent)		Nitrate Nitrite as N	0.203015 g/g
.WC_FL_Q_NO3St_00003	10/24/20	04/24/20	DI Water, Lot 13347	1000 mL	WC_FL_KNO3_00003	0.7218 g	Nitrate Nitrite as N	99.9982 mg/L
..WC_FL_KNO3_00003	02/20/25		Sigma-Aldrich, Lot MKCL6190		(Purchased Reagent)		Nitrate Nitrite as N	0.13854 g/g
WC_IC_C_Det_00006	06/02/20	06/01/20	DI Water, Lot in house	50 mL	WC_IC_C_Br_00001	2.5 ug/mL	Bromide	50 ug/mL
					WC_IC_C_Cl_00001	2 ug/mL	Chloride	40 ug/mL
					WC_IC_C_F_00001	0.5 ug/mL	Fluoride	10 ug/mL
					WC_IC_C_SO4_00001	5 ug/mL	Sulfate	100 ug/mL
.WC_IC_C_Br_00001	10/11/20		Inorganic Ventures, Lot P2-BR675946		(Purchased Reagent)		Bromide	1000 ug/mL
.WC_IC_C_Cl_00001	08/21/20		Inorganic Ventures, Lot P2-CL675597		(Purchased Reagent)		Chloride	1000 ug/mL
.WC_IC_C_F_00001	07/10/20		Inorganic Ventures, Lot P2-F676731		(Purchased Reagent)		Fluoride	1000 ug/mL
.WC_IC_C_SO4_00001	10/08/20		Inorganic Ventures, Lot N2-SOX664928		(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_C_Int_00004	04/30/20	04/29/20	DI Water, Lot in house	50 mL	WC_IC_C_Br_00001	2.5 ug/mL	Bromide	50 ug/mL
					WC_IC_C_Cl_00001	1 ug/mL	Chloride	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					WC_IC_C_F_00001	0.5 ug/mL	Fluoride	10 ug/mL
					WC_IC_C_SO4_00001	2.5 ug/mL	Sulfate	50 ug/mL
.WC IC C Br 00001	10/11/20		Inorganic Ventures, Lot P2-BR675946		(Purchased Reagent)		Bromide	1000 ug/mL
.WC IC C Cl 00001	08/21/20		Inorganic Ventures, Lot P2-CL675597		(Purchased Reagent)		Chloride	1000 ug/mL
.WC IC C F 00001	07/10/20		Inorganic Ventures, Lot P2-F676731		(Purchased Reagent)		Fluoride	1000 ug/mL
.WC IC C SO4 00001	10/08/20		Inorganic Ventures, Lot N2-SOX664928		(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_C_Int_00007	06/02/20	06/01/20	DI Water, Lot in house	50 mL	WC_IC_C_Br_00001	2.5 ug/mL	Bromide	50 ug/mL
					WC_IC_C_Cl_00001	1 ug/mL	Chloride	20 ug/mL
					WC_IC_C_F_00001	0.5 ug/mL	Fluoride	10 ug/mL
					WC_IC_C_SO4_00001	2.5 ug/mL	Sulfate	50 ug/mL
.WC IC C Br 00001	10/11/20		Inorganic Ventures, Lot P2-BR675946		(Purchased Reagent)		Bromide	1000 ug/mL
.WC IC C Cl 00001	08/21/20		Inorganic Ventures, Lot P2-CL675597		(Purchased Reagent)		Chloride	1000 ug/mL
.WC IC C F 00001	07/10/20		Inorganic Ventures, Lot P2-F676731		(Purchased Reagent)		Fluoride	1000 ug/mL
.WC IC C SO4 00001	10/08/20		Inorganic Ventures, Lot N2-SOX664928		(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_QC2_00007	04/30/20	04/29/20	DI Water, Lot in house	50 mL	WC_IC_Q_Br_00003	2.5 ug/mL	Bromide	50 ug/mL
					WC_IC_Q_CI_00001	1 ug/mL	Chloride	20 ug/mL
					WC_IC_Q_SO4_00002	2.5 ug/mL	Sulfate	50 ug/mL
.WC IC Q Br 00003	09/24/20		AccuStandard, Lot 219095069		(Purchased Reagent)		Bromide	1000 ug/mL
.WC IC Q CI 00001	08/30/20		SPEX, Lot 4-176CL-2X		(Purchased Reagent)		Chloride	1000 ug/mL
.WC IC Q SO4 00002	07/10/21		AccuStandard, Lot 219065038		(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_QC2_00036	06/14/20	06/13/20	DI Water, Lot IC	50 mL	WC_IC_Q_Br_00004	2.5 mL	Bromide	50 ug/mL
					WC_IC_Q_CI_00002	1 mL	Chloride	20 ug/mL
					WC_IC_Q_SO4_00003	2.5 mL	Sulfate	50 ug/mL
.WC IC Q Br 00004	05/30/21		SpexCertiprep, Lot 4-195BR-2X		(Purchased Reagent)		Bromide	1000 ug/mL
.WC IC Q CI 00002	04/30/21		SPEX Certiprep, Lot 4-176CL-2X		(Purchased Reagent)		Chloride	1000 ug/mL
.WC IC Q SO4 00003	05/30/21		Spex Certiprep, Lot 4-197SO4-2X		(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_QC2_00082	07/11/20	07/10/20	DI Water, Lot IC	50 mL	WC_IC_Q_Br_00004	2.5 mL	Bromide	50 ug/mL
					WC_IC_Q_CI_00002	1 mL	Chloride	20 ug/mL
					WC_IC_Q_SO4_00003	2.5 mL	Sulfate	50 ug/mL
.WC IC Q Br 00004	05/30/21		SpexCertiprep, Lot 4-195BR-2X		(Purchased Reagent)		Bromide	1000 ug/mL
.WC IC Q CI 00002	04/30/21		SPEX Certiprep, Lot 4-176CL-2X		(Purchased Reagent)		Chloride	1000 ug/mL
.WC IC Q SO4 00003	05/30/21		Spex Certiprep, Lot 4-197SO4-2X		(Purchased Reagent)		Sulfate	1000 ug/mL
WC_S-2_20_00021	06/09/20	06/08/20	DI Water, Lot 060820	1000 mL	WC_S-2_1000_00012	20 mL	Sulfide	20.0653 mg/L
.WC S-2 1000 00012	06/15/20	06/08/20	DI Water, Lot 06082020	500 mL	WC_Sulf_STK_00001	3.7582 g	Sulfide	1003.27 mg/L
..WC Sulf STK 00001	10/07/20		Alfa Aesar, Lot T02E033		(Purchased Reagent)		Sulfide	0.133477 g/g

Reagent

MT_HCl_JT_00003

Hydrochloric Acid, 36.5–38.0%
 BAKER INSTRA-ANALYZED® Reagent
 For Trace Metal Analysis



Material No.: 9530-33
 Batch No.: 0000217157
 Manufactured Date: 2018/11/12
 Retest Date: 2023/11/11
 Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.7
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	< 1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	< 1
ACS – Free Chlorine (as Cl ₂)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 0.05 ppm	< 0.03
Sulfate (SO ₄)	<= 0.5 ppm	< 0.3
Sulfite (SO ₃)	<= 0.8 ppm	0.3
Ammonium (NH ₄)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	12.9
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

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Test	Specification	Result
Trace Impurities - Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities - Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities - Iron (Fe)	<= 15.0 ppb	3.4
Trace Impurities - Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities - Magnesium (Mg)	<= 10.0 ppb	0.3
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities - Selenium (Se), For Information Only	ppb	1.0
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 1.0 ppb	0.3
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.5
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015



Jamie Ethier
Vice President Global Quality

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Receipt Date in TALs Based off of Product Manufacture Date

Expiration Date in TALs Based off of Manufacture Suggested Retest Date

For Receipt, Open, and Expiration date; refer to individual bottle.

ELLE QA

ELLE Dept. 4022 Management

Reagent

MT_HNO3_JT_00003

Nitric Acid, 69.0–70.0%
 BAKER INSTRA-ANALYZED® Reagent
 For Trace Metal Analysis



Material No.: 9598-34
 Batch No.: 0000234822
 Manufactured Date: 2019/06/11
 Retest Date: 2024/06/09
 Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (HNO ₃)	69.0 – 70.0 %	69.8
Appearance	Passes Test	PT
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 2 ppm	< 1
Chloride (Cl)	<= 0.04 ppm	< 0.03
Phosphate (PO ₄)	<= 0.1 ppm	< 0.01
Sulfate (SO ₄)	<= 0.4 ppm	< 0.2
Trace Impurities – Aluminum (Al)	<= 30.0 ppb	1.0
Arsenic and Antimony (as As)	<= 5 ppb	< 2
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 1.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 4.0 ppb	1.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	3.0
Trace Impurities – Chromium (Cr)	<= 10.0 ppb	4.0
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 20.0 ppb	0.2
Trace Impurities – Germanium (Ge)	<= 4.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 10.0 ppb	0.7
Trace Impurities – Lead (Pb)	<= 0.5 ppb	< 0.5

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Test	Specification	Result
Trace Impurities - Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	0.2
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities - Molybdenum (Mo)	<= 5.0 ppb	< 3.0
Trace Impurities - Nickel (Ni)	<= 1.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities - Potassium (K)	<= 5.0 ppb	< 2.0
Trace Impurities - Silicon (Si)	<= 20.0 ppb	1.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 200.0 ppb	2.0
Trace Impurities - Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 2.0 ppb	< 0.9
Trace Impurities - Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities - Zirconium (Zr)	<= 1.0 ppb	0.1

For Laboratory, Research or Manufacturing Use
 Meets ACS Specifications

Country of Origin: US
 Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
 Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

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Receipt Date in TALs Based off of Product Manufacture Date

Expiration Date in TALs Based off of Manufacture Suggested Retest Date

For Receipt, Open, and Expiration date; refer to individual bottle.

ELLE QA

ELLE Dept. 4022 Management

Reagent

MT_MSSPK_SCP_00002

Certificate of Analysis

1.0 DESCRIPTION : *Plasma CAL – Custom Standard*
 Catalogue Number : **AQ0-140-615**
 Lot Number : **S200325060** **ICP-MS Spike**
 Matrix: **2.0% HNO₃ Traces HF**
 Expiration Date (End of month): **October 2020**

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:

Method of Analysis: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

Traceability: Applicable NIST Standard Reference Materials (see list below):

3101a	Al	3109a	Ca	3117a	Eu	3126a	Fe	3134	Mo	3142a	Pr	3151	Ag	3159	Th	3167a	Y
3102a	Sb	3110	Ce	3118a	Gd	3127a	La	3135a	Nd	3143	Re	3152a	Na	3160a	Tm	3168a	Zn
3103a	As	3111a	Cs	3119a	Ga	3128	Pb	3136	Ni	3144	Rh	3153a	Sr	3161a	Sn	3169	Zr
3104a	Ba	3112a	Cr	3120a	Ge	3129a	Li	3137	Nb	3145a	Rb	3154	S	3162a	Ti		
3105a	Be	3113	Co	3121	Au	3130a	Lu	3138	Pd	3147a	Sm	3155	Ta	3163	W		
3106	Bi	3114	Cu	3122	Hf	3131a	Mg	3139a	P	3148a	Sc	3156	Te	3164	U		
3107	B	3115a	Dy	3123a	Ho	3132	Mn	3140	Pt	3149	Se	3157a	Tb	3165	V		
3108	Cd	3116a	Er	3124a	In	3133	Hg	3141a	K	3150	Si	3158	Tl	3166a	Yb		

Certified Concentrations:

Ag*	5.03 ± 0.04	µg/ml	Fe	30.09 ± 0.25	µg/ml	Se*	1.00 ± 1%	µg/ml
Al	19.91 ± 0.13	µg/ml	K	996 ± 8	µg/ml	Si	49.40 ± 0.38	µg/ml
As*	0.989 ± 1%	µg/ml	Li*	50.0 ± 0.5	µg/ml	Sn*	5.01 ± 0.05	µg/ml
B	24.99 ± 0.22	µg/ml	Mg	199.8 ± 1.7	µg/ml	Sr*	3.98 ± 0.03	µg/ml
Ba*	4.96 ± 0.03	µg/ml	Mn*	5.02 ± 0.04	µg/ml	Ti	25.03 ± 0.18	µg/ml
Be*	0.402 ± 1%	µg/ml	Mo*	4.95 ± 0.03	µg/ml	Tl*	0.200 ± 1%	µg/ml
Ca	403.1 ± 3.8	µg/ml	Na	998 ± 8	µg/ml	V*	5.00 ± 0.04	µg/ml
Cd*	0.500 ± 1%	µg/ml	Ni*	5.02 ± 0.03	µg/ml	Zn	50.2 ± 0.4	µg/ml
Co	24.98 ± 0.22	µg/ml	Pb*	0.492 ± 1%	µg/ml			
Cr*	5.02 ± 0.04	µg/ml	S	49.95 ± 0.50	µg/ml			
Cu*	5.00 ± 0.04	µg/ml	Sb*	0.602 ± 1%	µg/ml			

Reference Material Producer
 CERTIFICATE #2885.02

*Concentration value derived from v/v dilutions of certified, NIST-traceable starting materials

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($u_c = \sqrt{\sum u_i^2}$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:

Density: **1.015 g/ml** @ **22.4 °C**

4.0 APPROVAL AND DATE OF CERTIFICATION:

Certification Approval: **Yaling Sui, Chemist**
 Certification Date: **April 07, 2020**
 Revision Date: **May 07, 2020**

Yaling Sui

SCP SCIENCE

Providing Innovative Solutions to Analytical Chemists

5.0 INTENDED USE:

- ICP Standards: For the calibration of, including but not limited to: ICP-AES, ICP-MS, FAAS, GFAA, XRF and DCP.
- AA Standards: For the calibration of Flame (FAAS) and Graphite Furnace (GFAA) Atomic Absorption Spectrometers.
- Matrix Modifiers: For the optimization of analytical conditions to provide better Graphite Furnace Atomic Absorption (GFAA) instrument response and improved detection limits.
- pH Standards: For the calibrating pH meters or for other wet chemistry applications.
- Conductivity Standards: For electrolytic conductivity measurement as a calibration standard.
- IC Standards: for calibration of, but not limited to IC, HPLC, TLC, ISE, IR, NMR, MS, UV/VIS or other wet chemistry applications.

For any inquiries, please contact **SCP SCIENCE**.

6.0 INSTRUCTIONS FOR USE:

Handling and Storage: Keep product tightly capped when not in use. The solution should be opened for a minimum amount of time necessary to dispense the amount required. Do not pipet or use directly from container. Do not return unused portions back to container. Store under normal laboratory conditions. Avoid exposure to excessive sources of heat and humidity or direct sunlight.

Stability: This Standard is guaranteed to be stable and accurate to within the specified uncertainty of measurement up to the unopened expiry date, if sealed, or up to the opened expiry date (when indicated), whichever comes first, provided the solution is kept tightly capped and stored under the indicated storage conditions. Purchasers will be notified of any significant changes resulting in re-certification or withdrawal of the product prior to the expiration date.

7.0 HAZARDOUS INFORMATION :

Please refer to the associated Material Safety Data Sheet (MSDS) for information regarding this product (available at www.SCPSCIENCE.com).

8.0 HOMOGENEITY:

This solution has been blended according to an in-house procedure and its homogeneity is guaranteed to be fit for purpose when a sample size sufficient for the intended method of analysis is used.

9.0 TRACEABILITY:

This CRM (Certified Reference Material) is traceable to the NIST SRM (Standard Reference Material) indicated in section 2 through an unbroken chain of comparisons. In addition, balances used are regularly calibrated using weights which are traceable to NIST (National Institute of Standards and Technology) or NRC (National Research Council of Canada) standards. All conductivity meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable Thermometer and standards. All pH meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable thermometer and pH/MV simulator.

10.0 PREPARATION:

For the preparation of these solutions, 18 megohm/cm double deionized water, high-purity acids and glassware calibrated to ASTM Class A specifications are used.

11.0 QUALITY SYSTEM CERTIFICATIONS:

ISO 9001 Certification: This standard was produced in a facility which operates a **registered** ISO 9001 Quality Management System. Please consult our web site for a copy of the most recent revision of our certificate of registration.

ISO 17025 Accreditation: **SCP SCIENCE (Corporate Headquarters)** operates an ISO 17025 **accredited** laboratory. Please consult our web site for a copy of the most recent revision of our certificate and scope of accreditation.

ISO 17034 Accreditation: **SCP SCIENCE (Corporate Headquarters)** is an ISO 17034 accredited Reference Material Producer. Please consult our website for a copy of our most recent certificate and scope of accreditation.



Corporate Headquarters:

CORPORATE HEADQUARTERS

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FRANCE

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GERMANY

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Fax: +49 (0) 8342-89560-69

PC-FRM005-CERT-8.0-B

Reagent

MT _ S _ 901S1 _ VH _ 00005



CERTIFICATE OF ANALYSIS



Multi-Element Aqueous CRM

Custom Multi Standard 901-S1

Matrix: 5% HNO₃

Product #: VHG-ZLANLAB901-500

Lot #: 10037608-30

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Al	5000 ± 25 µg/mL	Fe	5004 ± 25 µg/mL	Mg	5001 ± 25 µg/mL
Ca	5000 ± 25 µg/mL	K	5000 ± 25 µg/mL	Na	5000 ± 25 µg/mL

Intended Use: This solution is intended for use as a certified reference material or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), or alternative techniques for elemental detection, such as flame or furnace atomic absorption spectroscopy (AA or GFAA).

Certification & Traceability: VHG CRMs are manufactured and certified under a quality management system that is accredited to **ISO 9001, ISO Guide 34** and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to NIST SRMs. This solution was stabilized using high purity nitric acid (HNO₃) and diluted with filtered (0.22µm), 18 M-ohm deionized water. The balances used in the preparation of VHG CRMs are calibrated regularly with traceability to NIST. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined by VHG Labs based upon gravimetric procedures. Secondary verification of the certified concentrations was performed by VHG Labs using ICP-OES that was calibrated and/or referenced against **NIST SRMs** (see reverse side). The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) use a minimum sub-sample size of 500µL, (4) make dilutions using calibrated balances or certified volumetric class A flasks and pipettes, (5) dilute with the same matrix as the original CRM, and (6) never pour used product back into the original container. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or expose to direct sunlight. Minimize exposure to moisture or high humidity.

Period of Validity: VHG ensures the accuracy of this solution for **12 Months** from the Certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

VHG Labs, Inc.

Chuck Goudreau, Certifying Office

4 March 2020
Certification Date



LGC waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

Page 1 of 2

276 Abby Road, Manchester, NH 03103 USA
(603) 622-7660 Fax: (603) 622-5180 www.vhglabs.com



Reagent

MT _ S _ C1001 _ SC _ 00002

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Certificate of Analysis

1.0 DESCRIPTION : **Plasma CAL – Custom Standard**
 Catalogue Number : **AQ0-140-655**
 Lot Number : **S200325039** **Custom Std. 1001**
 Matrix: **5.0% HNO3 Traces HF**
 Expiration Date (End of month): **April 2021**

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:Method of Analysis: **Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)**Traceability: **Applicable NIST Standard Reference Materials (see list below):**

3101a	Al	3109a	Ca	3117a	Eu	3126a	Fe	3134	Mo	3142a	Pr	3151	Ag	3159	Th	3167a	Y
3102a	Sb	3110	Ce	3118a	Gd	3127a	La	3135a	Nd	3143	Re	3152a	Na	3160a	Tm	3168a	Zn
3103a	As	3111a	Cs	3119a	Ga	3128	Pb	3136	Ni	3144	Rh	3153a	Sr	3161a	Sn	3169	Zr
3104a	Ba	3112a	Cr	3120a	Ge	3129a	Li	3137	Nb	3145a	Rb	3154	S	3162a	Ti		
3105a	Be	3113	Co	3121	Au	3130a	Lu	3138	Pd	3147a	Sm	3155	Ta	3163	W		
3106	Bi	3114	Cu	3122	Hf	3131a	Mg	3139a	P	3148a	Sc	3156	Te	3164	U		
3107	B	3115a	Dy	3123a	Ho	3132	Mn	3140	Pt	3149	Se	3157a	Tb	3165	V		
3108	Cd	3116a	Er	3124a	In	3133	Hg	3141a	K	3150	Si	3158	Tl	3166a	Yb		

Certified Concentrations:

Ag	20.04 ± 0.16	µg/ml	Ni	199.2 ± 1.9	µg/ml
As	198.9 ± 1.7	µg/ml	Pb	19.97 ± 0.17	µg/ml
B	199.3 ± 2.1	µg/ml	Sb	20.07 ± 0.19	µg/ml
Ba	199.9 ± 2.1	µg/ml	Se	19.94 ± 0.18	µg/ml
Be	19.95 ± 0.23	µg/ml	Sn	20.07 ± 0.21	µg/ml
Cd	19.83 ± 0.19	µg/ml	Sr	19.81 ± 0.21	µg/ml
Co	199.3 ± 2.2	µg/ml	Ti	200.6 ± 2.1	µg/ml
Cr	200.1 ± 2.2	µg/ml	Tl	19.88 ± 0.18	µg/ml
Cu	200.2 ± 2.2	µg/ml	V	200.2 ± 2.2	µg/ml
Mn	200.1 ± 2.1	µg/ml	Zn	199.7 ± 2.0	µg/ml
Mo	19.82 ± 0.18	µg/ml			

Reference Material Producer
CERTIFICATE #2885.02

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($uc = \sqrt{\sum u_i^2}$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:Density: **1.029 g/ml @ 22.5 °C****4.0 APPROVAL AND DATE OF CERTIFICATION:**

Certification Approval: **Yaling Sui, Chemist**
 Certification Date: **April 06, 2020**

Yaling Sui

Reagent

MT _ S _ CCV1 _ HP _ 00002



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Certificate of Analysis

Certified Reference Material

Product Description: CCV-1

Product Number: **SM-510-047-500**
Lot Number: **1920562**
Matrix: **5% HNO₃**
Purity: **99.0%-99.9995%**



ISO 17034:2016
(RMP) Accreditation
Certificate Number
AR-1436

ISO/IEC 17025:2005
Accreditation
Certificate Number
AT-1529

Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#	Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#
Al	5000 \pm 30	3101a	140903	Mg	5000 \pm 30	3131a	140110
Ca	5000 \pm 30	3109a	130213	Na	5000 \pm 30	3152a	120715
Fe	5000 \pm 30	3126a	140812	S	5000 \pm 75	*	
K	5000 \pm 50	3141a	140813				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for one year from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: July 2019
Expiration Date: July 31, 2020
Certificate Issue Date: July 29, 2019

Moven Mututurari
Moven Mututurari, Ph. D, Laboratory Manager

*Rec'd 2 Bottles
Bottles A and B
Expire 7/31/20
PC392*

Lot Number: **1920562**



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Revision: 0
Page 1 of 2

Reagent

MT _ S _ CCV2 _ HP _ 00002



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Certificate of Analysis

Certified Reference Material

Product Description: CCV2

Product Number: SM-510-034-500

Lot Number: 1920564

Matrix: 4% HNO₃ / Tr HF

Purity: 99.95-99.9999%



ISO 17034:2016
(RMP) Accreditation
Certificate Number
AR-1436



ISO/IEC 17025:2005
Accreditation
Certificate Number
AT-1529

Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#	Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#
Ag	100 \pm 1	3151	160729	Ni	100 \pm 1	3136	120619
As	100 \pm 1	3103a	100818	P	100 \pm 2	3139a	060717
B	100 \pm 1	3107	110830	Pb	100 \pm 1	3128	101026
Ba	100 \pm 1	3104a	140909	Sb	100 \pm 1	3102a	140911
Be	100 \pm 1	3105a	090514	Se	100 \pm 1	3149	100901
Cd	100 \pm 1	3108	130116	Sn	100 \pm 1	3161a	140917
Co	100 \pm 1	*		Sr	100 \pm 1	*	
Cr	100 \pm 1	3112a	170630	Ti	100 \pm 1	3162a	130925
Cu	100 \pm 1	3114	121207	Tl	100 \pm 1	3158	151215
Li	100 \pm 1	3129a	100714	V	100 \pm 1	3165	160906
Mn	100 \pm 2	*		Zn	100 \pm 1	3168a	120629
Mo	100 \pm 1	3134	130418	Zr	100 \pm 2	3169	130920

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for one year from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: July 2019

Expiration Date: July 31, 2020

Certificate Issue Date: July 29, 2019

Moven Mututuvvari

Moven Mututuvvari, Ph. D, Laboratory Manager

*Rec'd 2 Bottles
Bottles
A and B
expire 7/31/20*

Lot Number: 1920564



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Revision: 0

Page 1 of 2

Reagent

MT _ S _ CCV2 _ HP _ 00004



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Certificate of Analysis

Certified Reference Material

Product Description: CCV2
Product Number: SM-510-034-500
Lot Number: 2005715-500
Matrix: 4% HNO₃ / Tr HF
Purity: 99.92%-99.9999%



Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	Element	($\mu\text{g/mL}$)	SRM ID
Ag	100 \pm 1	3151	Ni	100 \pm 1	3136
As	100 \pm 1	3103a	P	100 \pm 2	3139a
B	100 \pm 1	3107	Pb	100 \pm 1	3128
Ba	100 \pm 1	3104a	Sb	100 \pm 1	3102a
Be	100 \pm 1	3105a	Se	100 \pm 1	3149
Cd	100 \pm 1	3108	Sn	100 \pm 1	3161a
Co	100 \pm 1	3113	Sr	100 \pm 1	3153a
Cr	100 \pm 1	3112a	Ti	100 \pm 1	3162a
Cu	100 \pm 1	3114	Tl	100 \pm 1	3158
Li	100 \pm 1	3129a	V	100 \pm 1	3165
Mn	100 \pm 2	3132	Zn	100 \pm 1	3168a
Mo	100 \pm 1	3134	Zr	100 \pm 2	3169

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for one year from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: March 2020
Expiration Date: March 31, 2021
Certificate Issue Date: February 28, 2020

Moven Mututurari
Moven Mututurari, Ph. D, Laboratory Manager



410-37719

Lot Number: 2005715-500



Revision: 0

Page 1 of 2

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Reagent

MT _ S _ ICS2A _ HP _ 00005



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Certificate of Analysis

Certified Reference Material

Product Description:

Name: ICP-MS Interference Check Standard 2
Part Number: ICP-MS-ICS-2 Solution A
Lot Number: 1908821
Matrix: Tr HF + 5% HNO₃
Purity: 99.98% - 99.999%
Density: 1.060g/mL ± 0.002 g/mL @ 22.1°C



ISO 17034:2016 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Al	1000 ± 10	3101a	140903	K	1000 ± 10	3141a	140813
Ca	3000 ± 30	3109a	130213	Na	2500 ± 25	3152a	120715
Fe	2500 ± 25	3126a	140812	S	1000 ± 10	*	
Mg	1000 ± 10	3131a	140110	Ti	20.0 ± 0.2	3162a	130925
Mo	20.0 ± 0.2	3134	130418	C	2000 ^a	*	
P	1000 ± 10	3139a	060717	Cl	20,000 ± 200	3182	060925

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) and ion chromatography (IC) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

^a The carbon concentration is provided for reference only due to the nature of the element

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

Ag	< 0.5	Cd	< 0.5	Mn	28	Sb	4	V	1
As	3	Co	10	Ni	9	Se	< 0.5	W	11
Ba	8	Cr	7	Pb	4	Tl	< 0.1	Zn	11
Be	< 0.1	Cu	6	Sn	< 3	Sr	58		

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: February 2020

Certificate Issue Date: April 8, 2019

Moven Mututuvvari
Moven Mututuvvari PhD., Laboratory Manager



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Certificate of Analysis

Certified Reference Material



410-33880

Product Description:

Name: ICP-MS Interference Check Standard 2
Part Number: ICP-MS-ICS-2 Solution A
Lot Number: 1908821
Matrix: Tr HF + 5% HNO₃
Purity: 99.98% - 99.999%
Density: 1.060g/mL ± 0.002 g/mL @ 22.1°C



ISO 17034:2016 (RMP) Accreditation
Certificate Number AR-1436



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Al	1000 ± 10	3101a	140903	K	1000 ± 10	3141a	140813
Ca	3000 ± 30	3109a	130213	Na	2500 ± 25	3152a	120715
Fe	2500 ± 25	3126a	140812	S	1000 ± 10	*	
Mg	1000 ± 10	3131a	140110	Ti	20.0 ± 0.2	3162a	130925
Mo	20.0 ± 0.2	3134	130418	C	2000 ^a	*	
P	1000 ± 10	3139a	060717	Cl	20,000 ± 200	3182	060925

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) and ion chromatography (IC) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

^a The carbon concentration is provided for reference only due to the nature of the element

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

Ag	< 0.5	Cd	< 0.5	Mn	28	Sb	4	V	1
As	3	Co	10	Ni	9	Se	< 0.5	W	11
Ba	8	Cr	7	Pb	4	Tl	< 0.1	Zn	11
Be	< 0.1	Cu	6	Sn	< 3	Sr	58		

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: February 2020

Certificate Issue Date: April 8, 2019

Moven Mututuvvari
Moven Mututuvvari PhD., Laboratory Manager

Reagent

MT _ S _ ICS2B _ HP _ 00003



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Rec'd 1 Bottle
"C" expires
9-30-20

Opened
9-17-19

Certificate of Analysis

Certified Reference Material

Product Description:

Name: ICP-MS Interference Check 2
Part Number: ICP-MS-ICS-2 Solution B
Lot Number: 1811324
Matrix: 2% HNO₃
Purity: 99.992% - 99.9999%



ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
As	10.0 ± 0.1	3103a	100818	Ni	20.0 ± 0.2	3136	120619
Cd	10.0 ± 0.1	3108	130116	Se	10.0 ± 0.1	3149	100901
Cr	20.0 ± 0.2	3112a	030730	Ag	5.00 ± 0.05	3151	160729
Co	20.0 ± 0.2	3113	000630	V	20.0 ± 0.2	3165	160906
Cu	20.0 ± 0.2	3114	121207	Zn	10.0 ± 0.1	3168a	120629
Mn	20.0 ± 0.2	3132	050429				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

Density: 1.010 g/mL ± 0.002 g/mL @ 20.0°C ± 0.3 °C

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: September 2019

Certificate Issue Date: May 8, 2018

Moven Mututuvvari
Moven Mututuvvari PhD., Laboratory Manager

Reagent

MT _ S _ INF1 _ SC _ 00008

Certificate of Analysis**1.0 DESCRIPTION :** *PlasmaCAL – Custom Standard*

Catalogue Number : **AQ0-097-715** **INF-1**
 Lot Number : **S200217031**
 Matrix: **5.0% HNO₃**
 Expiration Date (End of month): **February 2021**

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:

Method of Analysis: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

Traceability: Applicable NIST Standard Reference Materials (see list below):

3101a	Al	3109a	Ca	3117a	Eu	3126a	Fe	3134	Mo	3142a	Pr	3151	Ag	3159	Th	3167a	Y
3102a	Sb	3110	Ce	3118a	Gd	3127a	La	3135a	Nd	3143	Re	3152a	Na	3160a	Tm	3168a	Zn
3103a	As	3111a	Cs	3119a	Ga	3128	Pb	3136	Ni	3144	Rh	3153a	Sr	3161a	Sn	3169	Zr
3104a	Ba	3112a	Cr	3120a	Ge	3129a	Li	3137	Nb	3145a	Rb	3154	S	3162a	Ti		
3105a	Be	3113	Co	3121	Au	3130a	Lu	3138	Pd	3147a	Sm	3155	Ta	3163	W		
3106	Bi	3114	Cu	3122	Hf	3131a	Mg	3139a	P	3148a	Sc	3156	Te	3164	U		
3107	B	3115a	Dy	3123a	Ho	3132	Mn	3140	Pt	3149	Se	3157a	Tb	3165	V		
3108	Cd	3116a	Er	3124a	In	3133	Hg	3141a	K	3150	Si	3158	Tl	3166a	Yb		

Certified Concentrations:

Al	5.012 ± 43	µg/ml
Ca	5.053 ± 46	µg/ml
Fe	2.012 ± 16	µg/ml
Mg	5.012 ± 44	µg/ml

ACCREDITEDReference Material Producer
CERTIFICATE #2005-02

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($u_c = \sqrt{\sum u_i^2}$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:

Density: **1.096 g/ml** @ **22.1 °C**

4.0 APPROVAL AND DATE OF CERTIFICATION:

Certification Approval: **Yaling Sui, Chemist**
 Certification Date: **February 20, 2020**

Yaling Sui

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5.0 INTENDED USE:

- ICP Standards: For the calibration of, including but not limited to: ICP-AES, ICP-MS, FAAS, GFAA, XRF and DCP.
- AA Standards: For the calibration of Flame (FAAS) and Graphite Furnace (GFAA) Atomic Absorption Spectrometers.
- Matrix Modifiers: For the optimization of analytical conditions to provide better Graphite Furnace Atomic Absorption (GFAA) instrument response and improved detection limits.
- pH Standards: For the calibrating pH meters or for other wet chemistry applications.
- Conductivity Standards: For electrolytic conductivity measurement as a calibration standard.
- IC Standards: for calibration of, but not limited to IC, HPLC, TLC, ISE, IR, NMR, MS, UV/VIS or other wet chemistry applications.

For any inquiries, please contact **SCP SCIENCE**.

6.0 INSTRUCTIONS FOR USE:

Handling and Storage: Keep product tightly capped when not in use. The solution should be opened for a minimum amount of time necessary to dispense the amount required. Do not pipet or use directly from container. Do not return unused portions back to container. Store under normal laboratory conditions. Avoid exposure to excessive sources of heat and humidity or direct sunlight.

Stability: This Standard is guaranteed to be stable and accurate to within the specified uncertainty of measurement up to the unopened expiry date, if sealed, or up to the opened expiry date (when indicated), whichever comes first, provided the solution is kept tightly capped and stored under the indicated storage conditions. Purchasers will be notified of any significant changes resulting in re-certification or withdrawal of the product prior to the expiration date.

7.0 HAZARDOUS INFORMATION :

Please refer to the associated Material Safety Data Sheet (MSDS) for information regarding this product (available at www.SCPSCIENCE.com).

8.0 HOMOGENEITY:

This solution has been blended according to an in-house procedure and its homogeneity is guaranteed to be fit for purpose when a sample size sufficient for the intended method of analysis is used.

9.0 TRACEABILITY:

This CRM (Certified Reference Material) is traceable to the NIST SRM (Standard Reference Material) indicated in section 2 through an unbroken chain of comparisons. In addition, balances used are regularly calibrated using weights which are traceable to NIST (National Institute of Standards and Technology) or NRC (National Research Council of Canada) standards. All conductivity meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable Thermometer and standards. All pH meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable thermometer and pH/MV simulator.

10.0 PREPARATION:

For the preparation of these solutions, 18 megohm/cm double deionized water, high-purity acids and glassware calibrated to ASTM Class A specifications are used.

11.0 QUALITY SYSTEM CERTIFICATIONS:

ISO 9001 Certification: This standard was produced in a facility which operates a **registered** ISO 9001 Quality Management System. Please consult our web site for a copy of the most recent revision of our certificate of registration.

ISO 17025 Accreditation: **SCP SCIENCE (Corporate Headquarters)** operates an ISO 17025 **accredited** laboratory. Please consult our web site for a copy of the most recent revision of our certificate and scope of accreditation.

ISO 17034 Accreditation: **SCP SCIENCE (Corporate Headquarters)** is an ISO 17034 accredited Reference Material Producer. Please consult our website for a copy of our most recent certificate and scope of accreditation.



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Fax: +49 (0) 8342-89560-69

PC-FRM005-CERT-8.0-B

Reagent

MT _ S _ INF1 _ SC _ 00009

Certificate of Analysis**1.0 DESCRIPTION :** *Plasma* CAL – Custom Standard

Catalogue Number : **AQ0-097-715** **INF-1**
 Lot Number : **S200217031**
 Matrix: **5.0% HNO₃**
 Expiration Date (End of month): **February 2021**

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:

Method of Analysis: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

Traceability: Applicable NIST Standard Reference Materials (see list below):

3101a	Al	3109a	Ca	3117a	Eu	3126a	Fe	3134	Mo	3142a	Pr	3151	Ag	3159	Th	3167a	Y
3102a	Sb	3110	Ce	3118a	Gd	3127a	La	3135a	Nd	3143	Re	3152a	Na	3160a	Tm	3168a	Zn
3103a	As	3111a	Cs	3119a	Ga	3128	Pb	3136	Ni	3144	Rh	3153a	Sr	3161a	Sn	3169	Zr
3104a	Ba	3112a	Cr	3120a	Ge	3129a	Li	3137	Nb	3145a	Rb	3154	S	3162a	Ti		
3105a	Be	3113	Co	3121	Au	3130a	Lu	3138	Pd	3147a	Sm	3155	Ta	3163	W		
3106	Bi	3114	Cu	3122	Hf	3131a	Mg	3139a	P	3148a	Sc	3156	Te	3164	U		
3107	B	3115a	Dy	3123a	Ho	3132	Mn	3140	Pt	3149	Se	3157a	Tb	3165	V		
3108	Cd	3116a	Er	3124a	In	3133	Hg	3141a	K	3150	Si	3158	Tl	3166a	Yb		

Certified Concentrations:

Al	5 012 ± 43	µg/ml
Ca	5 053 ± 46	µg/ml
Fe	2 012 ± 16	µg/ml
Mg	5 012 ± 44	µg/ml

ACCREDITED

Reference Material Producer

CERTIFICATE #2005-02

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($u_c = \sqrt{\sum u_i^2}$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:

Density: **1.096 g/ml** @ **22.1 °C**

4.0 APPROVAL AND DATE OF CERTIFICATION:

Certification Approval: Yaling Sui, Chemist
 Certification Date: **February 20, 2020**

Yaling Sui

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5.0 INTENDED USE:

- ICP Standards: For the calibration of, including but not limited to: ICP-AES, ICP-MS, FAAS, GFAA, XRF and DCP.
- AA Standards: For the calibration of Flame (FAAS) and Graphite Furnace (GFAA) Atomic Absorption Spectrometers.
- Matrix Modifiers: For the optimization of analytical conditions to provide better Graphite Furnace Atomic Absorption (GFAA) instrument response and improved detection limits.
- pH Standards: For the calibrating pH meters or for other wet chemistry applications.
- Conductivity Standards: For electrolytic conductivity measurement as a calibration standard.
- IC Standards: for calibration of, but not limited to IC, HPLC, TLC, ISE, IR, NMR, MS, UV/VIS or other wet chemistry applications.

For any inquiries, please contact **SCP SCIENCE**.

6.0 INSTRUCTIONS FOR USE:

Handling and Storage: Keep product tightly capped when not in use. The solution should be opened for a minimum amount of time necessary to dispense the amount required. Do not pipet or use directly from container. Do not return unused portions back to container. Store under normal laboratory conditions. Avoid exposure to excessive sources of heat and humidity or direct sunlight.

Stability: This Standard is guaranteed to be stable and accurate to within the specified uncertainty of measurement up to the unopened expiry date, if sealed, or up to the opened expiry date (when indicated), whichever comes first, provided the solution is kept tightly capped and stored under the indicated storage conditions. Purchasers will be notified of any significant changes resulting in re-certification or withdrawal of the product prior to the expiration date.

7.0 HAZARDOUS INFORMATION :

Please refer to the associated Material Safety Data Sheet (MSDS) for information regarding this product (available at www.SCPSCIENCE.com).

8.0 HOMOGENEITY:

This solution has been blended according to an in-house procedure and its homogeneity is guaranteed to be fit for purpose when a sample size sufficient for the intended method of analysis is used.

9.0 TRACEABILITY:

This CRM (Certified Reference Material) is traceable to the NIST SRM (Standard Reference Material) indicated in section 2 through an unbroken chain of comparisons. In addition, balances used are regularly calibrated using weights which are traceable to NIST (National Institute of Standards and Technology) or NRC (National Research Council of Canada) standards. All conductivity meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable Thermometer and standards. All pH meters used to analyze this standard have been regularly calibrated using a NIST or NRC traceable thermometer and pH/MV simulator.

10.0 PREPARATION:

For the preparation of these solutions, 18 megohm/cm double deionized water, high-purity acids and glassware calibrated to ASTM Class A specifications are used.

11.0 QUALITY SYSTEM CERTIFICATIONS:

ISO 9001 Certification: This standard was produced in a facility which operates a **registered** ISO 9001 Quality Management System. Please consult our web site for a copy of the most recent revision of our certificate of registration.

ISO 17025 Accreditation: **SCP SCIENCE (Corporate Headquarters)** operates an ISO 17025 **accredited** laboratory. Please consult our web site for a copy of the most recent revision of our certificate and scope of accreditation.

ISO 17034 Accreditation: **SCP SCIENCE (Corporate Headquarters)** is an ISO 17034 accredited Reference Material Producer. Please consult our website for a copy of our most recent certificate and scope of accreditation.



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Fax: +49 (0) 8342-89560-69

PC-FRM005-CERT-8.0-B

Reagent

MT _ S _ LAN13 _ IV _ 00003



CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: LANCASTER-13
 Lot Number: P2-MEB687710
 Matrix: 5% (v/v) HNO3
 tr. HF
 Value / Analyte(s):
 100 µg/mL ea: Cadmium, Nickel, Zinc,
 60 µg/mL ea: Antimony,
 55 µg/mL ea: Selenium, Lead,
 50 µg/mL ea: Vanadium, Cobalt, Chromium,
 Copper, Manganese, Barium,
 Beryllium,
 20 µg/mL ea: Silver,
 10 µg/mL ea: Arsenic, Thallium



3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	59.90 ± 0.44 µg/mL	Arsenic, As	10.00 ± 0.07 µg/mL
Barium, Ba	49.97 ± 0.23 µg/mL	Beryllium, Be	49.98 ± 0.24 µg/mL
Cadmium, Cd	100.0 ± 0.4 µg/mL	Chromium, Cr	49.95 ± 0.28 µg/mL
Cobalt, Co	50.01 ± 0.24 µg/mL	Copper, Cu	49.97 ± 0.22 µg/mL
Lead, Pb	54.96 ± 0.25 µg/mL	Manganese, Mn	49.98 ± 0.22 µg/mL
Nickel, Ni	100.0 ± 0.4 µg/mL	Selenium, Se	54.94 ± 0.38 µg/mL
Silver, Ag	19.99 ± 0.14 µg/mL	Thallium, Tl	10.01 ± 0.07 µg/mL
Vanadium, V	49.97 ± 0.22 µg/mL	Zinc, Zn	100.0 ± 0.4 µg/mL

Density: 1.027 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	EDTA	928	928
Co	ICP Assay	traceable to 3113	M2-CO661665
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Mn	EDTA	928	928
Mn	ICP Assay	Traceable to 3132	N2-MN665236
Mn	Calculated		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sb	ICP Assay	3102a	140911
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty (k)} = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

u_{char} = $(\sum (w_i)^2 (u_{\text{char } i}^2))^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty (k)} = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL**7.1 Storage and Handling Recommendations**

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° \pm 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION**10.1 ISO 9001 Quality Management System Registration**

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone 800.669.8799; 540.585.3030 Fax 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 18, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 18, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MT _ S _ LLC _ HP _ 00002



7221 Investment Drive • North Charleston, SC 29418
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Certificate of Analysis

Certified Reference Material

Product Description: Custom Inorganic Standard

Product Number: HPS-510-057-500

Lot Number: 1922825

Matrix: 2% HNO₃ / Tr HF

Purity: 99.0-99.9999%



ISO 17034:2016
(RMP) Accreditation
Certificate Number
AR-1436



ISO/IEC 17025:2005
Accreditation
Certificate Number
AT-1529

Rec'd 2 Bottles
A and B
expres 8-31-20
PE3470

Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#	Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#
Ag	5.00 \pm 0.05	3151	160729	Na	500 \pm 5	3152a	120715
Al	100 \pm 1	3101a	140903	Ni	5.00 \pm 0.05	3136	120619
As	15.0 \pm 0.2	3103a	100818	P	50.0 \pm 0.8	3139a	060717
B	15.0 \pm 0.2	3107	110830	Pb	7.50 \pm 0.08	3128	101026
Ba	2.50 \pm 0.03	3104a	140909	S	250 \pm 4	*	
Be	2.50 \pm 0.03	3105a	090514	Sb	25.0 \pm 0.3	3102a	140911
Ca	100 \pm 1	3109a	130213	Se	25.0 \pm 0.3	3149	100901
Cd	2.50 \pm 0.03	3108	130116	Si	250 \pm 3	3150	130912
Co	2.50 \pm 0.03	*		Sn	25.0 \pm 0.3	3161a	140917
Cr	7.50 \pm 0.08	3112a	170630	Sr	2.50 \pm 0.03	*	
Cu	10.0 \pm 0.1	3114	121207	Ti	5.00 \pm 0.05	3162a	130925
Fe	100 \pm 1	3126a	140812	Tl	15.0 \pm 0.2	3158	151215
K	150 \pm 2	3141a	140813	V	5.00 \pm 0.05	3165	160906
Li	25.0 \pm 0.3	3129a	100714	W	15.0 \pm 0.2	3163	140606
Mg	50.0 \pm 0.5	3131a	140110	Zn	10.0 \pm 0.1	3168a	120629
Mn	5.00 \pm 0.08	*		Zr	25.0 \pm 0.4	3169	130920
Mo	5.00 \pm 0.05	3134	130418				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: August 2019

Expiration Date: August 31, 2020

Certificate Issue Date: August 16, 2019

Moven Mututuvvari

Moven Mututuvvari, Ph. D, Laboratory Manager

Lot Number: 1922825



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Revision: 0

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Reagent

MT _ S _ LLC _ HP _ 00003



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Certificate of Analysis

Certified Reference Material

Product Description: Custom Inorganic Standard

Product Number: HPS-510-057-1L
Lot Number: 1928338
Matrix: 2% HNO₃ / Tr HF
Purity: 99.0%-99.9999%

Rec'd 5 bottles
10/16/19
opened 10/27/19
exp. 10/16/20



ISO 17034:2016
(RMP) Accreditation
Certificate Number
AR-1436



ISO/IEC 17025:2005
Accreditation
Certificate Number
AT-1529

Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#	Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#
Ag	5.00 \pm 0.05	3151	160729	Na	500 \pm 5	3152a	120715
Al	100 \pm 1	3101a	140903	Ni	5.00 \pm 0.05	3136	120619
As	15.0 \pm 0.2	3103a	100818	P	50.0 \pm 0.8	3139a	060717
B	15.0 \pm 0.2	3107	110830	Pb	7.50 \pm 0.08	3128	101026
Ba	2.50 \pm 0.03	3104a	140909	S	250 \pm 4	*	
Be	2.50 \pm 0.03	3105a	090514	Sb	25.0 \pm 0.3	3102a	140911
Ca	100 \pm 1	3109a	130213	Se	25.0 \pm 0.3	3149	100901
Cd	2.50 \pm 0.03	3108	130116	Si	250 \pm 3	3150	130912
Co	2.50 \pm 0.03	*		Sn	25.0 \pm 0.3	3161a	140917
Cr	7.50 \pm 0.08	3112a	170630	Sr	2.50 \pm 0.03	*	
Cu	10.0 \pm 0.1	3114	121207	Ti	5.00 \pm 0.05	3162a	130925
Fe	100 \pm 1	3126a	140812	Tl	15.0 \pm 0.2	3158	151215
K	150 \pm 2	3141a	140813	V	5.00 \pm 0.05	3165	160906
Li	25.0 \pm 0.3	3129a	100714	W	15.0 \pm 0.2	3163	140606
Mg	50.0 \pm 0.5	3131a	140110	Zn	10.0 \pm 0.1	3168a	120629
Mn	5.00 \pm 0.08	*		Zr	25.0 \pm 0.4	3169	130920
Mo	5.00 \pm 0.05	3134	130418				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: October 2019
Expiration Date: October 31, 2020
Certificate Issue Date: October 11, 2019

Moven Mututuvvari
Moven Mututuvvari, Ph. D, Laboratory Manager

Lot Number: 1928338



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Revision: 0

Page 1 of 2

Reagent

MT _ S _ MSCCV _ SP _ 00001

SCP SCIENCE

Providing Innovative Solutions to Analytical Chemists

Certificate of Analysis

1.0 DESCRIPTION : *Plasma CAL – Custom Standard*
 Catalogue Number : **AQ0-140-645**
 Lot Number : **S200325038** **ICP-MS CCV**
 Matrix: **4.0% HNO₃ Traces HF**
 Expiration Date (End of month): **April 2021**

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:

Method of Analysis: Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES)

Traceability: Applicable NIST Standard Reference Materials (see list below):

3101a	Al	3109a	Ca	3117a	Eu	3126a	Fe	3134	Mo	3142a	Pr	3151	Ag	3159	Th	3167a	Y
3102a	Sb	3110	Ce	3118a	Gd	3127a	La	3135a	Nd	3143	Re	3152a	Na	3160a	Tm	3168a	Zn
3103a	As	3111a	Cs	3119a	Ga	3128	Pb	3136	Ni	3144	Rh	3153a	Sr	3161a	Sn	3169	Zr
3104a	Ba	3112a	Cr	3120a	Ge	3129a	Li	3137	Nb	3145a	Rb	3154	S	3162a	Tl		
3105a	Be	3113	Co	3121	Au	3130a	Lu	3138	Pd	3147a	Sm	3155	Ta	3163	W		
3106	Bi	3114	Cu	3122	Hf	3131a	Mg	3139a	P	3148a	Sc	3156	Te	3164	U		
3107	B	3115a	Dy	3123a	Ho	3132	Mn	3140	Pt	3149	Se	3157a	Tb	3165	V		
3108	Cd	3116a	Er	3124a	In	3133	Hg	3141a	K	3150	Si	3158	Tl	3166a	Yb		

Certified Concentrations:

Ag	20.19 ± 0.17	µg/ml	Pb	20.15 ± 0.19	µg/ml
As	200.1 ± 1.6	µg/ml	Sb	20.21 ± 0.21	µg/ml
B*	200.0 ± 2.0	µg/ml	Se	20.18 ± 0.20	µg/ml
Ba	200.5 ± 1.8	µg/ml	Sn	20.26 ± 0.20	µg/ml
Be	19.99 ± 0.20	µg/ml	Sr*	20.00 ± 0.20	µg/ml
Cd	20.01 ± 0.21	µg/ml	Ti	200.7 ± 1.9	µg/ml
Co	200.2 ± 2.4	µg/ml	Tl	20.09 ± 0.19	µg/ml
Cr	200.9 ± 1.9	µg/ml	U	201.7 ± 2.0	µg/ml
Mn*	200.0 ± 2.0	µg/ml	V	199.9 ± 2.0	µg/ml
Mo	19.98 ± 0.24	µg/ml	Zn	201.3 ± 1.9	µg/ml
Ni	200.3 ± 1.9	µg/ml			

Reference Material Producer
CERTIFICATE #2885.02

*Concentration value derived from v/v dilutions of certified, NIST-traceable starting materials

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) such as the SRM inherited uncertainty, weighing and dilution errors and instrument variability. The combined uncertainty ($uc = \sqrt{\sum u_i^2}$) has been multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:Density: **1.022 g/ml** @ **21.9 °C****4.0 APPROVAL AND DATE OF CERTIFICATION:**

Certification Approval: **Yaling Sui, Chemist**
 Certification Date: **April 03, 2020**

Yaling Sui

Reagent

MT _ S _ MWLLC _ HP _ 00002



7221 Investment Drive • North Charleston, SC 29418
843.767.7900 • info@highpuritystandards.com • www.highpuritystandards.com

Certificate of Analysis

Certified Reference Material

Rec'd 2 Bottles
A and B
Expires 8-31-20
PE3572

Product Description: Custom Inorganic Standard

Product Number: HPS-510-058-500

Lot Number: 1922619

Matrix: 2% HNO₃ / Tr HF

Purity: 99.95%-99.9999%



ISO 17034:2016
(RMP) Accreditation
Certificate Number
AR-1436

ISO/IEC 17025:2005
Accreditation
Certificate Number
AT-1529

Certified Values:

Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#	Element	($\mu\text{g/mL}$)	SRM ID	SRM Lot#
Ag	0.500 \pm 0.005	3151	160729	Mo	0.50 \pm 0.01	3134	130418
Al	25.0 \pm 0.2	3101a	140903	Na	200 \pm 2	3152a	120715
As	2.00 \pm 0.02	3103a	100818	Ni	1.00 \pm 0.01	3136	120619
Ba	2.00 \pm 0.02	3104a	140909	Pb	0.50 \pm 0.01	3128	101026
Be	0.50 \pm 0.01	3105a	090514	Sb	1.00 \pm 0.01	3102a	140911
Ca	100 \pm 1	3109a	130213	Se	1.00 \pm 0.01	3149	100901
Cd	0.500 \pm 0.005	3108	130116	Sn	2.00 \pm 0.02	3161a	140917
Co	0.500 \pm 0.005	*		Sr	1.00 \pm 0.01	*	
Cr	1.00 \pm 0.01	3112a	170630	Ti	10.0 \pm 0.1	3162a	130925
Cu	1.00 \pm 0.01	3114	121207	Tl	0.500 \pm 0.005	3158	151215
Fe	50.0 \pm 0.3	3126a	140812	U	1.00 \pm 0.01	3164	080521
K	200 \pm 2	3141a	140813	V	0.500 \pm 0.005	3165	160906
Mg	50.0 \pm 0.3	3131a	140110	Zn	10.0 \pm 0.1	3168a	120629
Mn	2.00 \pm 0.03	*					

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: August 2019

Expiration Date: August 31, 2020

Certificate Issue Date: August 15, 2019

Moven Mututurari

Moven Mututurari, Ph. D., Laboratory Manager

Lot Number: 1922619



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Revision: 0

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Reagent

MT _ S _ S2 _ VH _ 00002



CERTIFICATE OF ANALYSIS



Multi-Element Aqueous CRM

Rec'd 4 Bottles

Tracecal #5 Custom S2

C, D, E, F

Matrix: 5% HNO₃

Expire 7-18-20

Product #: VHG-ZLLTRCAL#5-2X250

PE3472

Lot #: 10040609-9

Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty	Element	Certified Concentration & Uncertainty
Ag	500.1 ± 2.5 µg/mL	Co	500.1 ± 2.5 µg/mL	Pb	500.2 ± 2.5 µg/mL
As	500.1 ± 2.5 µg/mL	Cu	500.1 ± 2.5 µg/mL	Se	500.0 ± 2.5 µg/mL
B	500.1 ± 2.5 µg/mL	Li	500.1 ± 2.5 µg/mL	Sr	500.2 ± 2.5 µg/mL
Ba	500.1 ± 2.5 µg/mL	Mn	500.1 ± 2.5 µg/mL	Tl	500.2 ± 2.5 µg/mL
Be	500.0 ± 2.5 µg/mL	Ni	500.2 ± 2.5 µg/mL	Zn	500.2 ± 2.5 µg/mL
Cd	500.3 ± 2.5 µg/mL	P	500.0 ± 2.5 µg/mL		

Intended Use: This solution is intended for use as a certified reference material or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), or alternative techniques for elemental detection, such as flame or furnace atomic absorption spectroscopy (AA or GFAA).

Certification & Traceability: VHG CRMs are manufactured and certified under a quality management system that is accredited to **ISO 9001**, **ISO Guide 34** and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to NIST SRMs. This solution was stabilized using high purity nitric acid (HNO₃) and diluted with filtered (0.22µm), 18 M-ohm deionized water. The balances used in the preparation of VHG CRMs are calibrated regularly with traceability to NIST. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined by VHG Labs based upon gravimetric procedures. Secondary verification of the certified concentrations was performed by VHG Labs using ICP-OES that was calibrated and/or referenced against **NIST SRMs** (see reverse side). The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

Instructions for Use: We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) use a minimum sub-sample size of 500µL, (4) make dilutions using calibrated balances or certified volumetric class A flasks and pipettes, (5) dilute with the same matrix as the original CRM, and (6) never pour used product back into the original container. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or expose to direct sunlight. Minimize exposure to moisture or high humidity.

Period of Validity: VHG ensures the accuracy of this solution for **12 Months** from the Certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

VHG Labs, Inc.

Chuck Goudreau, Certifying Officer

18 July 2019

Certification Date

LGC waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.



Page 1 of 2

276 Abby Road, Manchester, NH 03103 USA
 (603) 622-7660 Fax: (603) 622-5180 www.vhglabs.com



Reagent

MT _ S _ SOL1A _ IV _ 00002



CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: IV-53950-A
 Lot Number: P2-MEB678440
 Matrix: 5% (v/v) HNO3
 Value / Analyte(s): 400 µg/mL ea:
 Cadmium, Copper, Nickel, Selenium, Thallium,
 200 µg/mL ea:
 Zinc,
 100 µg/mL ea:
 Boron, Strontium



410-19486

Cobalt, Chromium,
 Lithium, Manganese,
 Phosphorus, Lead,
 Arsenic, Thorium,
 Vanadium,
 Barium, Beryllium,

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	400.4 ± 2.9 µg/mL	Barium, Ba	100.0 ± 0.4 µg/mL
Beryllium, Be	100.0 ± 0.4 µg/mL	Boron, B	100.0 ± 0.7 µg/mL
Cadmium, Cd	400.1 ± 1.7 µg/mL	Chromium, Cr	400.0 ± 2.3 µg/mL
Cobalt, Co	400.0 ± 1.9 µg/mL	Copper, Cu	400.0 ± 1.6 µg/mL
Lead, Pb	400.0 ± 1.8 µg/mL	Lithium, Li	400.0 ± 1.7 µg/mL
Manganese, Mn	400.0 ± 1.6 µg/mL	Nickel, Ni	399.8 ± 1.8 µg/mL
Phosphorus, P	400.0 ± 2.0 µg/mL	Selenium, Se	399.9 ± 2.5 µg/mL
Strontium, Sr	99.9 ± 0.4 µg/mL	Thallium, Tl	399.9 ± 2.6 µg/mL
Thorium, Th	400.0 ± 2.0 µg/mL	Vanadium, V	399.9 ± 1.7 µg/mL
Zinc, Zn	200.0 ± 0.8 µg/mL		

Density: 1.041 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Th	EDTA	928	928
Tl	ICP Assay	3158	993012
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \frac{\sum(w_i)(X_i)}{\sum(w_i)}$$

X_i = mean of Assay Method *i* with standard uncertainty $u_{char,i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance
 $w_i = (1/u_{char,i}^2) / (\sum(1/u_{char,i}^2))$

CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$
 k = coverage factor = 2
 $u_{char} = (\sum(w_i^2)(u_{char,i}^2))^{1/2}$ where $u_{char,i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) / (u_{char,a})$$

X_a = mean of Assay Method A with
 $u_{char,a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k(u_{char,a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$
 k = coverage factor = 2
 $u_{char,a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL**7.1 Storage and Handling Recommendations**

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION**10.1 ISO 9001 Quality Management System Registration**

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.869.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 09, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 09, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity


- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director





CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: IV-53950-A

Lot Number: P2-MEB678440

Matrix: 5% (v/v) HNO₃

Value / Analyte(s): 400 µg/mL ea:

Cadmium,

Copper,

Nickel,

Selenium,

Thallium,

200 µg/mL ea:

Zinc,

100 µg/mL ea:

Boron,

Strontium

Cobalt,

Lithium,

Phosphorus,

Arsenic,

Vanadium,

Barium,

Chromium,

Manganese,

Lead,

Thorium,

Beryllium,



410-19487

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	400.4 ± 2.9 µg/mL	Barium, Ba	100.0 ± 0.4 µg/mL
Beryllium, Be	100.0 ± 0.4 µg/mL	Boron, B	100.0 ± 0.7 µg/mL
Cadmium, Cd	400.1 ± 1.7 µg/mL	Chromium, Cr	400.0 ± 2.3 µg/mL
Cobalt, Co	400.0 ± 1.9 µg/mL	Copper, Cu	400.0 ± 1.6 µg/mL
Lead, Pb	400.0 ± 1.8 µg/mL	Lithium, Li	400.0 ± 1.7 µg/mL
Manganese, Mn	400.0 ± 1.6 µg/mL	Nickel, Ni	399.8 ± 1.8 µg/mL
Phosphorus, P	400.0 ± 2.0 µg/mL	Selenium, Se	399.9 ± 2.5 µg/mL
Strontium, Sr	99.9 ± 0.4 µg/mL	Thallium, Tl	399.9 ± 2.6 µg/mL
Thorium, Th	400.0 ± 2.0 µg/mL	Vanadium, V	399.9 ± 1.7 µg/mL
Zinc, Zn	200.0 ± 0.8 µg/mL		

Density: 1.041 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	Traceable to 3153a	K2-SR650985
Th	EDTA	928	928
Tl	ICP Assay	3158	993012
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char,i}$
 w_i = the weighting factors for each method calculated using the inverse square of the variance
 $w_i = (1/u_{char,i}^2) / \sum(1/u_{char,i}^2)$

CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$
 k = coverage factor = 2
 u_{char} = $(\sum(w_i)^2 (u_{char,i}^2))^{1/2}$ where $u_{char,i}$ are the errors from each characterization method
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) / (u_{char,a})$$

X_a = mean of Assay Method A with
 $u_{char,a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k (u_{char,a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$
 k = coverage factor = 2
 $u_{char,a}$ = the errors from characterization
 u_{bb} = bottle to bottle homogeneity standard uncertainty
 u_{lts} = long term stability standard uncertainty (storage)
 u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL**7.1 Storage and Handling Recommendations**

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION**10.1 ISO 9001 Quality Management System Registration**

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va, 24073, USA, Telephone: 800.669.6799, 540.585.3030, Fax 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 09, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 09, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

MT _ S _ SOL2A _ HP _ 00002



7221 Investment Drive • North Charleston, SC 29418
843.767.7900 • info@highpuritystandards.com • www.highpuritystandards.com

Certificate of Analysis

Certified Reference Material

Product Description: LRS Solution 2

Product Number: **HPS-510-005-A-500**
Lot Number: **1928901**
Matrix: 10% HNO₃
Purity: 99.98%-99.9995%



ISO 17034:2016
(RMP) Accreditation
Certificate Number
AR-1436

ISO/IEC 17025:2005
Accreditation
Certificate Number
AT-1529

Certified Values:

<u>Element</u>	<u>(µg/mL)</u>	<u>SRM ID</u>	<u>SRM Lot#</u>
Al	10000 ± 60	3101a	140903
Ca	10000 ± 60	3109a	130213
Fe	6000 ± 36	3126a	140812
K	10000 ± 100	3141a	140813
Mg	10000 ± 60	3131a	140110
Na	10000 ± 60	3152a	120715

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section 4

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

Shipped Date: October 2019
Expiration Date: October 31, 2020
Certificate Issue Date: October 17, 2019

Moven Mututurari

Moven Mututurari, Ph. D., Laboratory Manager

Lot Number: 1928901



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Revision: 0

Page 1 of 2

Sample Container Check Report

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Sample Container Checks and Verifications

Lab Sample ID: 410-3144-1

Client Sample ID: GWVA2-2023

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
B	pH Check	USWF	06/04/2020	8	5-5	N/A	N/A	N/A	N/A	N/A
D	pH Check	USWF	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
D	Chlorine Check	USWF	06/04/2020	N	N/A	N/A	N/A	N/A	N/A	N/A
E	pH Check	USWF	06/04/2020	11	9-9	N/A	N/A	N/A	N/A	N/A
F	pH Check	USWF	06/04/2020	7	5-5	N/A	N/A	N/A	N/A	N/A
G	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-3144-2

Client Sample ID: GWVA2-6023

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
B	pH Check	USWF	06/04/2020	8	5-5	N/A	N/A	N/A	N/A	N/A
D	pH Check	USWF	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
D	Chlorine Check	USWF	06/04/2020	N	N/A	N/A	N/A	N/A	N/A	N/A
E	pH Check	USWF	06/04/2020	11	9-9	N/A	N/A	N/A	N/A	N/A
F	pH Check	USWF	06/04/2020	7	5-5	N/A	N/A	N/A	N/A	N/A
G	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-3144-3

Client Sample ID: GWK015-2023

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
B	pH Check	USWF	06/04/2020	8	5-5	N/A	N/A	N/A	N/A	N/A
D	pH Check	USWF	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
D	Chlorine Check	USWF	06/04/2020	N	N/A	N/A	N/A	N/A	N/A	N/A
E	pH Check	USWF	06/04/2020	11	9-9	N/A	N/A	N/A	N/A	N/A
F	pH Check	USWF	06/04/2020	7	5-5	N/A	N/A	N/A	N/A	N/A
G	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-3144-4

Client Sample ID: GWK016-2023

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
B	pH Check	USWF	06/04/2020	8	5-5	N/A	N/A	N/A	N/A	N/A
D	pH Check	USWF	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
D	Chlorine Check	USWF	06/04/2020	N	N/A	N/A	N/A	N/A	N/A	N/A
E	pH Check	USWF	06/04/2020	11	9-9	N/A	N/A	N/A	N/A	N/A
F	pH Check	USWF	06/04/2020	7	5-5	N/A	N/A	N/A	N/A	N/A

Eurofins Lancaster Laboratories Env

Sample Container Check Report

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB

Job ID: 410-3144-1

Sample Container Checks and Verifications (Continued)

Lab Sample ID: 410-3144-4
Client Sample ID: GWK016-2023

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
G	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A

Lab Sample ID: 410-3144-5
Client Sample ID: GWK003-2023

Bottle Code	Check Performed	By Employee	Date	Check Result	Expected Result	Adjusted Date	Reagent Lot #	Reagent Expires	Re-check Result	Re-check Date
A	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
B	pH Check	USWF	06/04/2020	8	5-5	N/A	N/A	N/A	N/A	N/A
D	pH Check	USWF	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A
D	Chlorine Check	USWF	06/04/2020	N	N/A	N/A	N/A	N/A	N/A	N/A
E	pH Check	USWF	06/04/2020	11	9-9	N/A	N/A	N/A	N/A	N/A
F	pH Check	USWF	06/04/2020	7	5-5	N/A	N/A	N/A	N/A	N/A
G	pH Check, 24hr Adjustment Confirmation Required	ULEB	06/04/2020	<2	N/A	N/A	N/A	N/A	N/A	N/A

300_ORGEM_28D

Anions, Ion Chromatography

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2016515_34.d
 Lab ID: LCS 410-12842/3 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Bromide	7.50	7.06	94	90-110	
Chloride	3.00	2.89	96	90-110	
Sulfate	7.50	7.30	97	90-110	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2019213A_19.d
 Lab ID: LCS 410-21417/19 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Bromide	7.50	6.94	92	90-110	
Chloride	3.00	2.81	94	90-110	
Sulfate	7.50	7.67	102	90-110	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2019213A_23.d
 Lab ID: LCS 410-21417/23 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Bromide	7.50	6.91	92	90-110	
Chloride	3.00	2.81	94	90-110	
Sulfate	7.50	7.59	101	90-110	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 2019213A_27.d
 Lab ID: 410-3144-3 MS Client ID: GWK015-2023 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Bromide	25.0	2.0 U	24.6	99	90-110	D
Sulfate	25.0	30	59.3	117	90-110	J1 D

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 2019213A_30.d

Lab ID: 410-3144-3 MS Client ID: GWK015-2023 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Bromide	2500	200 U	2500	100	90-110	D
Chloride	1000	190 J	1040	85	90-110	J1 D
Sulfate	2500	450 U	2710	108	90-110	D

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Lab File ID: 2016515_35.d Lab Sample ID: MB 410-12842/4
 Matrix: Water Date Extracted: _____
 Instrument ID: 12115 Date Analyzed: 06/13/2020 19:32
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 410-12842/2	2016515_2.d	06/13/2020 18:58
	LCS 410-12842/3	2016515_34.d	06/13/2020 19:15
	CCB 410-12842/14	2016515_45.d	06/13/2020 22:23
	CCB 410-12842/26	2016515_57.d	06/14/2020 01:48
GWVA2-2023	410-3144-1	2016515_66.d	06/14/2020 04:22
GWVA2-2023	410-3144-1	2016515_67.d	06/14/2020 04:39
	CCB 410-12842/38	2016515_69.d	06/14/2020 05:14
GWVA2-6023	410-3144-2	2016515_70.d	06/14/2020 05:31
GWK015-2023	410-3144-3	2016515_72.d	06/14/2020 06:05
GWK016-2023	410-3144-4	2016515_74.d	06/14/2020 06:39
GWK003-2023	410-3144-5	2016515_76.d	06/14/2020 07:13
	CCB 410-12842/48	2016515_79.d	06/14/2020 08:05

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Lab File ID: 2019213A_20.d Lab Sample ID: MB 410-21417/20
 Matrix: Water Date Extracted: _____
 Instrument ID: 19052 Date Analyzed: 07/11/2020 04:33
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 410-21417/14	2019213A_14 .d	07/11/2020 02:50
GWVA2-2023	410-3144-1	2019213A_15 .d	07/11/2020 03:08
GWVA2-6023	410-3144-2	2019213A_17 .d	07/11/2020 03:42
	LCS 410-21417/19	2019213A_19 .d	07/11/2020 04:16
	CCB 410-21417/22	2019213A_22 .d	07/11/2020 05:07
	LCS 410-21417/23	2019213A_23 .d	07/11/2020 05:24
	CCB 410-21417/34	2019213A_34 .d	07/11/2020 08:31
	CCB 410-21417/40	2019213A_40 .d	07/11/2020 10:14

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Lab File ID: 2019213A_24.d Lab Sample ID: MB 410-21417/24
 Matrix: Water Date Extracted: _____
 Instrument ID: 19052 Date Analyzed: 07/11/2020 05:41
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
GWK015-2023	410-3144-3	2019213A_25 .d	07/11/2020 05:58
GWK015-2023 DU	410-3144-3 DU	2019213A_26 .d	07/11/2020 06:15
GWK015-2023 MS	410-3144-3 MS	2019213A_27 .d	07/11/2020 06:32
GWK015-2023	410-3144-3	2019213A_28 .d	07/11/2020 06:49
GWK015-2023 DU	410-3144-3 DU	2019213A_29 .d	07/11/2020 07:06
GWK015-2023 MS	410-3144-3 MS	2019213A_30 .d	07/11/2020 07:23
GWK016-2023	410-3144-4	2019213A_31 .d	07/11/2020 07:40
GWK003-2023	410-3144-5	2019213A_35 .d	07/11/2020 08:48

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Matrix: Water Lab File ID: 2016515_66.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 04:22
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2.0	U Q	2.5	2.0	1.3
14808-79-8	Sulfate	27	D	5.0	4.5	1.5

Report Date: 17-Jun-2020 09:22:40

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_66.d
 Lims ID: 410-3144-B-1
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 14-Jun-2020 04:22:00 ALS Bottle#: 0 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-B-1
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:37 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.547	4.570	-0.023	118245328	7.94	E
4 Bromide		7.193			ND	
6 Sulfate	12.827	13.187	-0.360	59306936	5.40	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:22:40

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_66.d

Injection Date: 14-Jun-2020 04:22:00

Instrument ID: 12115

Operator ID:

Lims ID: 410-3144-B-1

Lab Sample ID: 410-3144-1

Worklist Smp#: 35

Client ID: GWVA2-2023

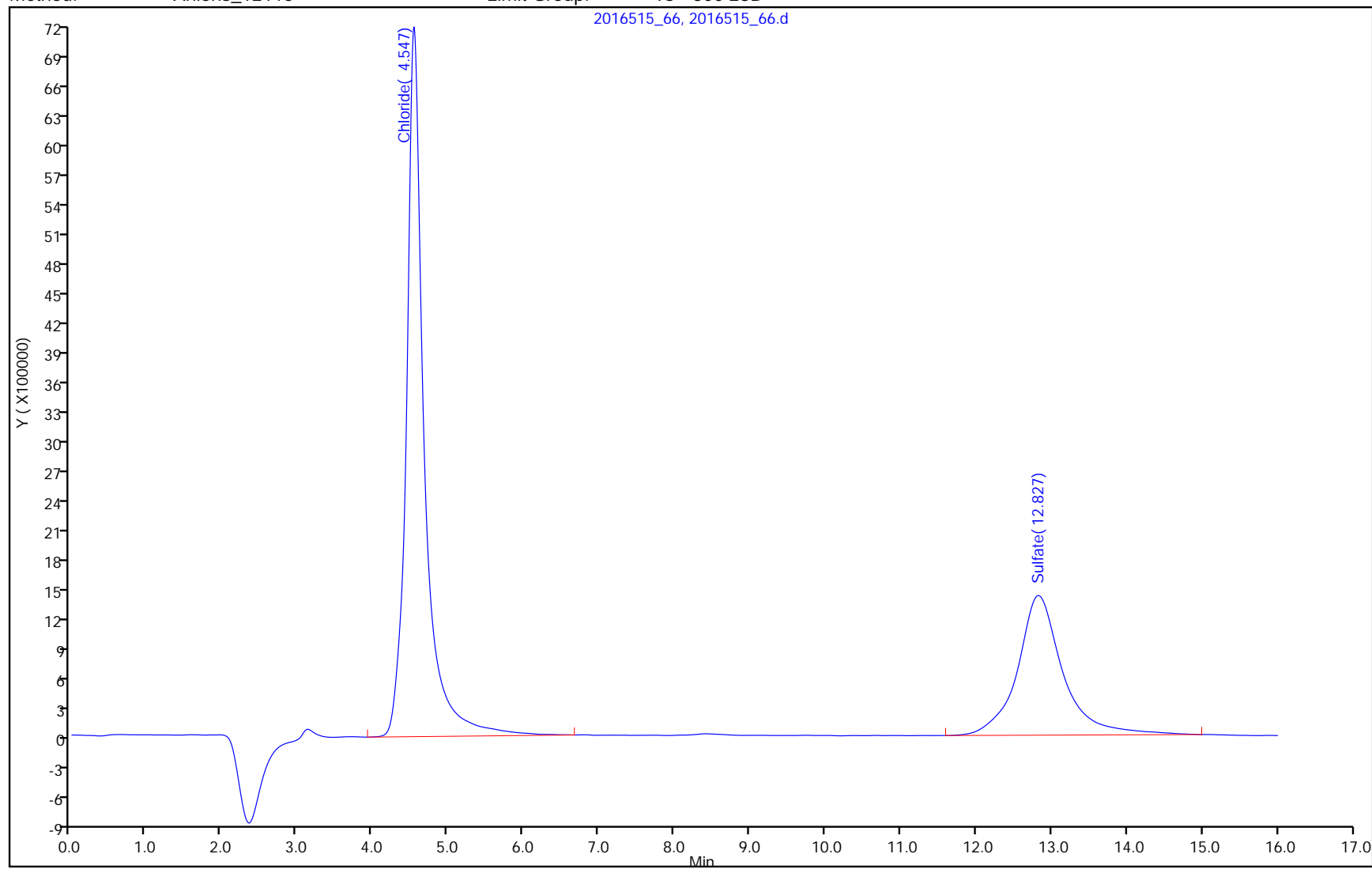
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Matrix: Water Lab File ID: 2019213A_15.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 03:08
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
<u>24959-67-9</u>	<u>Bromide</u>	<u>2.0</u>	<u>U H</u>	<u>2.5</u>	<u>2.0</u>	<u>1.3</u>

Report Date: 13-Jul-2020 12:40:49

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_15.d
 Lims ID: 410-3144-B-1
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 11-Jul-2020 03:08:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-1
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:47 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.337	4.323	0.014	97439968	6.69	E
4 Bromide		6.660			ND	
6 Sulfate	11.950	11.917	0.033	51904502	5.07	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 13-Jul-2020 12:40:49

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_15.d

Injection Date: 11-Jul-2020 03:08:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-1

Lab Sample ID: 410-3144-1

Worklist Smp#: 15

Client ID: GWVA2-2023

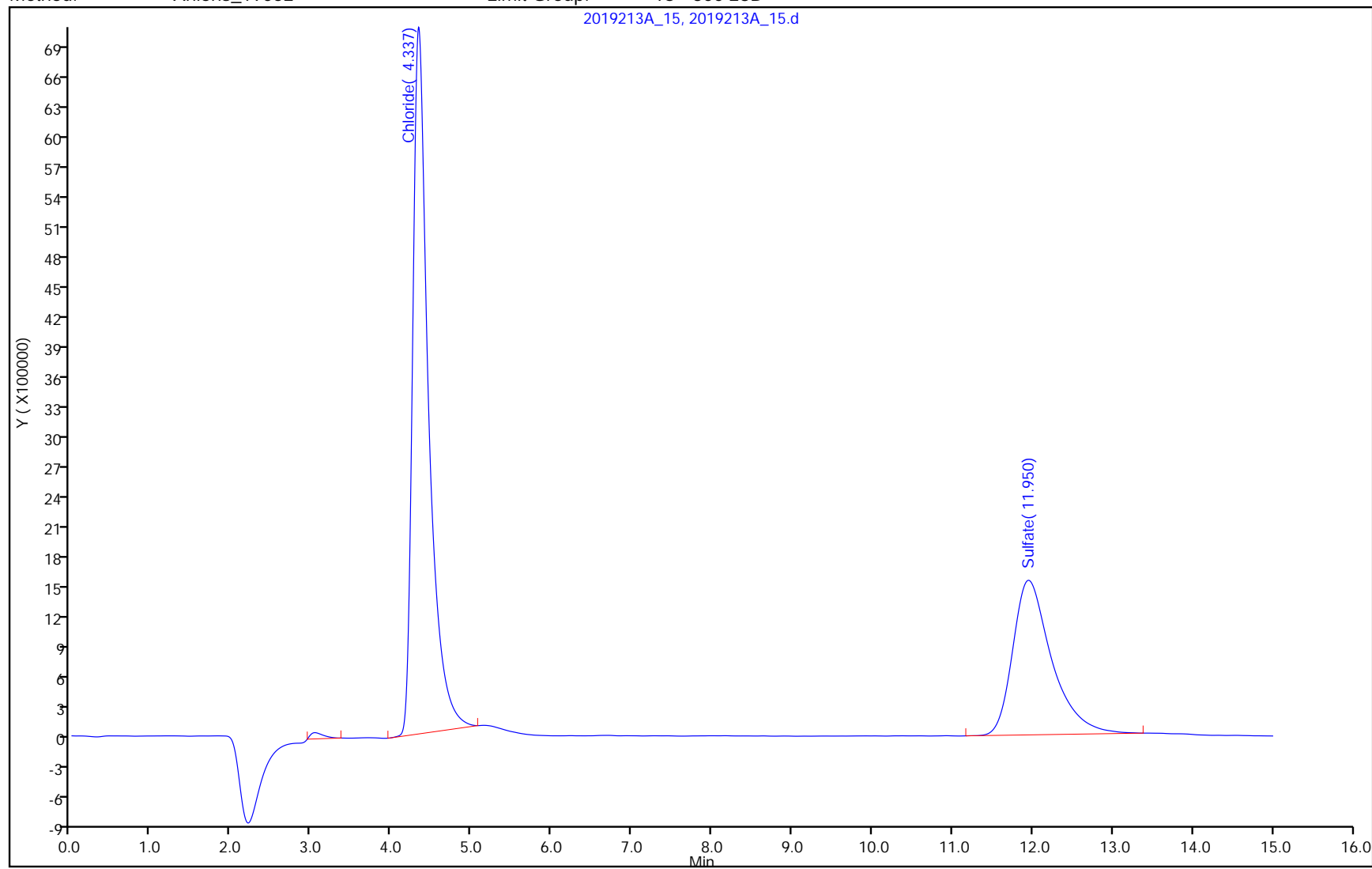
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Matrix: Water Lab File ID: 2016515_67.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 04:39
 Con. Extract Vol.: _____ Dilution Factor: 50
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
16887-00-6	Chloride	40	D	20	15	10

Report Date: 17-Jun-2020 09:22:40

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_67.d
 Lims ID: 410-3144-B-1
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 14-Jun-2020 04:39:00 ALS Bottle#: 0 Worklist Smp#: 36
 Injection Vol: 1.0 ul Dil. Factor: 50.0000
 Sample Info: 410-3144-B-1
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:37 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.533	4.570	-0.037	11248598	0.8037	
4 Bromide		7.193			ND	
6 Sulfate	12.837	13.187	-0.350	5391723	0.8039	

Report Date: 17-Jun-2020 09:22:40

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_67.d

Injection Date: 14-Jun-2020 04:39:00

Instrument ID: 12115

Operator ID:

Lims ID: 410-3144-B-1

Lab Sample ID: 410-3144-1

Worklist Smp#: 36

Client ID: GWVA2-2023

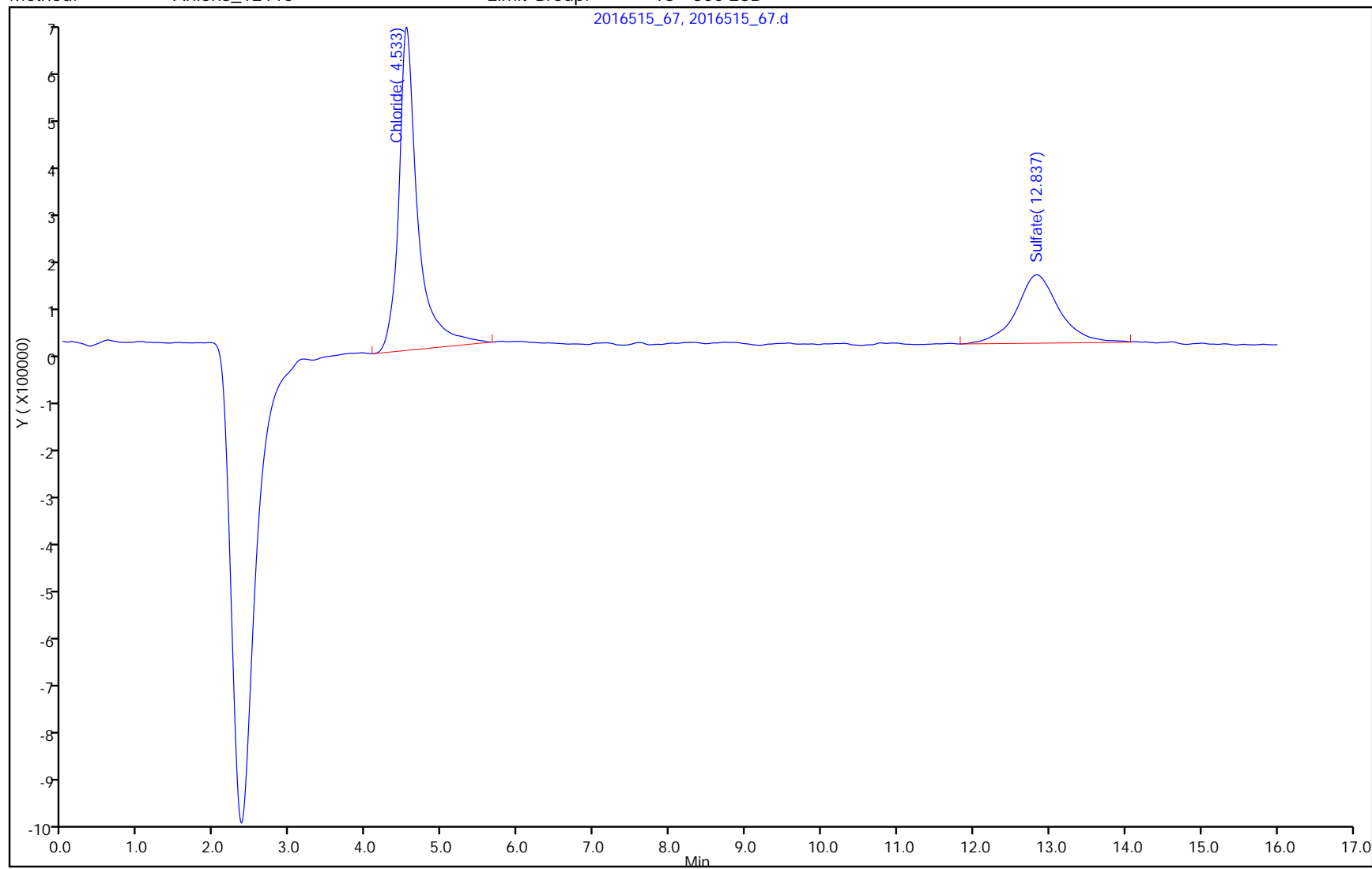
Injection Vol: 1.0 ul

Dil. Factor: 50.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWVA2-6023 Lab Sample ID: 410-3144-2
 Matrix: Water Lab File ID: 2016515_70.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 05:31
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2.0	U Q	2.5	2.0	1.3
16887-00-6	Chloride	38	D E	2.0	1.5	1.0
14808-79-8	Sulfate	26	D	5.0	4.5	1.5

Report Date: 17-Jun-2020 09:22:41

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_70.d
 Lims ID: 410-3144-B-2
 Client ID: GWVA2-6023
 Sample Type: Client
 Inject. Date: 14-Jun-2020 05:31:00 ALS Bottle#: 0 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-B-2
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.540	4.570	-0.030	114262075	7.67	E
4 Bromide		7.193			ND	
6 Sulfate	12.813	13.187	-0.374	57456238	5.24	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:22:41

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_70.d

Injection Date: 14-Jun-2020 05:31:00

Instrument ID: 12115

Operator ID:

Lims ID: 410-3144-B-2

Lab Sample ID: 410-3144-2

Worklist Smp#: 39

Client ID: GWVA2-6023

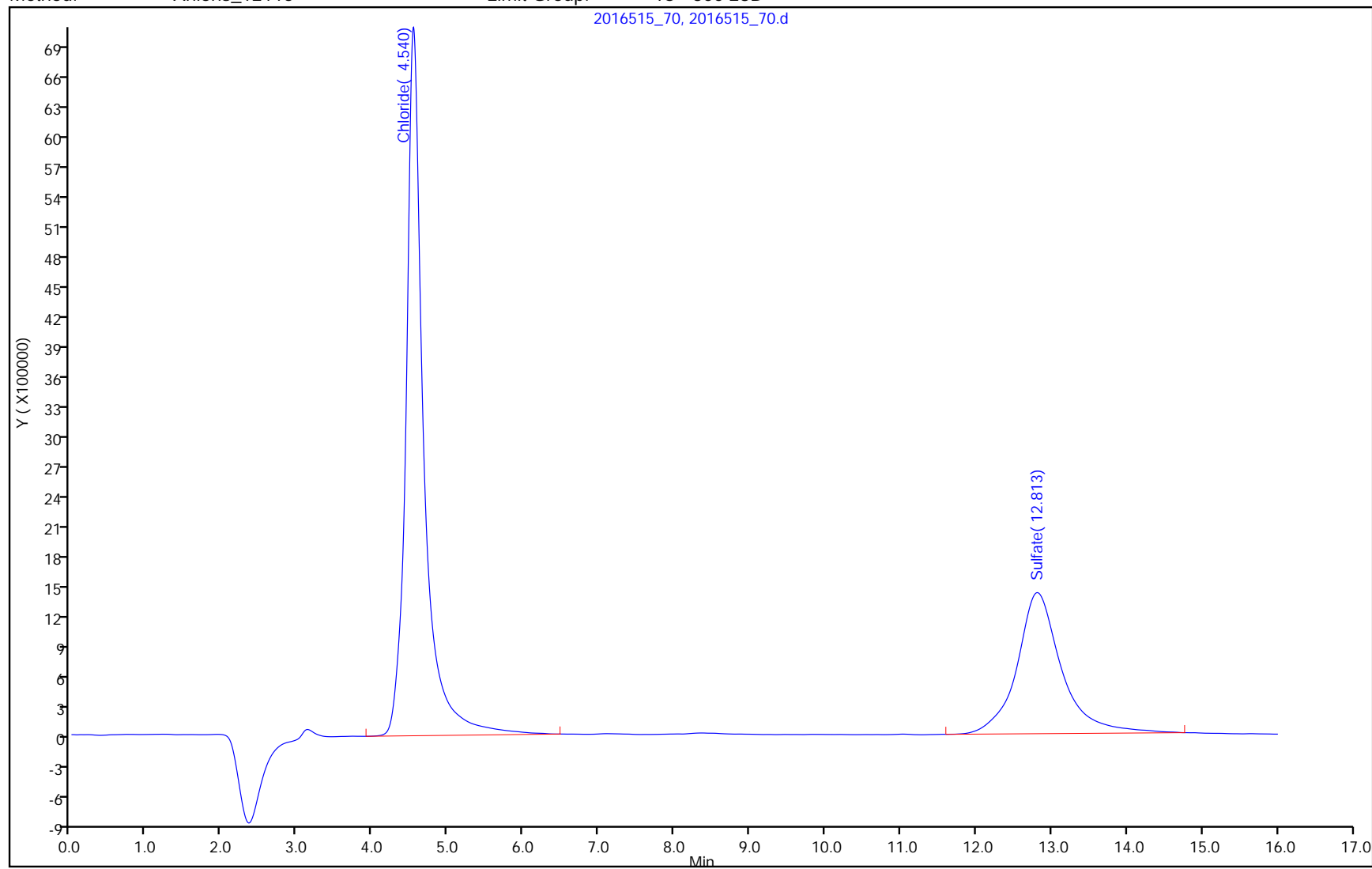
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWVA2-6023 Lab Sample ID: 410-3144-2
 Matrix: Water Lab File ID: 2019213A_17.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 03:42
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
<u>24959-67-9</u>	<u>Bromide</u>	<u>2.0</u>	<u>U H</u>	<u>2.5</u>	<u>2.0</u>	<u>1.3</u>

Report Date: 13-Jul-2020 12:40:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_17.d
 Lims ID: 410-3144-B-2
 Client ID: GWVA2-6023
 Sample Type: Client
 Inject. Date: 11-Jul-2020 03:42:00 ALS Bottle#: 0 Worklist Smp#: 17
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-2
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:47 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.340	4.323	0.017	96145904	6.60	E
4 Bromide		6.660			ND	
6 Sulfate	11.950	11.917	0.033	51072041	4.99	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 13-Jul-2020 12:40:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_17.d

Injection Date: 11-Jul-2020 03:42:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-2

Lab Sample ID: 410-3144-2

Worklist Smp#: 17

Client ID: GWVA2-6023

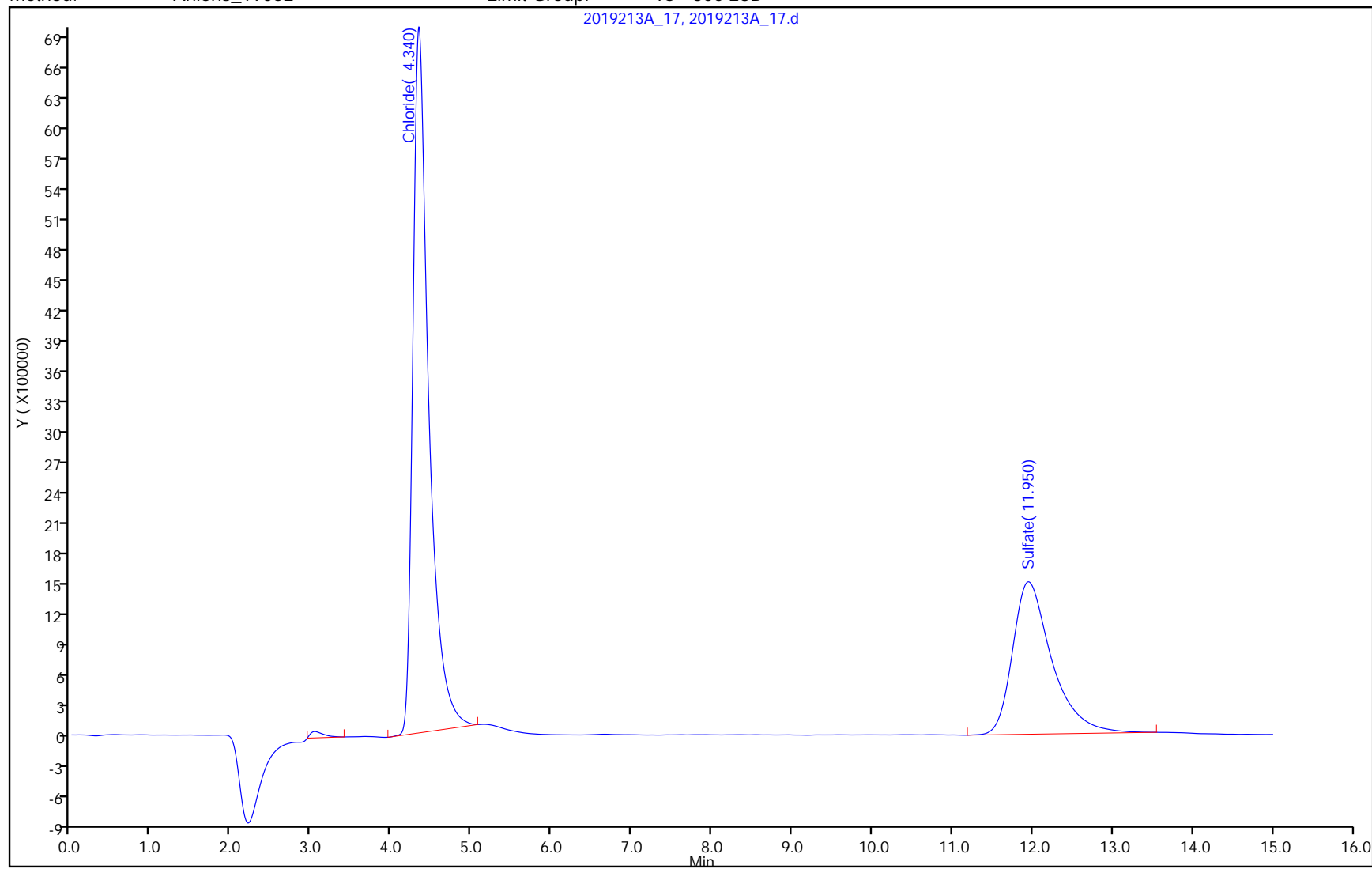
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Matrix: Water Lab File ID: 2016515_72.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 06:05
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2.0	U Q	2.5	2.0	1.3
16887-00-6	Chloride	49	D E	2.0	1.5	1.0
14808-79-8	Sulfate	31	D	5.0	4.5	1.5

Report Date: 17-Jun-2020 09:22:42

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_72.d
 Lims ID: 410-3144-B-3
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 14-Jun-2020 06:05:00 ALS Bottle#: 0 Worklist Smp#: 41
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-B-3
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.543	4.570	-0.027	145112547	9.73	E
4 Bromide		7.193			ND	
6 Sulfate	12.847	13.187	-0.340	69056795	6.23	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:22:42

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_72.d

Injection Date: 14-Jun-2020 06:05:00

Instrument ID: 12115

Operator ID:

Lims ID: 410-3144-B-3

Lab Sample ID: 410-3144-3

Worklist Smp#: 41

Client ID: GWK015-2023

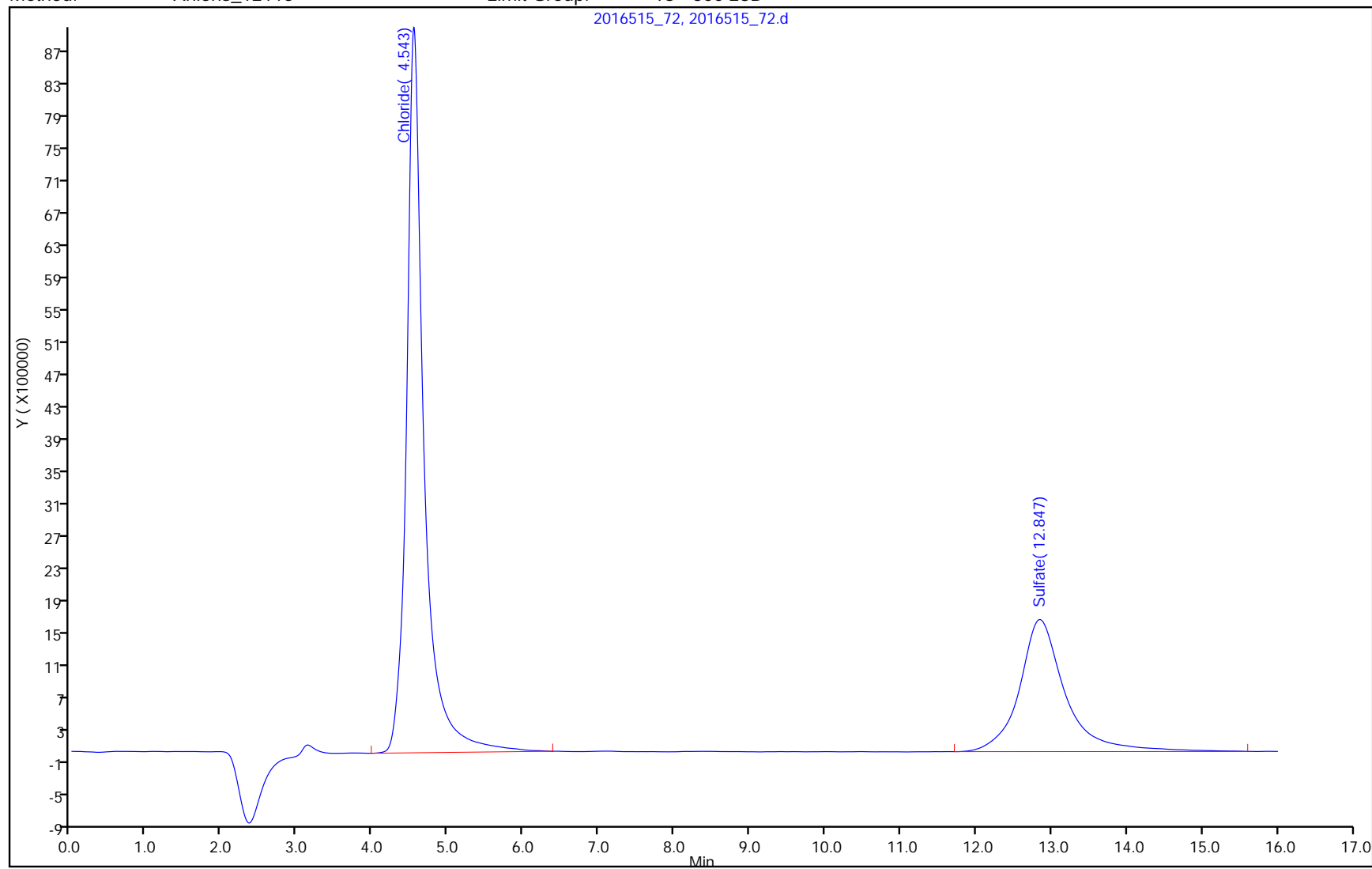
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Matrix: Water Lab File ID: 2019213A_25.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 05:58
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
<u>24959-67-9</u>	<u>Bromide</u>	<u>2.0</u>	<u>U H</u>	<u>2.5</u>	<u>2.0</u>	<u>1.3</u>
<u>14808-79-8</u>	<u>Sulfate</u>	<u>30</u>	<u>H D</u> <u>J1</u>	<u>5.0</u>	<u>4.5</u>	<u>1.5</u>

Report Date: 13-Jul-2020 12:40:45

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_25.d
 Lims ID: 410-3144-B-3
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 11-Jul-2020 05:58:00 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-3
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.037	3.027	0.010	988884	0.1333	
2 Chloride	4.340	4.323	0.017	126579847	8.69	E
3 Nitrite as N		5.187			ND	
4 Bromide		6.660			ND	
5 Nitrate as N		7.770			ND	
6 Sulfate	11.950	11.917	0.033	61581738	6.00	
S 7 Nitrate Nitrite as N		0.000			ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 13-Jul-2020 12:40:45

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_25.d

Injection Date: 11-Jul-2020 05:58:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-3

Lab Sample ID: 410-3144-3

Worklist Smp#: 25

Client ID: GWK015-2023

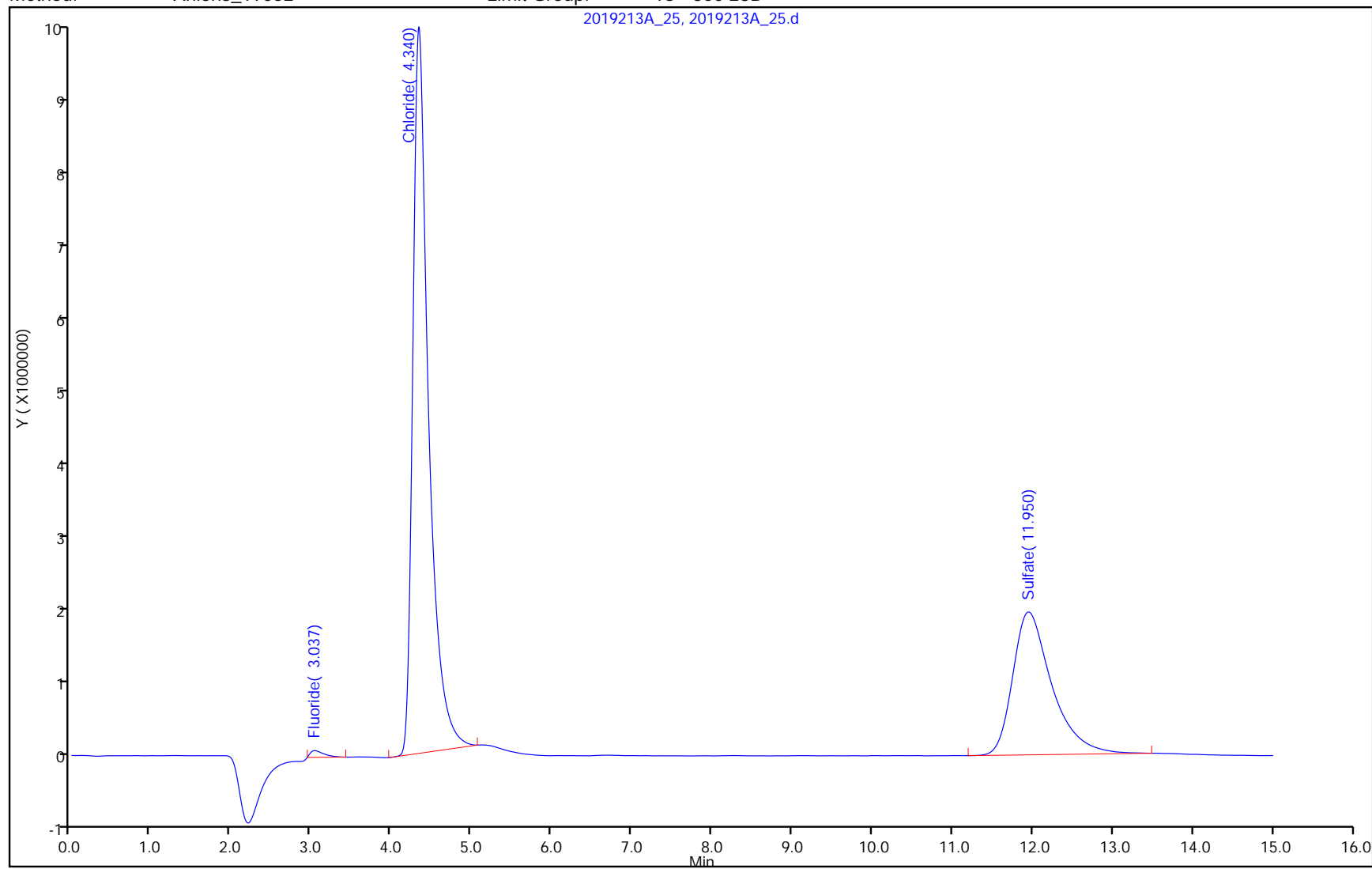
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Matrix: Water Lab File ID: 2019213A_28.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 06:49
 Con. Extract Vol.: _____ Dilution Factor: 500
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
<u>24959-67-9</u>	<u>Bromide</u>	<u>200</u>	<u>U H</u>	<u>250</u>	<u>200</u>	<u>130</u>
<u>16887-00-6</u>	<u>Chloride</u>	<u>190</u>	<u>J H</u> <u>J1 D</u>	<u>200</u>	<u>150</u>	<u>100</u>
<u>14808-79-8</u>	<u>Sulfate</u>	<u>450</u>	<u>U H</u>	<u>500</u>	<u>450</u>	<u>150</u>

Report Date: 13-Jul-2020 12:40:44

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_28.d
 Lims ID: 410-3144-B-3
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 11-Jul-2020 06:49:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 1.0 ul Dil. Factor: 500.0000
 Sample Info: 410-3144-b-3
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.027			ND	
2 Chloride	4.320	4.323	-0.003	5641391	0.3841	
3 Nitrite as N		5.187			ND	
4 Bromide		6.660			ND	
5 Nitrate as N		7.770			ND	
6 Sulfate	11.960	11.917	0.043	1697995	0.2478	
S 7 Nitrate Nitrite as N		0.000			ND	

Report Date: 13-Jul-2020 12:40:44

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_28.d

Injection Date: 11-Jul-2020 06:49:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-3

Lab Sample ID: 410-3144-3

Worklist Smp#: 28

Client ID: GWK015-2023

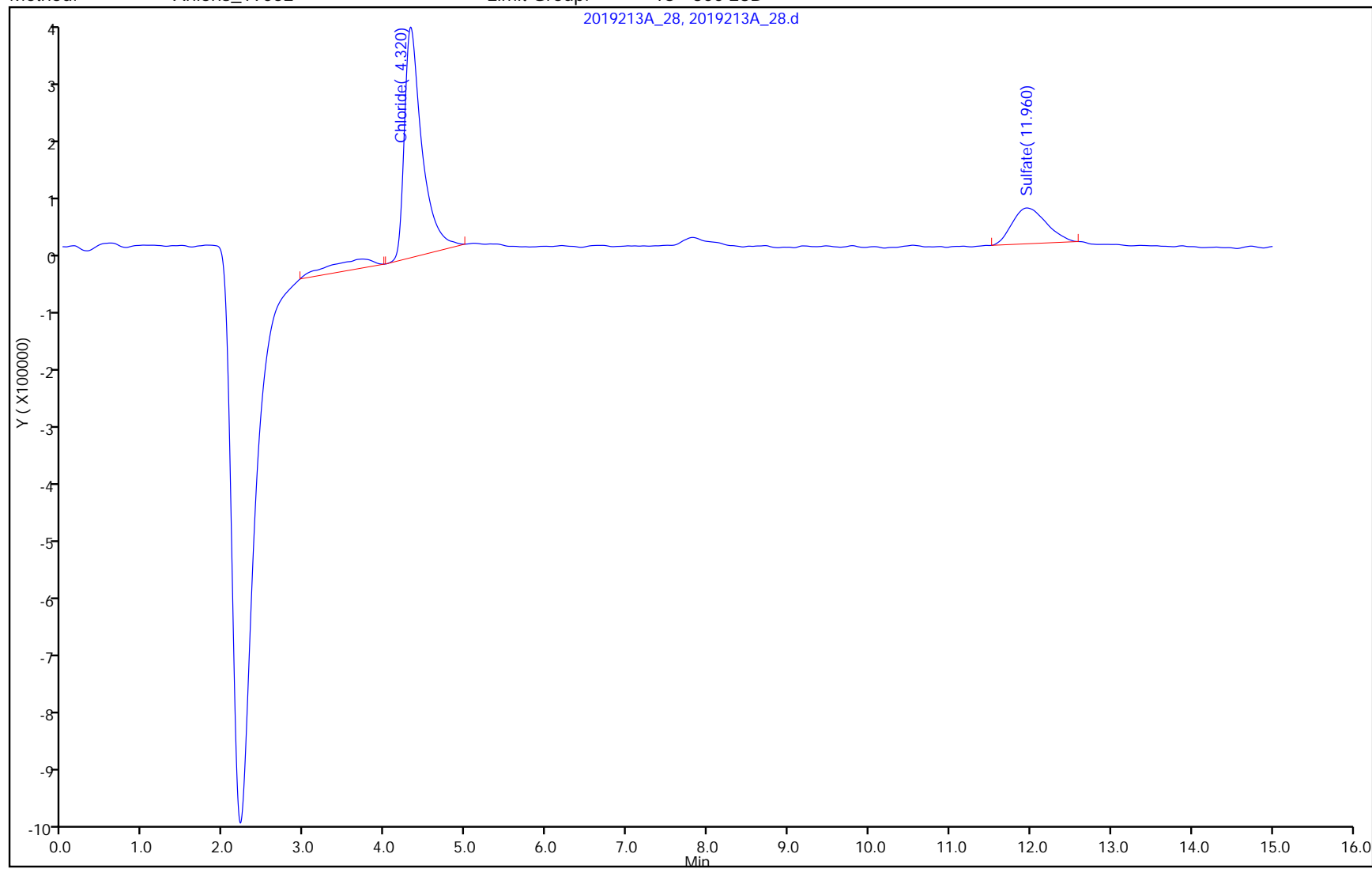
Injection Vol: 1.0 ul

Dil. Factor: 500.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK016-2023 Lab Sample ID: 410-3144-4
 Matrix: Water Lab File ID: 2016515_74.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 09:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 06:39
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2.0	U Q	2.5	2.0	1.3
16887-00-6	Chloride	59	D E	2.0	1.5	1.0
14808-79-8	Sulfate	32	D	5.0	4.5	1.5

Report Date: 17-Jun-2020 09:22:42

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_74.d
 Lims ID: 410-3144-B-4
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 14-Jun-2020 06:39:00 ALS Bottle#: 0 Worklist Smp#: 43
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-B-4
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.543	4.570	-0.027	174953256	11.7	E
4 Bromide		7.193			ND	
6 Sulfate	12.837	13.187	-0.350	70886389	6.38	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:22:42

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_74.d

Injection Date: 14-Jun-2020 06:39:00

Instrument ID: 12115

Operator ID:

Lims ID: 410-3144-B-4

Lab Sample ID: 410-3144-4

Worklist Smp#: 43

Client ID: GWK016-2023

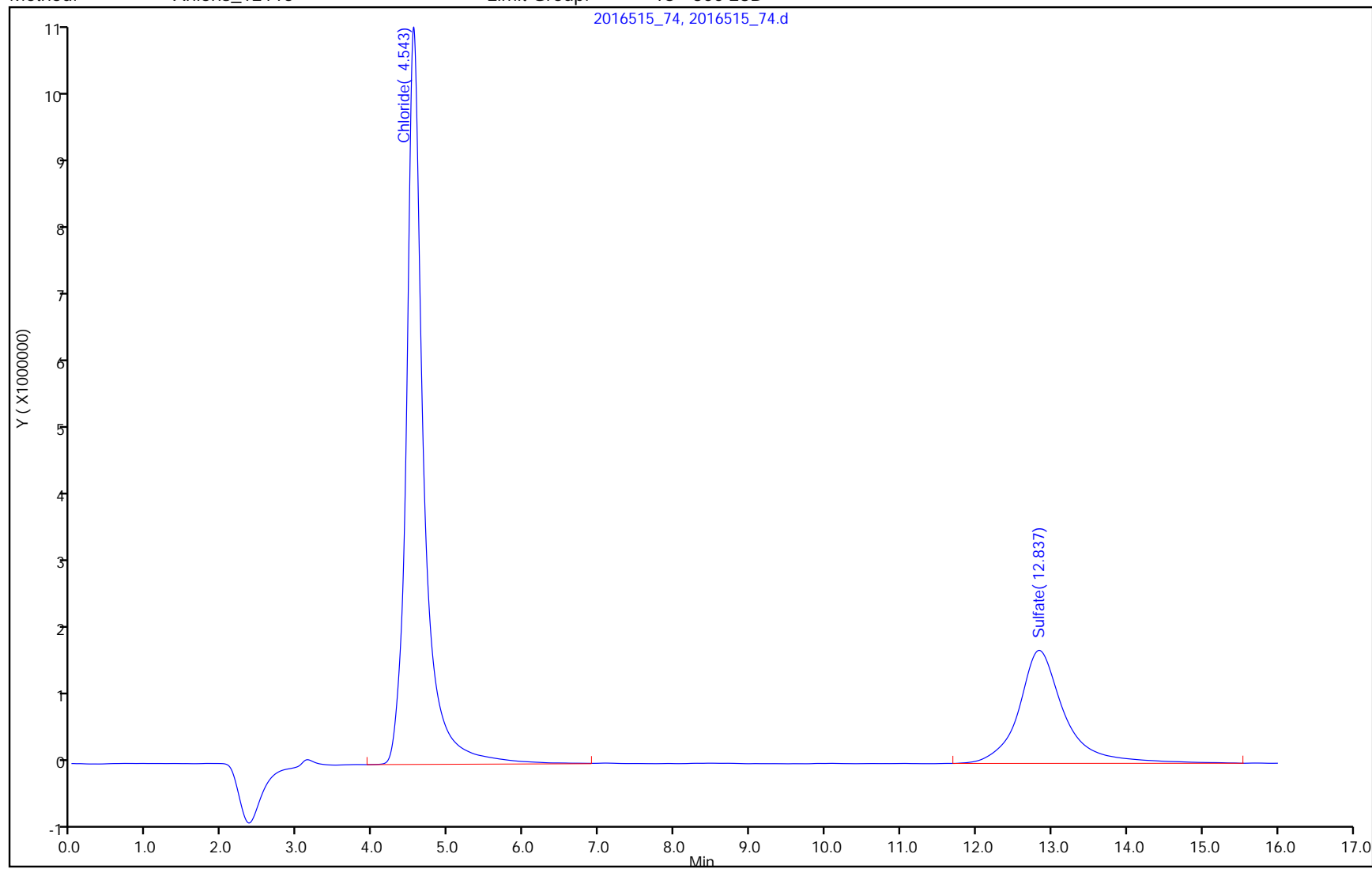
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK016-2023 Lab Sample ID: 410-3144-4
 Matrix: Water Lab File ID: 2019213A_31.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 09:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 07:40
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
<u>24959-67-9</u>	<u>Bromide</u>	<u>2.0</u>	<u>U H</u>	<u>2.5</u>	<u>2.0</u>	<u>1.3</u>

Report Date: 13-Jul-2020 12:40:43

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_31.d
 Lims ID: 410-3144-B-4
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 11-Jul-2020 07:40:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-4
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.340	4.323	0.017	149463698	10.3	E
4 Bromide		6.660			ND	
6 Sulfate	11.950	11.917	0.033	63993342	6.23	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 13-Jul-2020 12:40:43

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_31.d

Injection Date: 11-Jul-2020 07:40:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-4

Lab Sample ID: 410-3144-4

Worklist Smp#: 31

Client ID: GWK016-2023

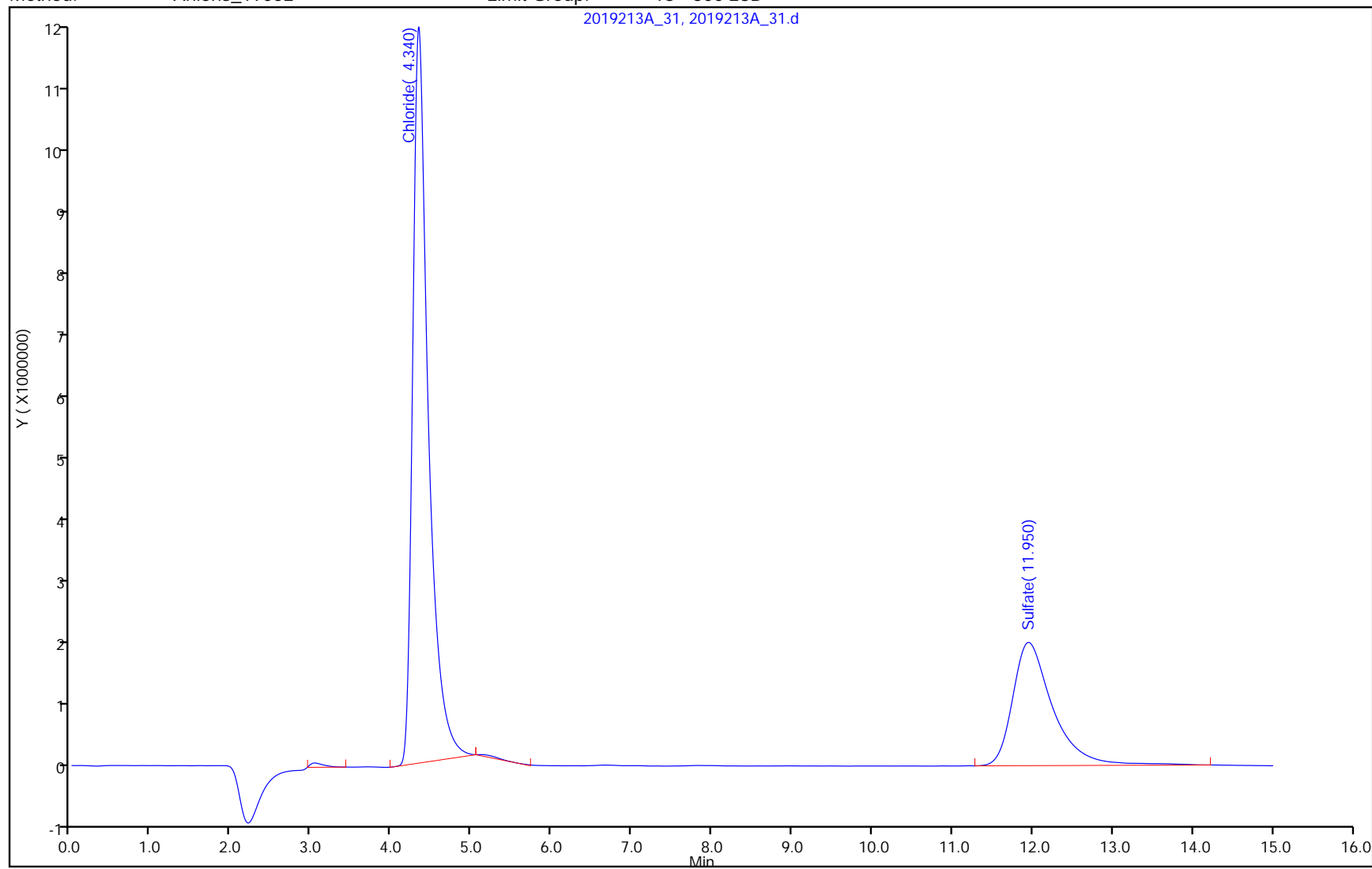
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK003-2023 Lab Sample ID: 410-3144-5
 Matrix: Water Lab File ID: 2016515_76.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 07:13
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2.0	U Q	2.5	2.0	1.3
16887-00-6	Chloride	24	D	2.0	1.5	1.0
14808-79-8	Sulfate	31	D	5.0	4.5	1.5

Report Date: 17-Jun-2020 09:22:43

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_76.d
 Lims ID: 410-3144-B-5
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 14-Jun-2020 07:13:00 ALS Bottle#: 0 Worklist Smp#: 45
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-B-5
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.540	4.570	-0.030	70341580	4.74	
4 Bromide		7.193			ND	
6 Sulfate	12.840	13.187	-0.347	69063841	6.23	

Report Date: 17-Jun-2020 09:22:43

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_76.d

Injection Date: 14-Jun-2020 07:13:00

Instrument ID: 12115

Operator ID:

Lims ID: 410-3144-B-5

Lab Sample ID: 410-3144-5

Worklist Smp#: 45

Client ID: GWK003-2023

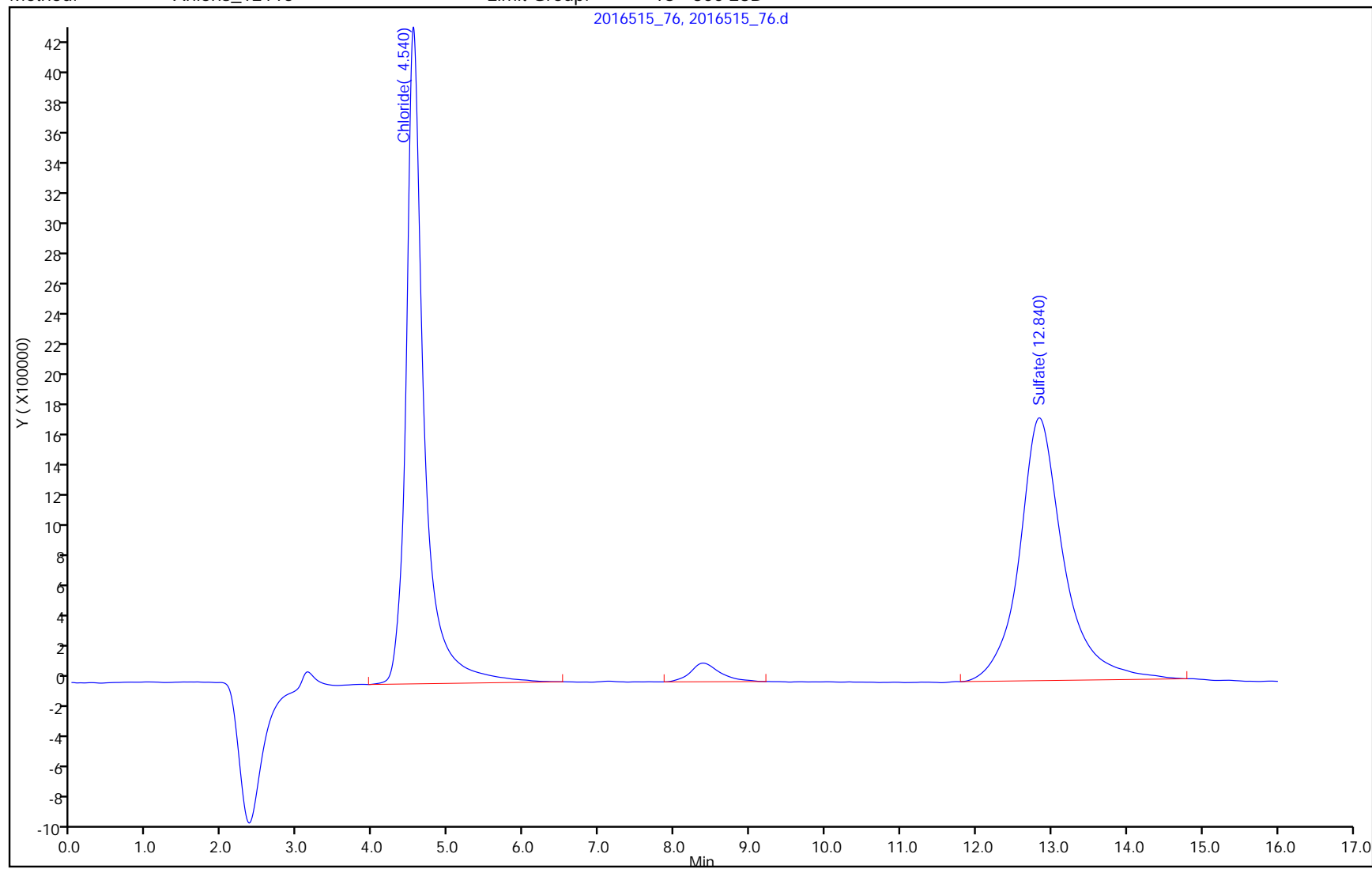
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK003-2023 Lab Sample ID: 410-3144-5
 Matrix: Water Lab File ID: 2019213A_35.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 08:48
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
<u>24959-67-9</u>	<u>Bromide</u>	<u>2.0</u>	<u>U H</u>	<u>2.5</u>	<u>2.0</u>	<u>1.3</u>

Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_35.d
 Lims ID: 410-3144-B-5
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 11-Jul-2020 08:48:00 ALS Bottle#: 0 Worklist Smp#: 35
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-5
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:40 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.337	4.323	0.014	58045635	3.98	
4 Bromide		6.660			ND	
6 Sulfate	11.960	11.917	0.043	59805945	5.83	

Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_35.d

Injection Date: 11-Jul-2020 08:48:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-5

Lab Sample ID: 410-3144-5

Worklist Smp#: 35

Client ID: GWK003-2023

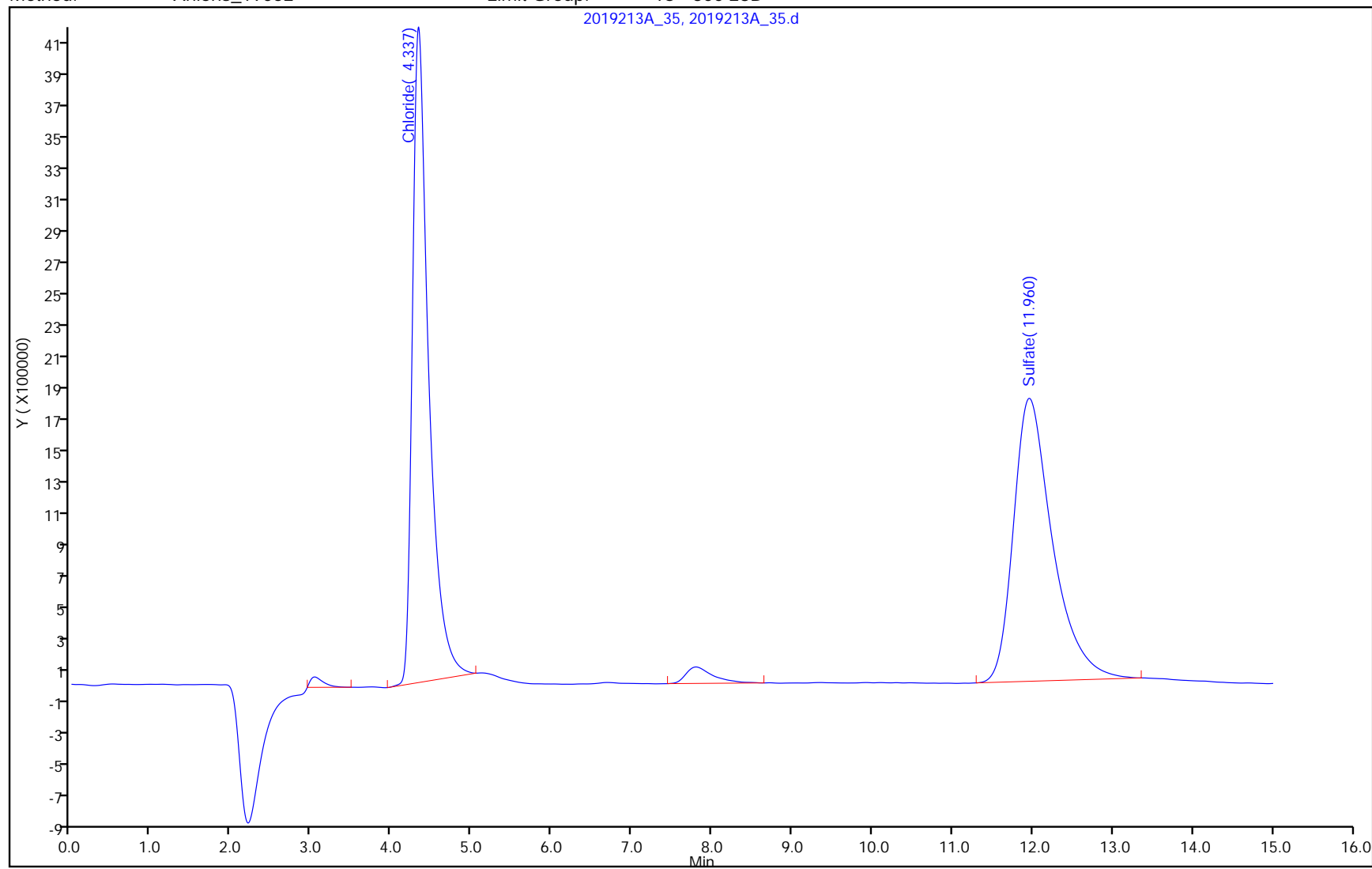
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1 Analy Batch No.: 13072

SDG No.: _____

Instrument ID: 12115 GC Column: IC15-AS14 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 13:02 Calibration End Date: 06/01/2020 14:27 Calibration ID: 5658

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-13072/1	2015315C_1.d
Level 2	IC 410-13072/2	2015315C_2.d
Level 3	IC 410-13072/3	2015315C_3.d
Level 4	IC 410-13072/4	2015315C_4.d
Level 5	IC 410-13072/5	2015315C_5.d
Level 6	IC 410-13072/6	2015315C_6.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Fluoride		3.167	3.160	3.160	3.160	3.160					0.000 - 0.000	3.161
Chloride		4.577	4.573	4.577	4.577	4.573					0.000 - 0.000	4.575
Bromide		7.247	7.223	7.217	7.200	7.183					0.000 - 0.000	7.214
Sulfate		13.210	13.203	13.193	13.193	13.183					0.000 - 0.000	13.196

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1 Analy Batch No.: 13072

SDG No.: _____

Instrument ID: 12115 GC Column: IC15-AS14 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 13:02 Calibration End Date: 06/01/2020 14:27 Calibration ID: 5658

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-13072/1	2015315C_1.d
Level 2	IC 410-13072/2	2015315C_2.d
Level 3	IC 410-13072/3	2015315C_3.d
Level 4	IC 410-13072/4	2015315C_4.d
Level 5	IC 410-13072/5	2015315C_5.d
Level 6	IC 410-13072/6	2015315C_6.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Fluoride	20571935	28763940 22511572	24392015	19646983	Lin	-218710.82	21887851.5						0.9950		0.9900	
Chloride	14001397	14112935 15345727	16823149	13001297	Lin	-809337.05	15003201.2						0.9940		0.9900	
Bromide	5798617	4640680 6455766	5729031	5262485	Lin	-1929802.0	6353609.42						0.9940		0.9900	
Sulfate	10744086	9307371 11872385	10398759	9501424	Lin	-4046281.6	11739888.9						0.9940		0.9900	

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1 Analy Batch No.: 13072

SDG No.: _____

Instrument ID: 12115 GC Column: IC15-AS14 ID: 4 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2020 13:02 Calibration End Date: 06/01/2020 14:27 Calibration ID: 5658

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-13072/1	2015315C_1.d
Level 2	IC 410-13072/2	2015315C_2.d
Level 3	IC 410-13072/3	2015315C_3.d
Level 4	IC 410-13072/4	2015315C_4.d
Level 5	IC 410-13072/5	2015315C_5.d
Level 6	IC 410-13072/6	2015315C_6.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Fluoride	Lin	67534717	2876394	9756806	19646983	41143870	0.000000 3.00	0.100	0.400	1.00	2.00
Chloride	Lin	92074359	5645174	13458519	26002593	56005588	0.000000 6.00	0.400	0.800	2.00	4.00
Bromide	Lin	96836495	2320340	11458061	26312425	57986173	0.000000 15.0	0.500	2.00	5.00	10.0
Sulfate	Lin	178085780	9307371	20797517	47507120	107440856	0.000000 15.0	1.00	2.00	5.00	10.0

Curve Type Legend:

Lin = Linear

Report Date: 15-Jun-2020 09:37:01

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_1.d
 Lims ID: IC CAL0
 Client ID:
 Sample Type: IC Calib Level: 0
 Inject. Date: 01-Jun-2020 13:02:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 0
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub1
 Method: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 15-Jun-2020 09:37:01 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1061

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_C_Det_00006 Amount Added: 0.00 Units: mL

Report Date: 15-Jun-2020 09:37:01

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_1.d

Injection Date: 01-Jun-2020 13:02:00

Instrument ID: 12115

Operator ID:

Lims ID: IC CALO

Worklist Smp#: 1

Client ID:

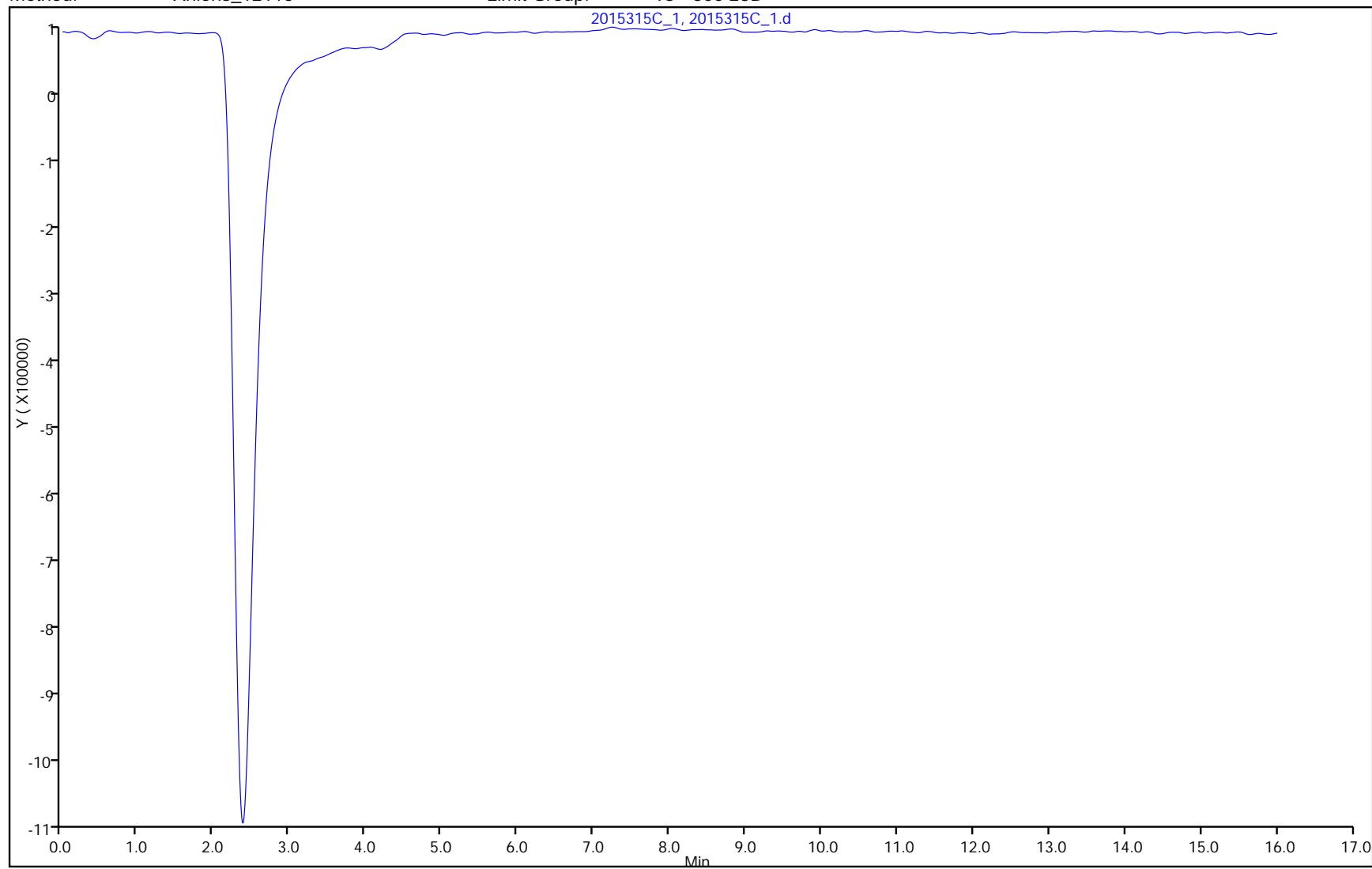
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



Report Date: 15-Jun-2020 09:38:23

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_2.d
 Lims ID: IC CAL1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 01-Jun-2020 13:19:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 1
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub1
 Method: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 15-Jun-2020 09:38:23 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1061

First Level Reviewer: litwak Date: 15-Jun-2020 09:37:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.167	3.153	0.014	2876394	0.1000	0.1414	Ma
2 Chloride	4.577	4.570	0.007	5645174	0.4000	0.4302	a
3 Nitrite as N	5.570	5.550	0.020	2693622	NC	NC	
4 Bromide	7.247	7.193	0.054	2320340	0.5000	0.6689	
5 Nitrate as N	8.577	8.490	0.087	2893686	NC	NC	
6 Sulfate	13.210	13.187	0.023	9307371	1.00	1.14	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

WC_IC_C_Det_00006 Amount Added: 0.10 Units: mL

Report Date: 15-Jun-2020 09:38:23

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_2.d

Injection Date: 01-Jun-2020 13:19:00

Instrument ID: 12115

Operator ID:

Lims ID: IC CAL1

Worklist Smp#: 2

Client ID:

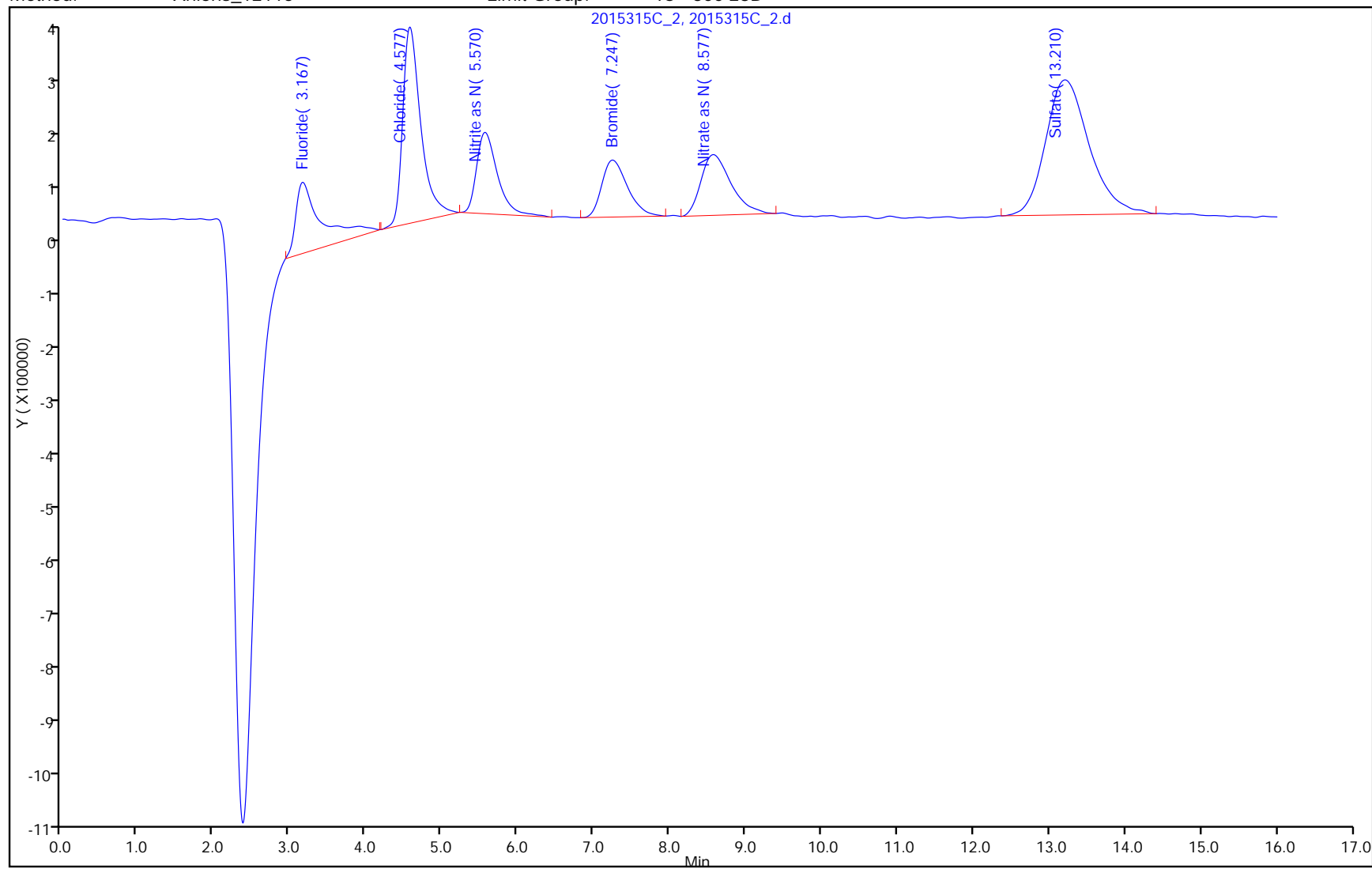
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



Report Date: 15-Jun-2020 09:38:23

Chrom Revision: 2.3 13-Jun-2020 09:53:24
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

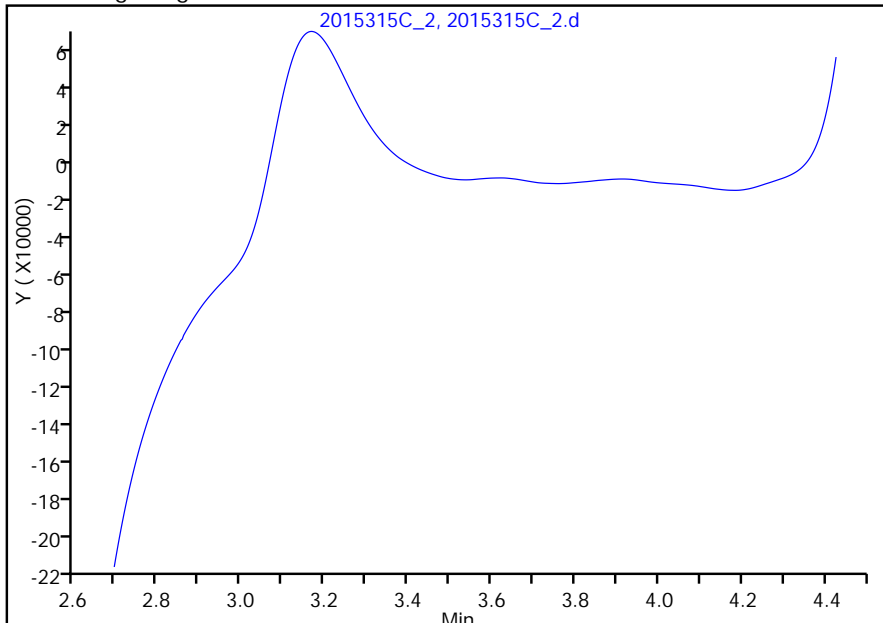
Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_2.d
Injection Date: 01-Jun-2020 13:19:00 Instrument ID: 12115
Lims ID: IC CAL1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Anions_12115 Limit Group: IC - 300 28D
Column: Detector det0

1 Fluoride, CAS: 16984-48-8

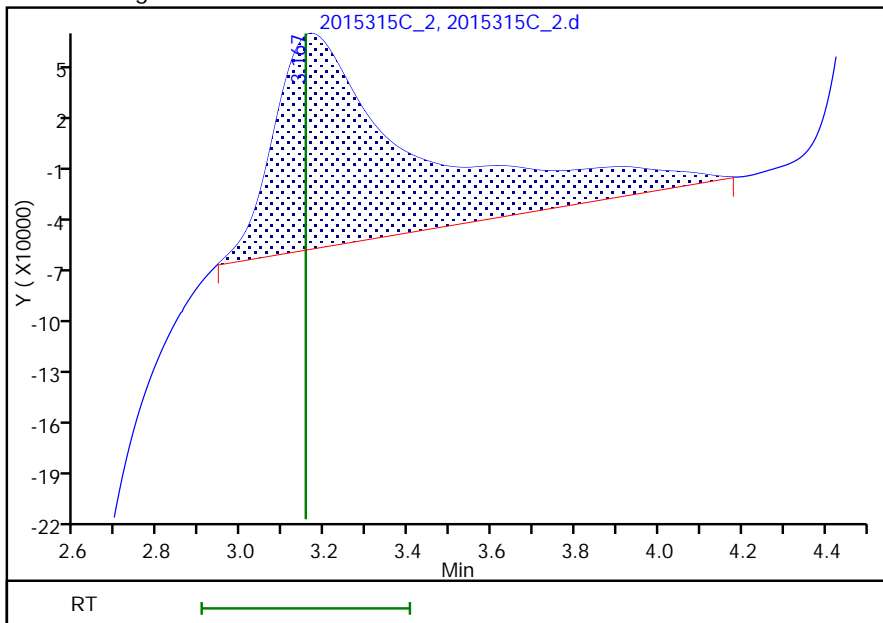
Signal: 1

Not Detected
Expected RT: 3.15

Processing Integration Results



Manual Integration Results



RT: 3.17
Area: 2876394
Amount: 0.141407
Amount Units: ug/ml

Reviewer: litwak, 15-Jun-2020 09:35:23

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Report Date: 15-Jun-2020 09:38:23

Chrom Revision: 2.3 13-Jun-2020 09:53:24
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

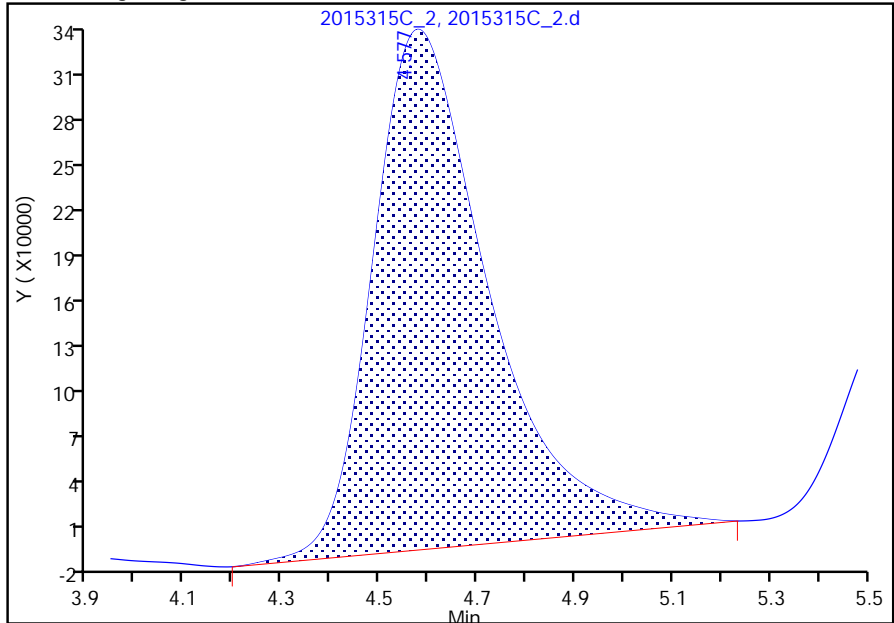
Data File:	\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_2.d			
Injection Date:	01-Jun-2020 13:19:00	Instrument ID:	12115	
Lims ID:	IC CAL1			
Client ID:				
Operator ID:	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	
Method:	Anions_12115	Limit Group:	IC - 300 28D	
Column:		Detector	det0	

2 Chloride, CAS: 16887-00-6

Signal: 1

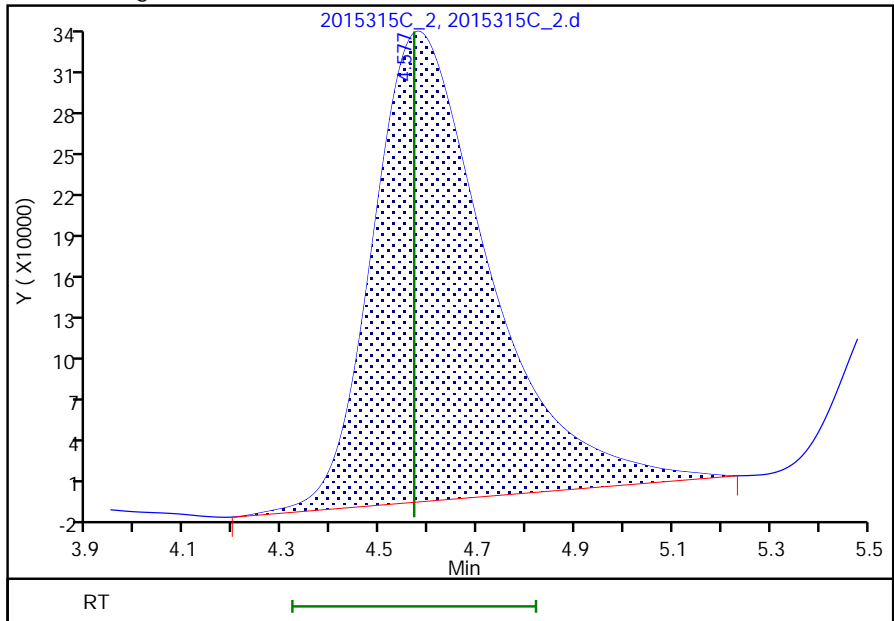
RT: 4.58
 Area: 5645174
 Amount: 0.430209
 Amount Units: ug/ml

Processing Integration Results



RT: 4.58
 Area: 5645174
 Amount: 0.430209
 Amount Units: ug/ml

Manual Integration Results



Reviewer: litwak, 15-Jun-2020 09:34:49
Audit Action: Assigned Compound ID

Audit Reason:
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Report Date: 15-Jun-2020 09:37:02

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_3.d
 Lims ID: IC CAL2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 01-Jun-2020 13:36:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 2
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub1
 Method: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 15-Jun-2020 09:37:02 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1061

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.160	3.153	0.007	9756806	0.4000	0.4558	
2 Chloride	4.573	4.570	0.003	13458519	0.8000	0.9510	
3 Nitrite as N	5.560	5.550	0.010	12352821	NC	NC	
4 Bromide	7.223	7.193	0.030	11458061	2.00	2.11	
5 Nitrate as N	8.530	8.490	0.040	13863671	NC	NC	
6 Sulfate	13.203	13.187	0.016	20797517	2.00	2.12	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC_IC_C_Int_00007 Amount Added: 0.40 Units: mL

Report Date: 15-Jun-2020 09:37:02

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_3.d

Injection Date: 01-Jun-2020 13:36:00

Instrument ID: 12115

Operator ID:

Lims ID: IC CAL2

Worklist Smp#: 3

Client ID:

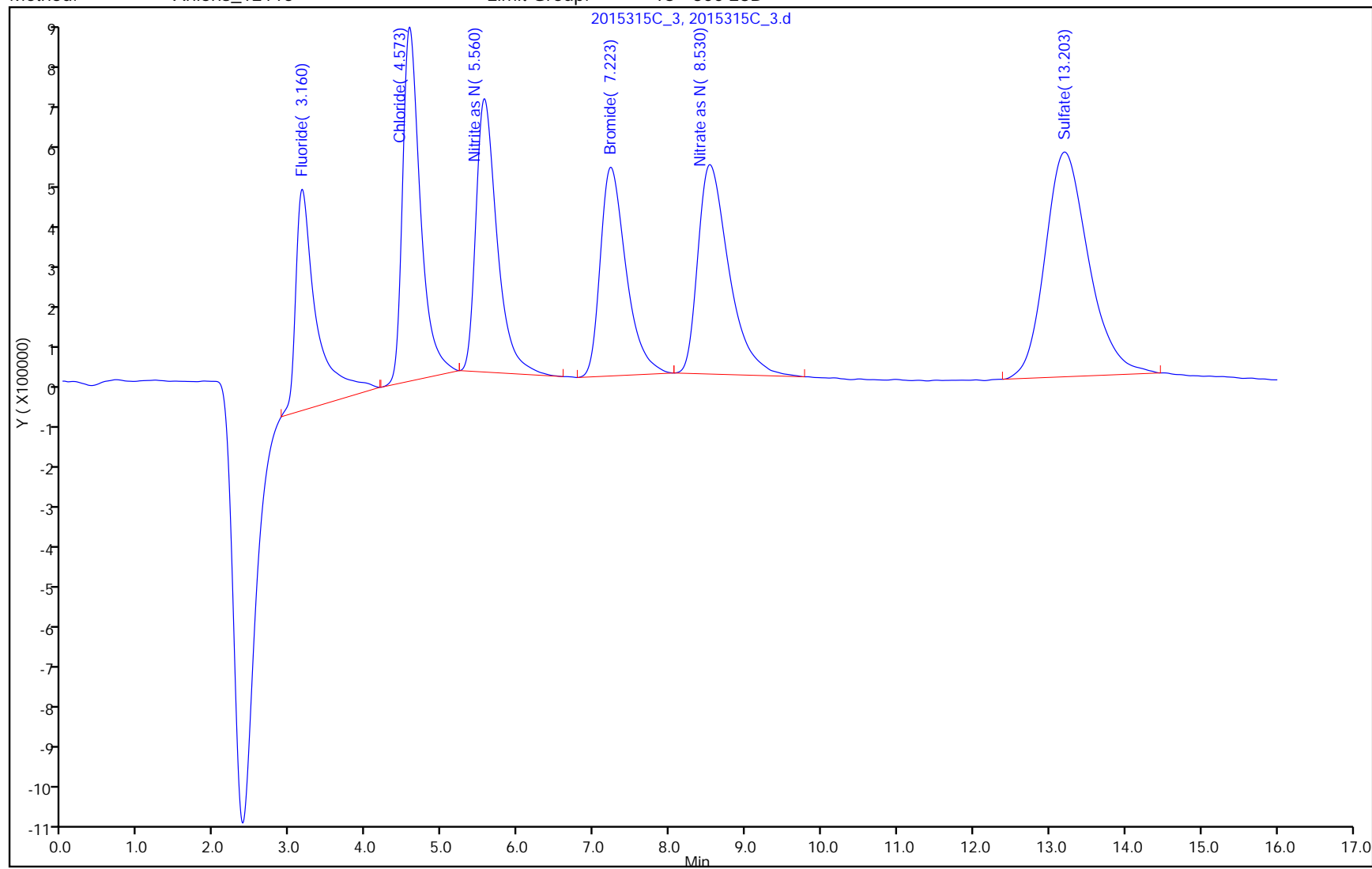
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



Report Date: 15-Jun-2020 09:37:02

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_4.d
 Lims ID: IC CAL3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 01-Jun-2020 13:53:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 3
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub1
 Method: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 15-Jun-2020 09:37:02 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1061

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.160	3.153	0.007	19646983	1.00	0.9076	
2 Chloride	4.577	4.570	0.007	26002593	2.00	1.79	
3 Nitrite as N	5.560	5.550	0.010	27753213	NC	NC	
4 Bromide	7.217	7.193	0.024	26312425	5.00	4.45	
5 Nitrate as N	8.503	8.490	0.013	30918941	NC	NC	
6 Sulfate	13.193	13.187	0.006	47507120	5.00	4.39	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC_IC_C_Int_00007 Amount Added: 1.00 Units: mL

Report Date: 15-Jun-2020 09:37:02

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_4.d

Injection Date: 01-Jun-2020 13:53:00

Instrument ID: 12115

Operator ID:

Lims ID: IC CAL3

Worklist Smp#: 4

Client ID:

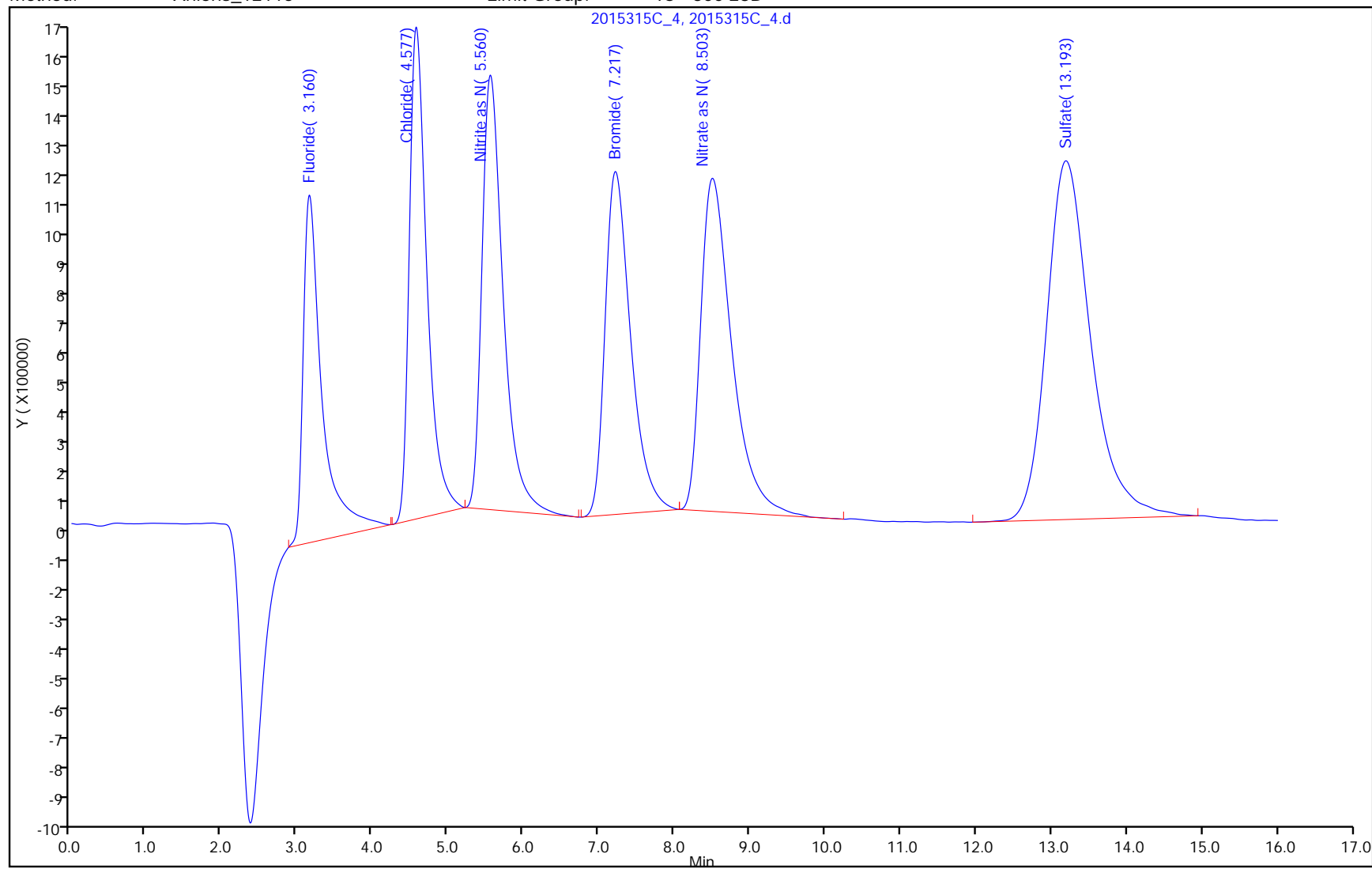
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



Report Date: 15-Jun-2020 09:37:03

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_5.d
 Lims ID: IC CAL4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 01-Jun-2020 14:10:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 4
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub1
 Method: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 15-Jun-2020 09:37:03 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1061

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.160	3.160	0.000	41143870	2.00	1.89	
2 Chloride	4.577	4.577	0.000	56005588	4.00	3.79	
3 Nitrite as N	5.557	5.557	0.000	60282929	NC	NC	
4 Bromide	7.200	7.200	0.000	57986173	10.0	9.43	
5 Nitrate as N	8.467	8.467	0.000	66971475	NC	NC	
6 Sulfate	13.193	13.193	0.000	107440856	10.0	9.50	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC_IC_C_Int_00007 Amount Added: 2.00 Units: mL

Report Date: 15-Jun-2020 09:37:03

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_5.d

Injection Date: 01-Jun-2020 14:10:00

Instrument ID: 12115

Operator ID:

Lims ID: IC CAL4

Worklist Smp#: 5

Client ID:

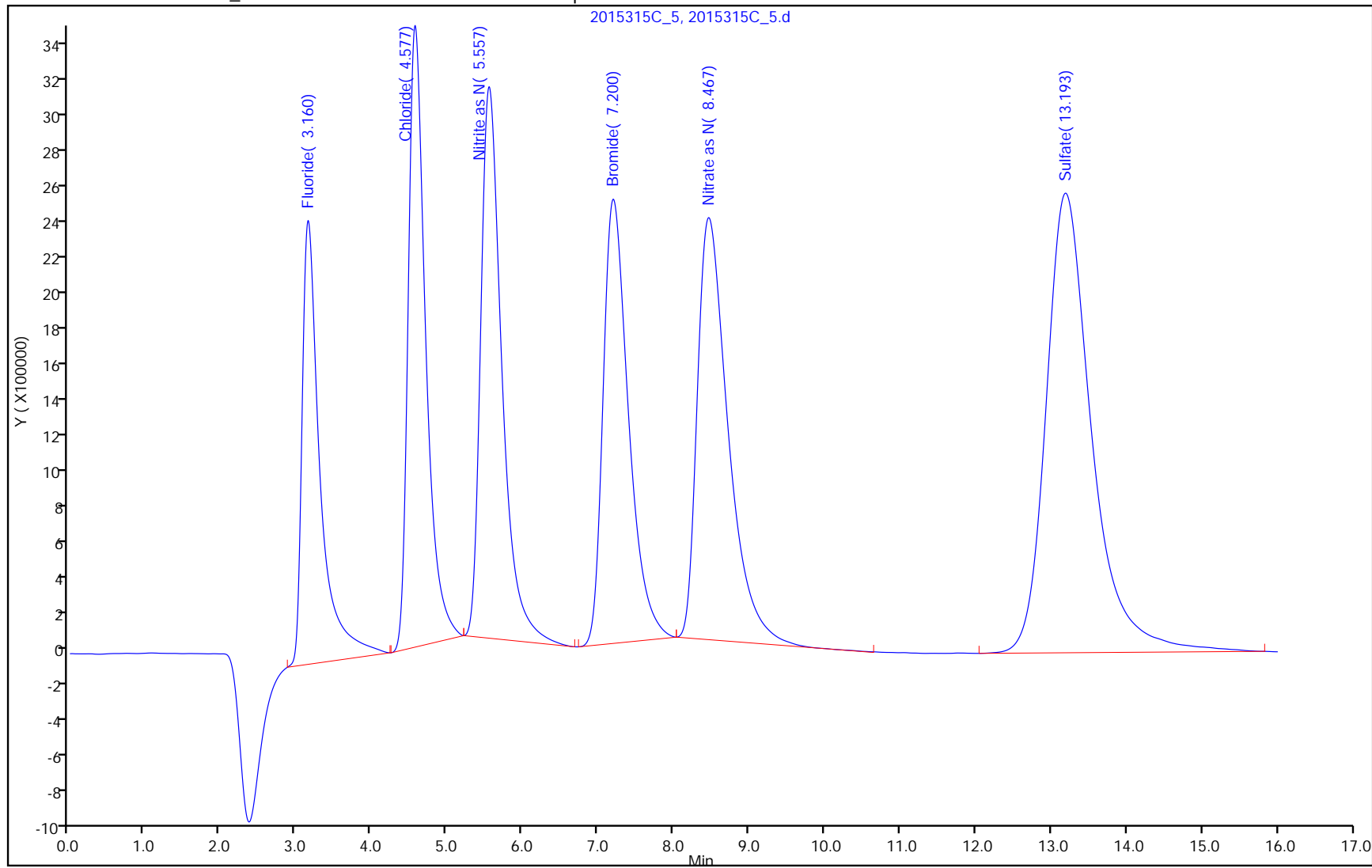
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



Report Date: 15-Jun-2020 09:37:58

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Lims ID: IC CAL5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 01-Jun-2020 14:27:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 5
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub1
 Method: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 15-Jun-2020 09:37:58 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1061

First Level Reviewer: litwak Date: 15-Jun-2020 09:37:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.160	3.153	0.007	67534717	3.00	3.10	
2 Chloride	4.573	4.570	0.003	92074359	6.00	6.19	
3 Nitrite as N	5.553	5.550	0.003	99176456	NC	NC	
4 Bromide	7.183	7.193	-0.010	96836495	15.0	15.5	
5 Nitrate as N	8.430	8.490	-0.060	110884262	NC	NC	
6 Sulfate	13.183	13.187	-0.004	178085780	15.0	15.5	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC_IC_C_Int_00007 Amount Added: 3.00 Units: mL

Report Date: 15-Jun-2020 09:37:58

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d

Injection Date: 01-Jun-2020 14:27:00

Instrument ID: 12115

Operator ID:

Lims ID: IC CAL5

Worklist Smp#: 6

Client ID:

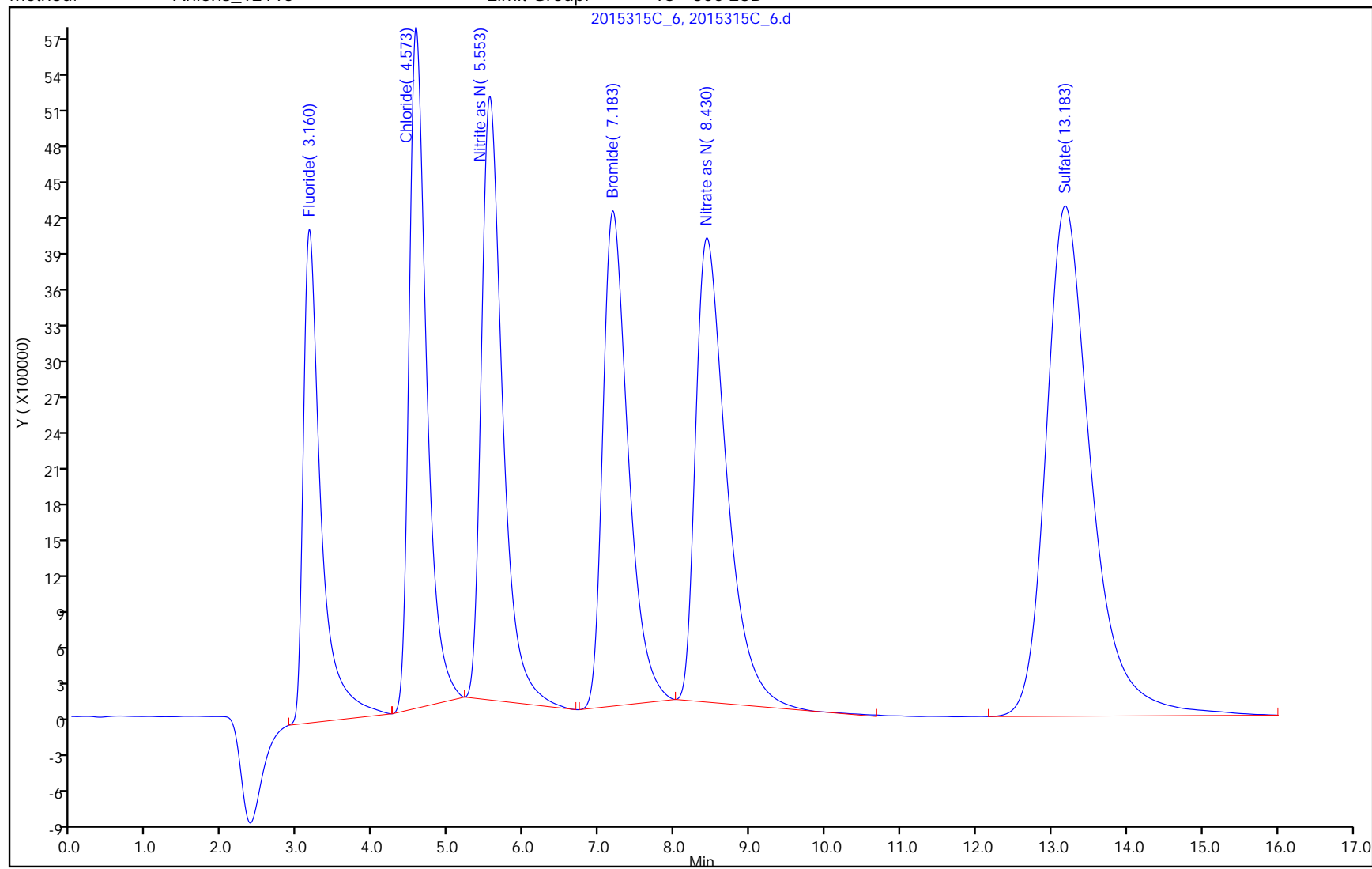
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1 Analy Batch No.: 8732

SDG No.: _____

Instrument ID: 19052 GC Column: _____ ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2020 12:51 Calibration End Date: 04/29/2020 14:16 Calibration ID: 4367

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-8732/1	2012013C_2.d
Level 2	IC 410-8732/2	2012013C_3.d
Level 3	IC 410-8732/3	2012013C_4.d
Level 4	IC 410-8732/4	2012013C_5.d
Level 5	IC 410-8732/5	2012013C_6.d
Level 6	IC 410-8732/6	2012013C_7.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Fluoride		3.217	3.213	3.217	3.217	3.213					0.000 - 0.000	3.215
Chloride		4.753	4.750	4.753	4.760	4.757					0.000 - 0.000	4.755
Bromide		7.683	7.637	7.627	7.597	7.577					0.000 - 0.000	7.624
Sulfate		13.847	13.853	13.863	13.853	13.840					0.000 - 0.000	13.851

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1 Analy Batch No.: 8732

SDG No.: _____

Instrument ID: 19052 GC Column: _____ ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2020 12:51 Calibration End Date: 04/29/2020 14:16 Calibration ID: 4367

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-8732/1	2012013C_2.d
Level 2	IC 410-8732/2	2012013C_3.d
Level 3	IC 410-8732/3	2012013C_4.d
Level 4	IC 410-8732/4	2012013C_5.d
Level 5	IC 410-8732/5	2012013C_6.d
Level 6	IC 410-8732/6	2012013C_7.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Fluoride	19096093	10984770 19577835	13752265	15518725	Lin	-1656282.6	19843306.6							0.9960		0.9900
Chloride	14643043	29926980 14778606	14778498	12282198	Lin	47483.1763	14563961.2							0.9950		0.9900
Bromide	6187383	4972860 6275205	5917018	5098378	Lin	-1478866.9	6298075.80							0.9960		0.9900
Sulfate	10361638	18004224 10498324	9851460	8624959	Lin	-880788.31	10406332.2							0.9950		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1 Analy Batch No.: 8732

SDG No.: _____

Instrument ID: 19052 GC Column: _____ ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2020 12:51 Calibration End Date: 04/29/2020 14:16 Calibration ID: 4367

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-8732/1	2012013C_2.d
Level 2	IC 410-8732/2	2012013C_3.d
Level 3	IC 410-8732/3	2012013C_4.d
Level 4	IC 410-8732/4	2012013C_5.d
Level 5	IC 410-8732/5	2012013C_6.d
Level 6	IC 410-8732/6	2012013C_7.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Fluoride	Lin	58733504	1098477	5500906	15518725	38192185	0.000000 3.00	0.100	0.400	1.00	2.00
Chloride	Lin	88671636	5985396	11822798	24564395	58572170	0.000000 6.00	0.200	0.800	2.00	4.00
Bromide	Lin	94128078	2486430	11834036	25491892	61873826	0.000000 15.0	0.500	2.00	5.00	10.0
Sulfate	Lin	157474859	9002112	19702919	43124797	103616378	0.000000 15.0	0.500	2.00	5.00	10.0

Curve Type Legend:

Lin = Linear

Report Date: 19-May-2020 08:31:42

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_2.d
 Lims ID: IC CALO
 Client ID:
 Sample Type: IC Calib Level: 0
 Inject. Date: 29-Apr-2020 12:51:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 0
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub1
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak Date: 19-May-2020 08:30:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.213				ND	
2 Chloride		4.753				ND	
3 Nitrite as N		5.817				ND	
4 Bromide		7.607				ND	
5 Nitrate as N		9.047				ND	
6 Sulfate		13.863				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_C_Det_00004 Amount Added: 0.00 Units: mL

Report Date: 19-May-2020 08:31:42

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_2.d

Injection Date: 29-Apr-2020 12:51:00

Instrument ID: 19052

Operator ID:

Lims ID: IC CALO

Worklist Smp#: 1

Client ID:

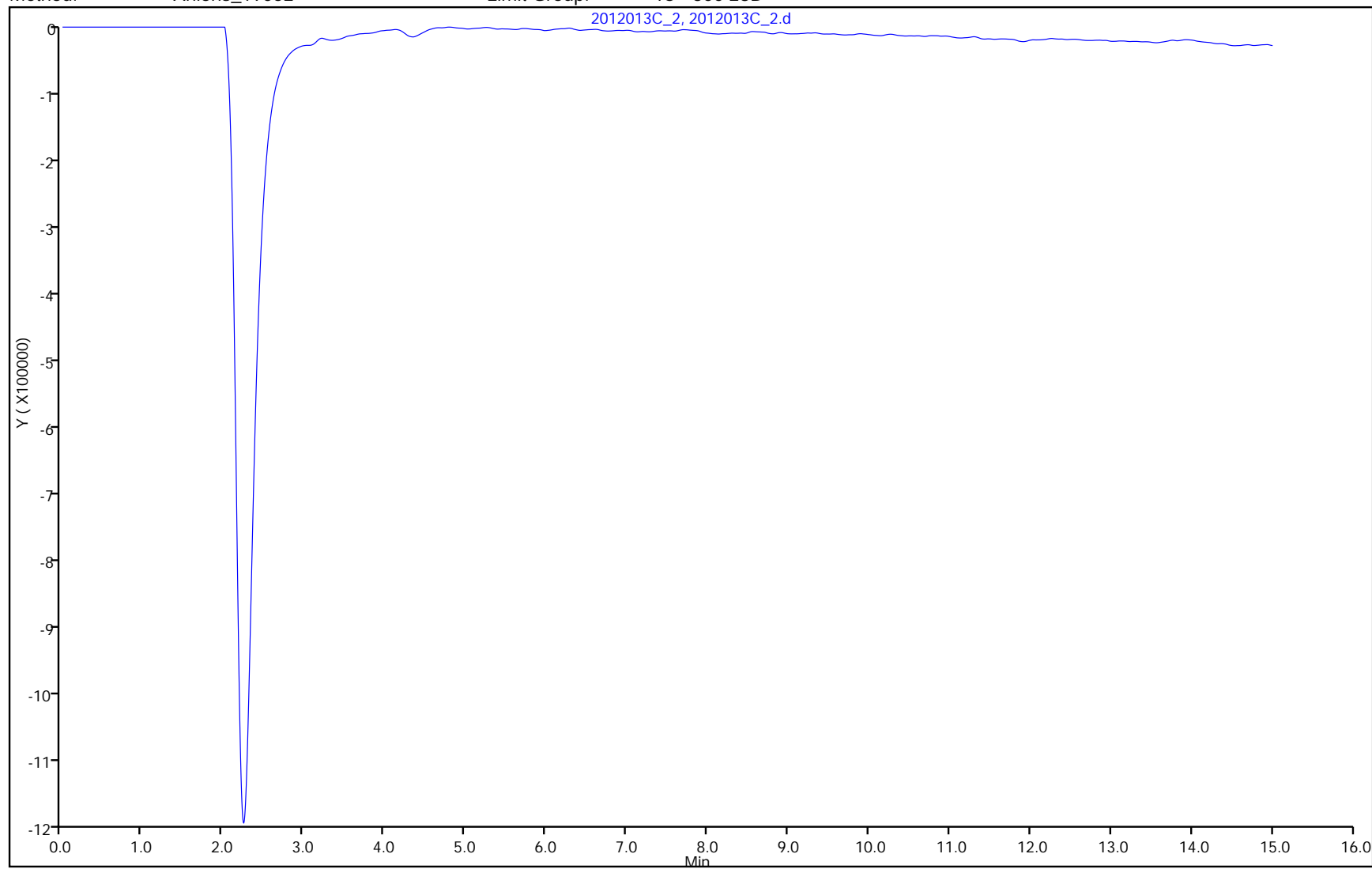
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 19-May-2020 08:31:43

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_3.d
 Lims ID: IC CAL1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 29-Apr-2020 13:08:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 1
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub1
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:43 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak

Date: 19-May-2020 07:58:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.213	0.004	1098477	0.1000	0.1388	
2 Chloride	4.753	4.753	0.000	5985396	0.2000	0.4077	
3 Nitrite as N	5.827	5.817	0.010	2588165	NC	NC	
4 Bromide	7.683	7.607	0.076	2486430	0.5000	0.6296	
5 Nitrate as N	9.177	9.047	0.130	3165012	NC	NC	
6 Sulfate	13.847	13.863	-0.016	9002112	0.5000	0.9497	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00004 Amount Added: 0.10 Units: mL

Report Date: 19-May-2020 08:31:43

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_3.d

Injection Date: 29-Apr-2020 13:08:00

Instrument ID: 19052

Operator ID:

Lims ID: IC CAL1

Worklist Smp#: 2

Client ID:

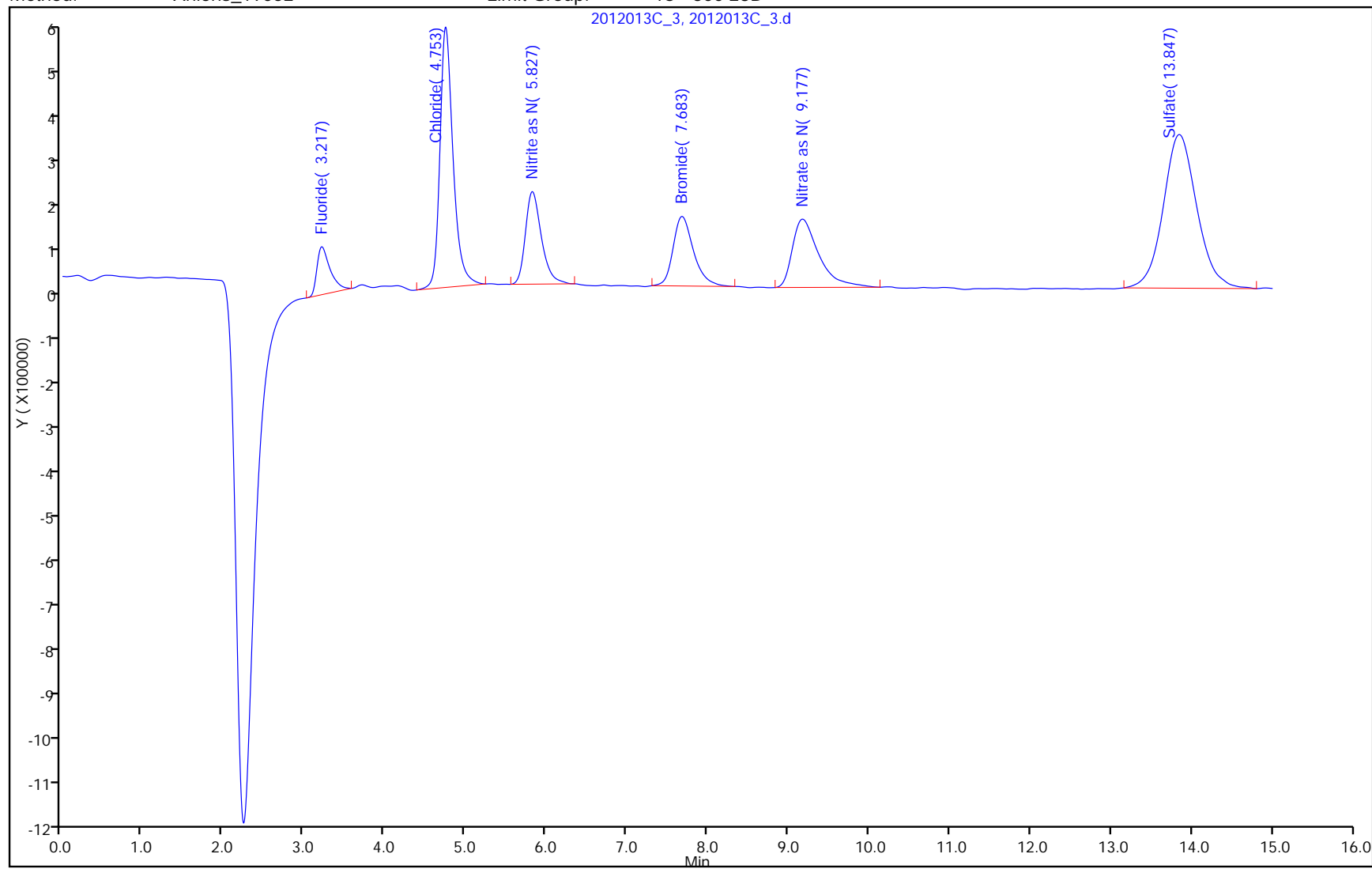
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 19-May-2020 08:31:44

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_4.d
 Lims ID: IC CAL2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 29-Apr-2020 13:25:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 2
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub1
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:44 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak

Date: 19-May-2020 08:03:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.213	0.000	5500906	0.4000	0.3607	
2 Chloride	4.750	4.753	-0.003	11822798	0.8000	0.8085	
3 Nitrite as N	5.813	5.817	-0.004	11972763	NC	NC	
4 Bromide	7.637	7.607	0.030	11834036	2.00	2.11	
5 Nitrate as N	9.073	9.047	0.026	13719282	NC	NC	
6 Sulfate	13.853	13.863	-0.010	19702919	2.00	1.98	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00004 Amount Added: 0.40 Units: mL

Report Date: 19-May-2020 08:31:44

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_4.d

Injection Date: 29-Apr-2020 13:25:00

Instrument ID: 19052

Operator ID:

Lims ID: IC CAL2

Worklist Smp#: 3

Client ID:

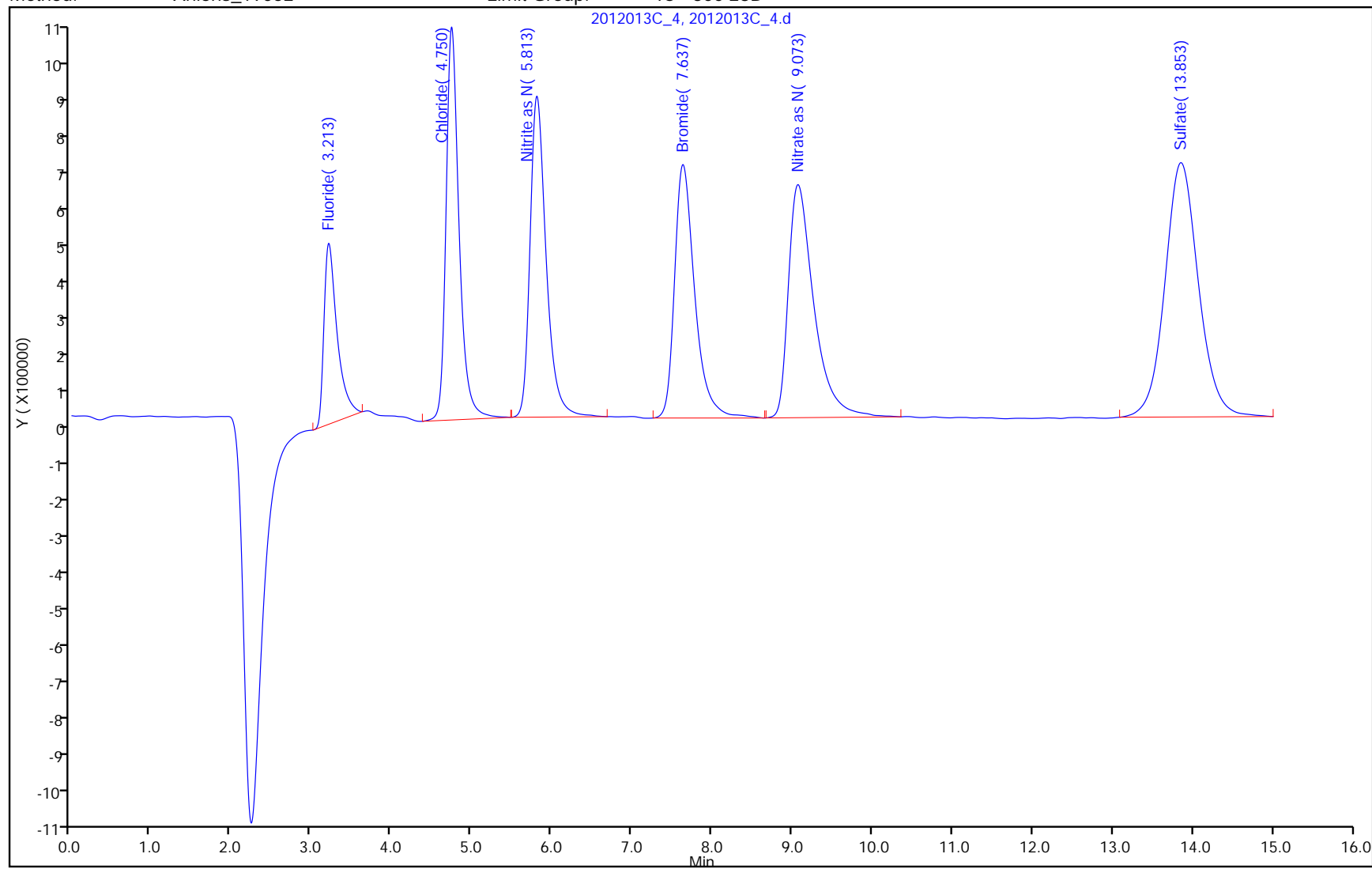
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 19-May-2020 08:31:45

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_5.d
 Lims ID: IC CAL3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 29-Apr-2020 13:42:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 3
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub1
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:45 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak Date: 19-May-2020 08:03:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.213	0.004	15518725	1.00	0.8655	
2 Chloride	4.753	4.753	0.000	24564395	2.00	1.68	
3 Nitrite as N	5.813	5.817	-0.004	26300190	NC	NC	
4 Bromide	7.627	7.607	0.020	25491892	5.00	4.28	
5 Nitrate as N	9.033	9.047	-0.014	29287204	NC	NC	
6 Sulfate	13.863	13.863	0.000	43124797	5.00	4.23	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00004 Amount Added: 1.00 Units: mL

Report Date: 19-May-2020 08:31:45

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_5.d

Injection Date: 29-Apr-2020 13:42:00

Instrument ID: 19052

Operator ID:

Lims ID: IC CAL3

Worklist Smp#: 4

Client ID:

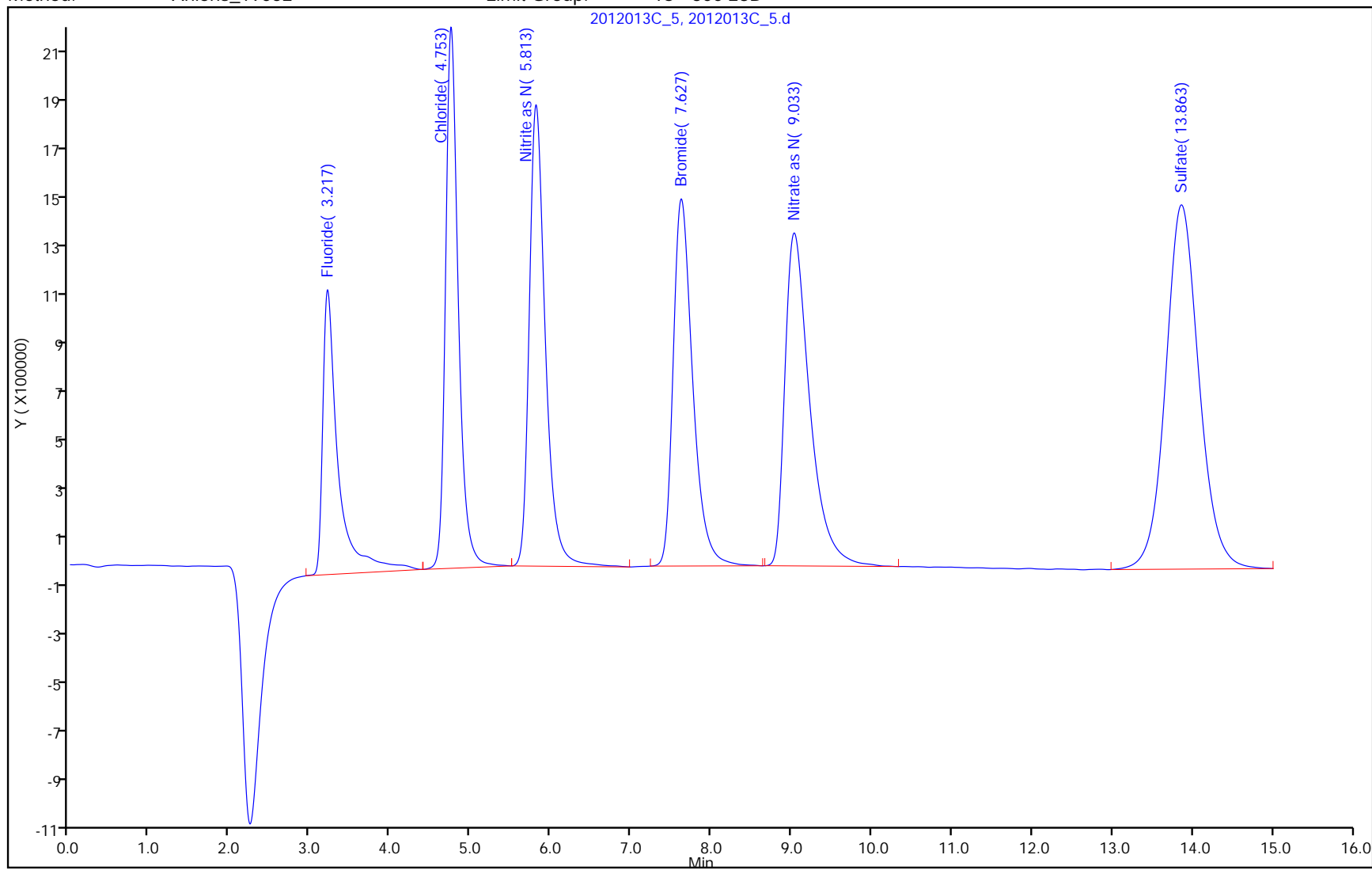
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 19-May-2020 08:31:46

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_6.d
 Lims ID: IC CAL4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 29-Apr-2020 13:59:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 4
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub1
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:46 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak Date: 19-May-2020 08:03:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.217	0.000	38192185	2.00	2.01	
2 Chloride	4.760	4.760	0.000	58572170	4.00	4.02	
3 Nitrite as N	5.810	5.810	0.000	63242089	NC	NC	
4 Bromide	7.597	7.597	0.000	61873826	10.0	10.1	
5 Nitrate as N	8.963	8.963	0.000	70489410	NC	NC	
6 Sulfate	13.853	13.853	0.000	103616378	10.0	10.0	
S 7 Nitrate Nitrite as N		0.000					ND

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00004 Amount Added: 2.00 Units: mL

Report Date: 19-May-2020 08:31:46

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_6.d

Injection Date: 29-Apr-2020 13:59:00

Instrument ID: 19052

Operator ID:

Lims ID: IC CAL4

Worklist Smp#: 5

Client ID:

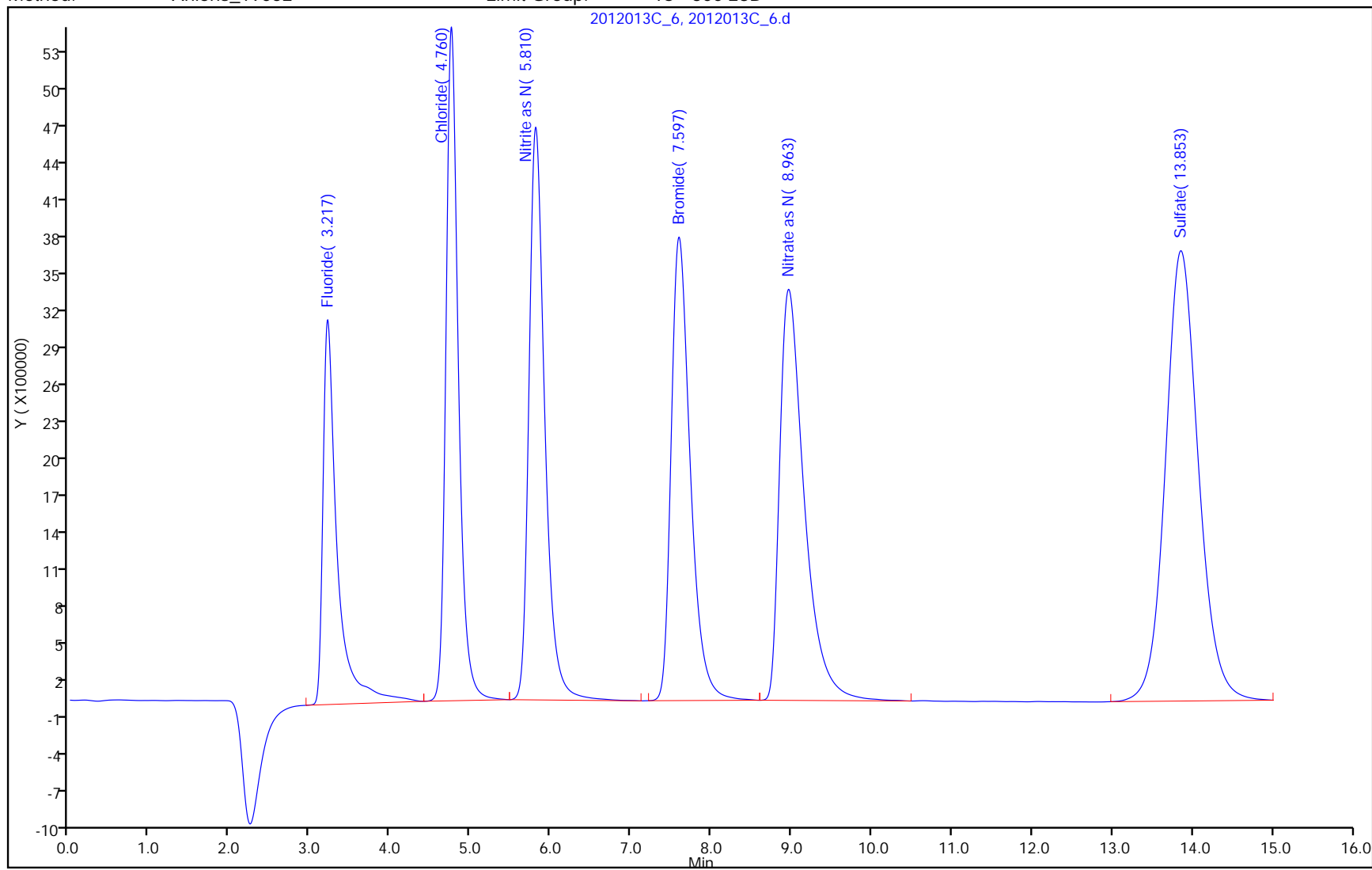
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 19-May-2020 08:31:54

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Lims ID: IC CAL5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 29-Apr-2020 14:16:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CAL 5
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub1
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:54 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak Date: 19-May-2020 08:31:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.213	0.000	58733504	3.00	3.04	
2 Chloride	4.757	4.753	0.004	88671636	6.00	6.09	
3 Nitrite as N	5.803	5.817	-0.014	96106808	NC	NC	
4 Bromide	7.577	7.607	-0.030	94128078	15.0	15.2	
5 Nitrate as N	8.923	9.047	-0.124	106525118	NC	NC	
6 Sulfate	13.840	13.863	-0.023	157474859	15.0	15.2	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00004 Amount Added: 3.00 Units: mL

Report Date: 19-May-2020 08:31:54

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d

Injection Date: 29-Apr-2020 14:16:00

Instrument ID: 19052

Operator ID:

Lims ID: IC CAL5

Worklist Smp#: 6

Client ID:

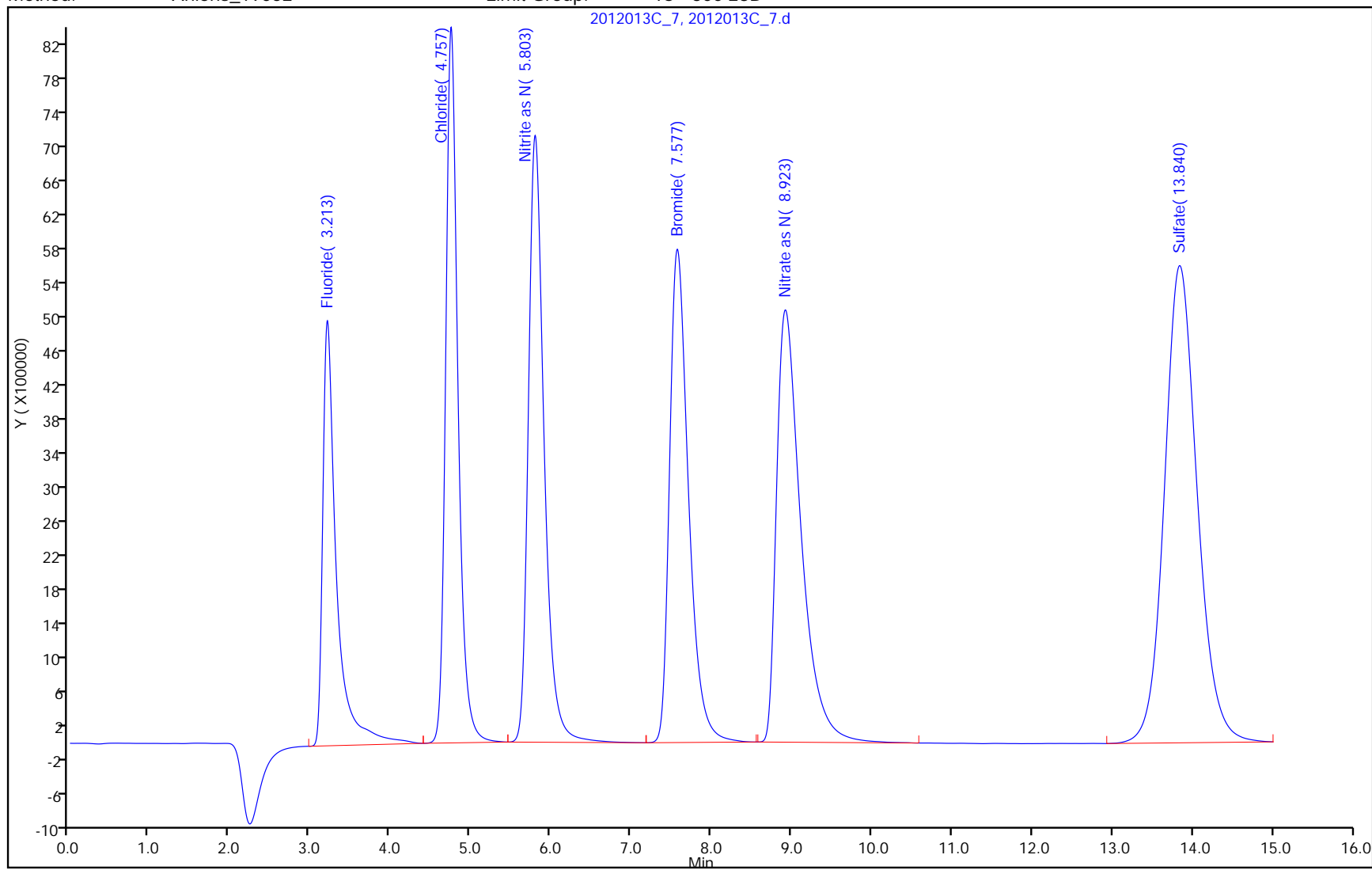
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/1 Calibration Date: 06/13/2020 18:40
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_1.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		20732427		0.720	0.750	-3.9	10.0
Chloride	Lin		13508211		2.76	3.00	-8.2	10.0
Bromide	Lin		5419416		6.70	7.50	-10.7*	10.0
Sulfate	Lin		10508528		7.06	7.50	-5.9	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/1 Calibration Date: 06/13/2020 18:40
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.13	2.90	3.40
Chloride	4.53	4.32	4.82
Bromide	7.09	6.79	7.59
Sulfate	12.83	12.39	13.99

Report Date: 17-Jun-2020 09:22:29

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_1.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Jun-2020 18:40:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub2
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:29 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.133	3.153	-0.020	15549320	0.7500	0.7204	
2 Chloride	4.533	4.570	-0.037	40524632	3.00	2.76	
3 Nitrite as N	5.483	5.550	-0.067	20417203	NC	NC	
4 Bromide	7.087	7.193	-0.106	40645621	7.50	6.70	
5 Nitrate as N	8.333	8.490	-0.157	23094472	NC	NC	
6 Sulfate	12.827	13.187	-0.360	78813957	7.50	7.06	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC_IC_QC2_00036 Amount Added: 7.50 Units: mL

Report Date: 17-Jun-2020 09:22:29

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_1.d

Injection Date: 13-Jun-2020 18:40:00

Instrument ID: 12115

Operator ID:

Lims ID: CCV

Worklist Smp#: 1

Client ID:

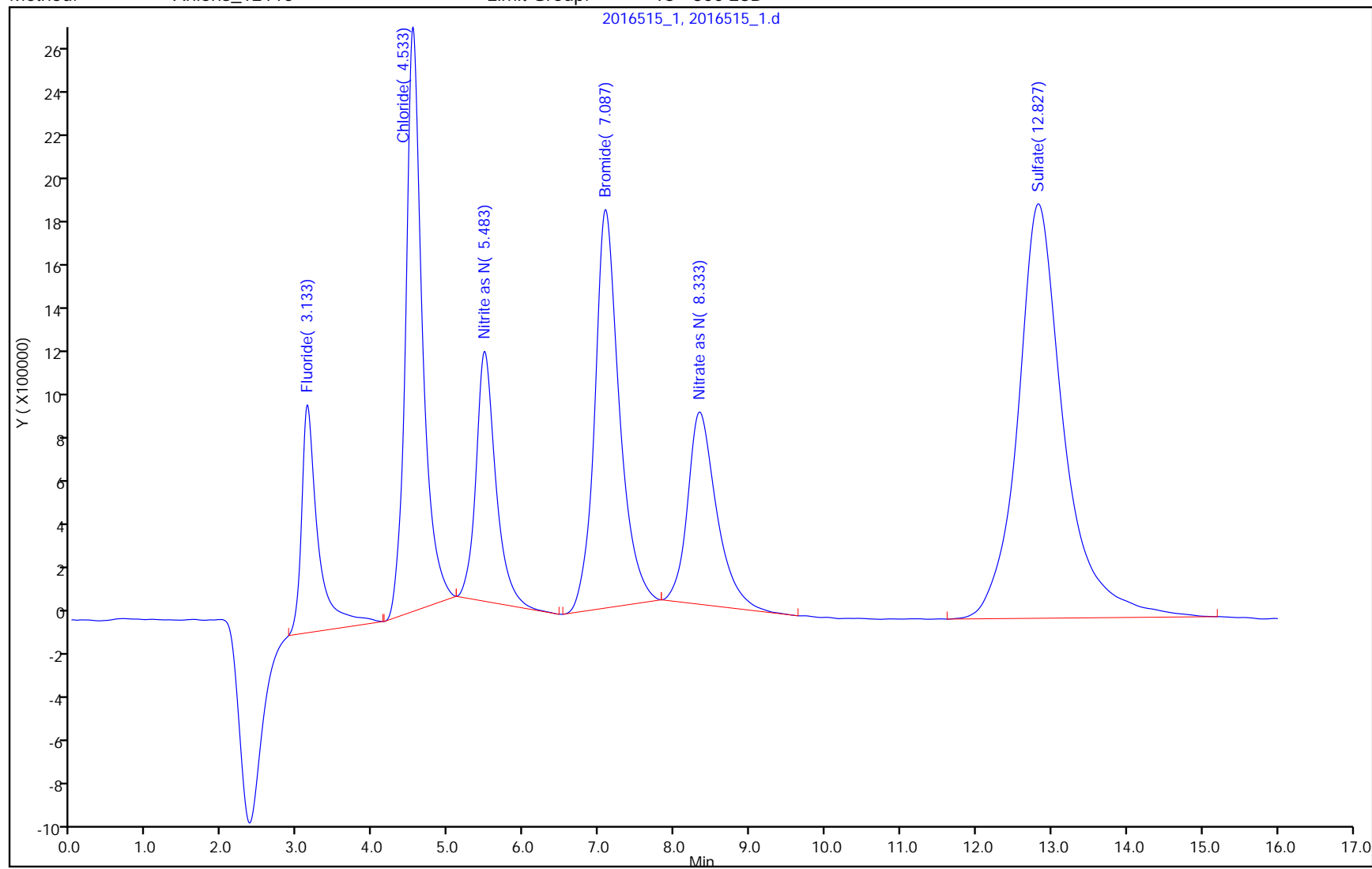
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/13 Calibration Date: 06/13/2020 22:06
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_44.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		21230675		0.737	0.750	-1.7	10.0
Chloride	Lin		13706636		2.79	3.00	-6.8	10.0
Bromide	Lin		5466593		6.76	7.50	-9.9	10.0
Sulfate	Lin		10773033		7.23	7.50	-3.6	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/13 Calibration Date: 06/13/2020 22:06
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_44.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.13	2.90	3.40
Chloride	4.53	4.32	4.82
Bromide	7.09	6.79	7.59
Sulfate	12.82	12.39	13.99

Report Date: 17-Jun-2020 09:22:33

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_44.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Jun-2020 22:06:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub2
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:33 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.130	3.153	-0.023	15923006	0.7500	0.7375	
2 Chloride	4.530	4.570	-0.040	41119909	3.00	2.79	
3 Nitrite as N	5.480	5.550	-0.070	20700619	NC	NC	
4 Bromide	7.087	7.193	-0.106	40999444	7.50	6.76	
5 Nitrate as N	8.333	8.490	-0.157	23276909	NC	NC	
6 Sulfate	12.820	13.187	-0.367	80797746	7.50	7.23	
S 7 Nitrate Nitrite as N		0.000					ND

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC_IC_QC2_00036 Amount Added: 7.50 Units: mL

Report Date: 17-Jun-2020 09:22:33

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_44.d

Injection Date: 13-Jun-2020 22:06:00

Instrument ID: 12115

Operator ID:

Lims ID: CCV

Worklist Smp#: 13

Client ID:

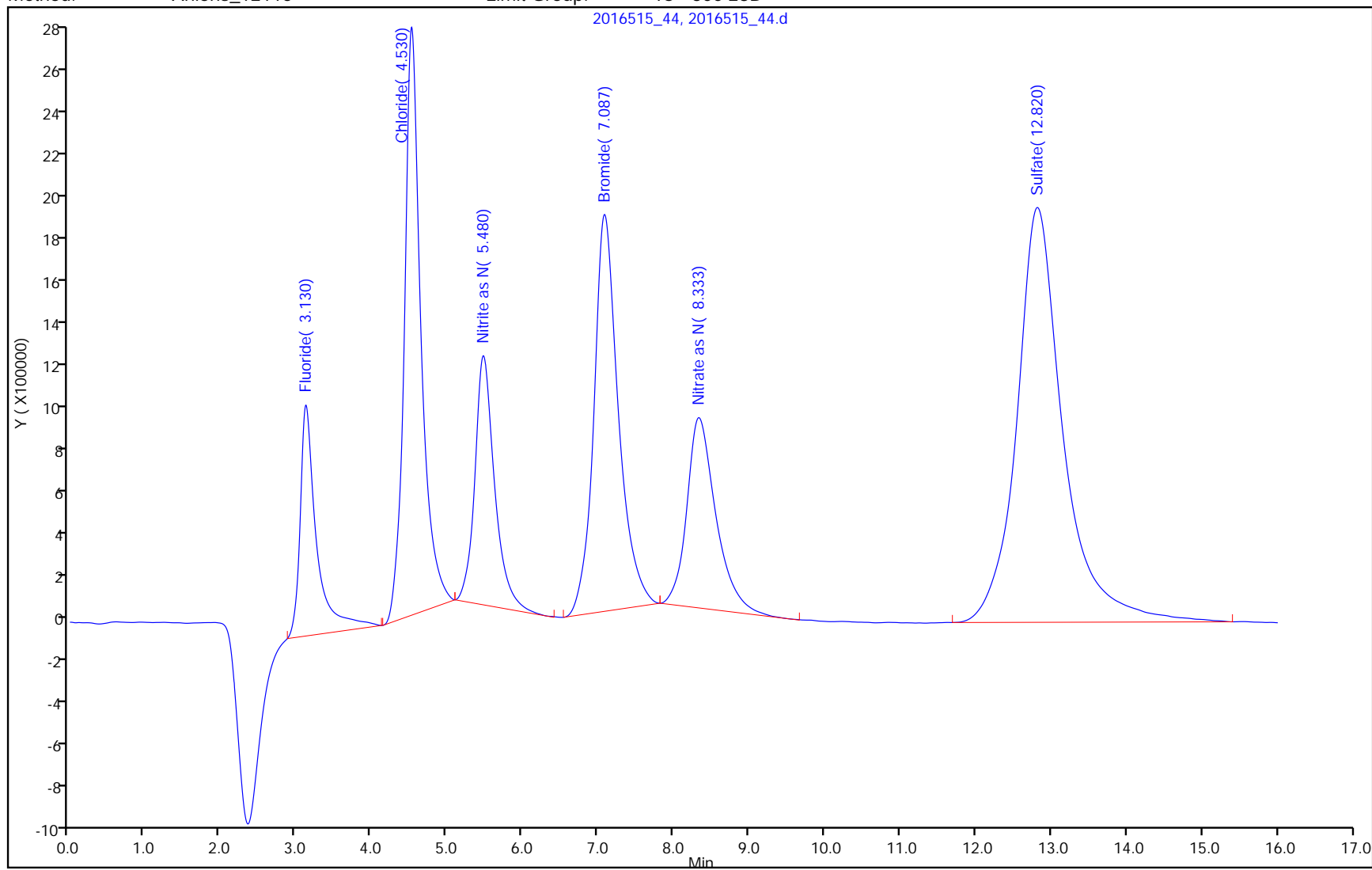
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/25 Calibration Date: 06/14/2020 01:31
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_56.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		22447696		0.779	0.750	3.9	10.0
Chloride	Lin		14340753		2.92	3.00	-2.6	10.0
Bromide	Lin		5766360		7.11	7.50	-5.2	10.0
Sulfate	Lin		11205812		7.50	7.50	0.0	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/25 Calibration Date: 06/14/2020 01:31
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_56.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.13	2.90	3.40
Chloride	4.53	4.32	4.82
Bromide	7.09	6.79	7.59
Sulfate	12.82	12.39	13.99

Report Date: 17-Jun-2020 09:22:37

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_56.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2020 01:31:00 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub2
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:37 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.133	3.153	-0.020	16835772	0.7500	0.7792	
2 Chloride	4.533	4.570	-0.037	43022260	3.00	2.92	
3 Nitrite as N	5.483	5.550	-0.067	21861871	NC	NC	
4 Bromide	7.090	7.193	-0.103	43247702	7.50	7.11	
5 Nitrate as N	8.337	8.490	-0.153	24621463	NC	NC	
6 Sulfate	12.820	13.187	-0.367	84043591	7.50	7.50	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC_IC_QC2_00036 Amount Added: 7.50 Units: mL

Report Date: 17-Jun-2020 09:22:37

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_56.d

Injection Date: 14-Jun-2020 01:31:00

Instrument ID: 12115

Operator ID:

Lims ID: CCV

Worklist Smp#: 25

Client ID:

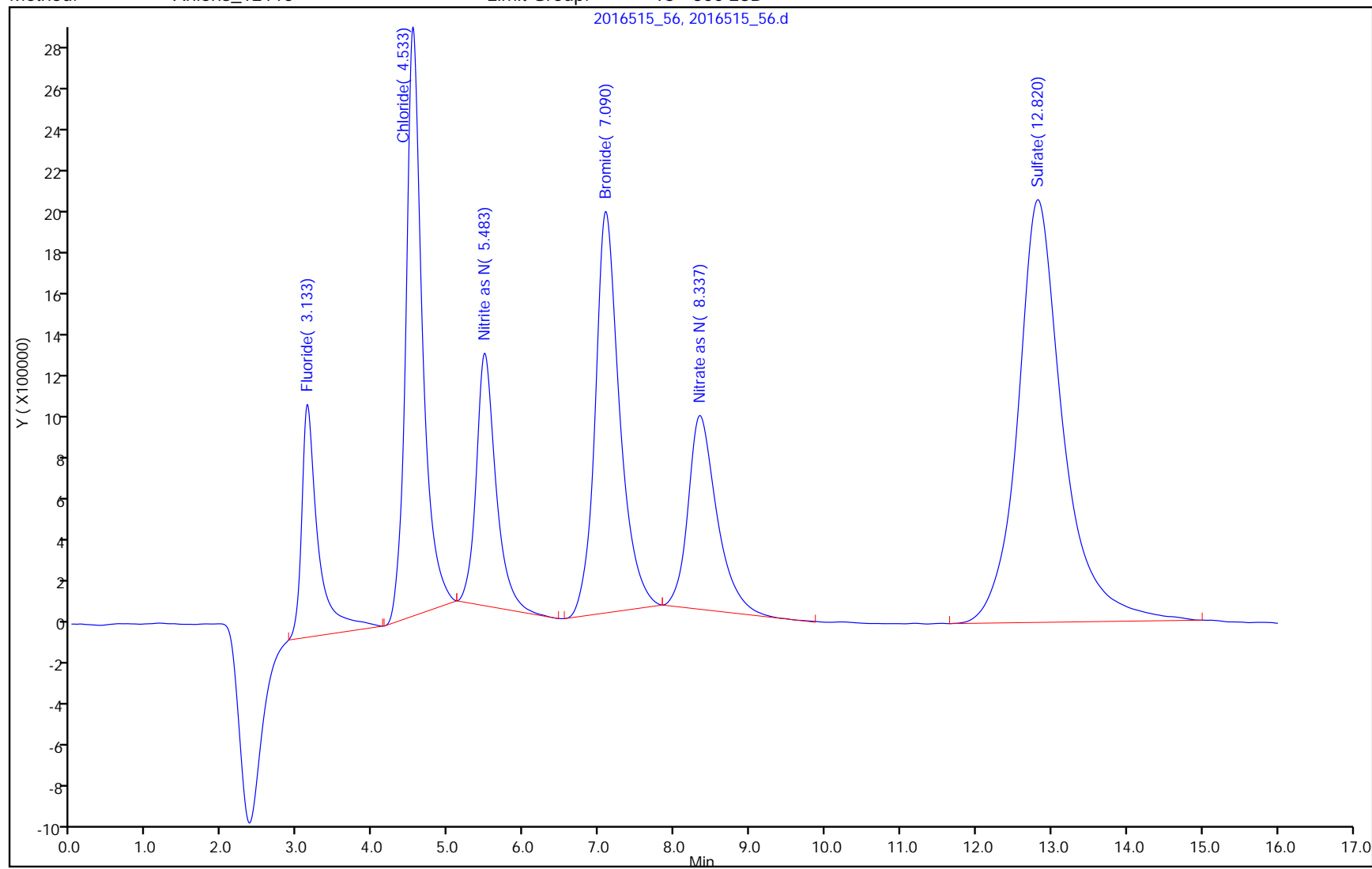
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/37 Calibration Date: 06/14/2020 04:56
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_68.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		22649552		0.786	0.750	4.8	10.0
Chloride	Lin		13795573		2.81	3.00	-6.3	10.0
Bromide	Lin		5392414		6.67	7.50	-11.1*	10.0
Sulfate	Lin		11059851		7.41	7.50	-1.2	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/37 Calibration Date: 06/14/2020 04:56
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_68.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.13	2.90	3.40
Chloride	4.53	4.32	4.82
Bromide	7.09	6.79	7.59
Sulfate	12.82	12.39	13.99

Report Date: 17-Jun-2020 09:22:40

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_68.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2020 04:56:00 ALS Bottle#: 0 Worklist Smp#: 37
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub2
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.133	3.153	-0.020	16987164	0.7500	0.7861	
2 Chloride	4.533	4.570	-0.037	41386718	3.00	2.81	
3 Nitrite as N	5.483	5.550	-0.067	21041277	NC	NC	
4 Bromide	7.093	7.193	-0.100	40443107	7.50	6.67	
5 Nitrate as N	8.340	8.490	-0.150	23792945	NC	NC	
6 Sulfate	12.820	13.187	-0.367	82948882	7.50	7.41	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC_IC_QC2_00036

Amount Added: 7.50

Units: mL

Report Date: 17-Jun-2020 09:22:40

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_68.d

Injection Date: 14-Jun-2020 04:56:00

Instrument ID: 12115

Operator ID:
Worklist Smp#: 37

Lims ID: CCV

Client ID:

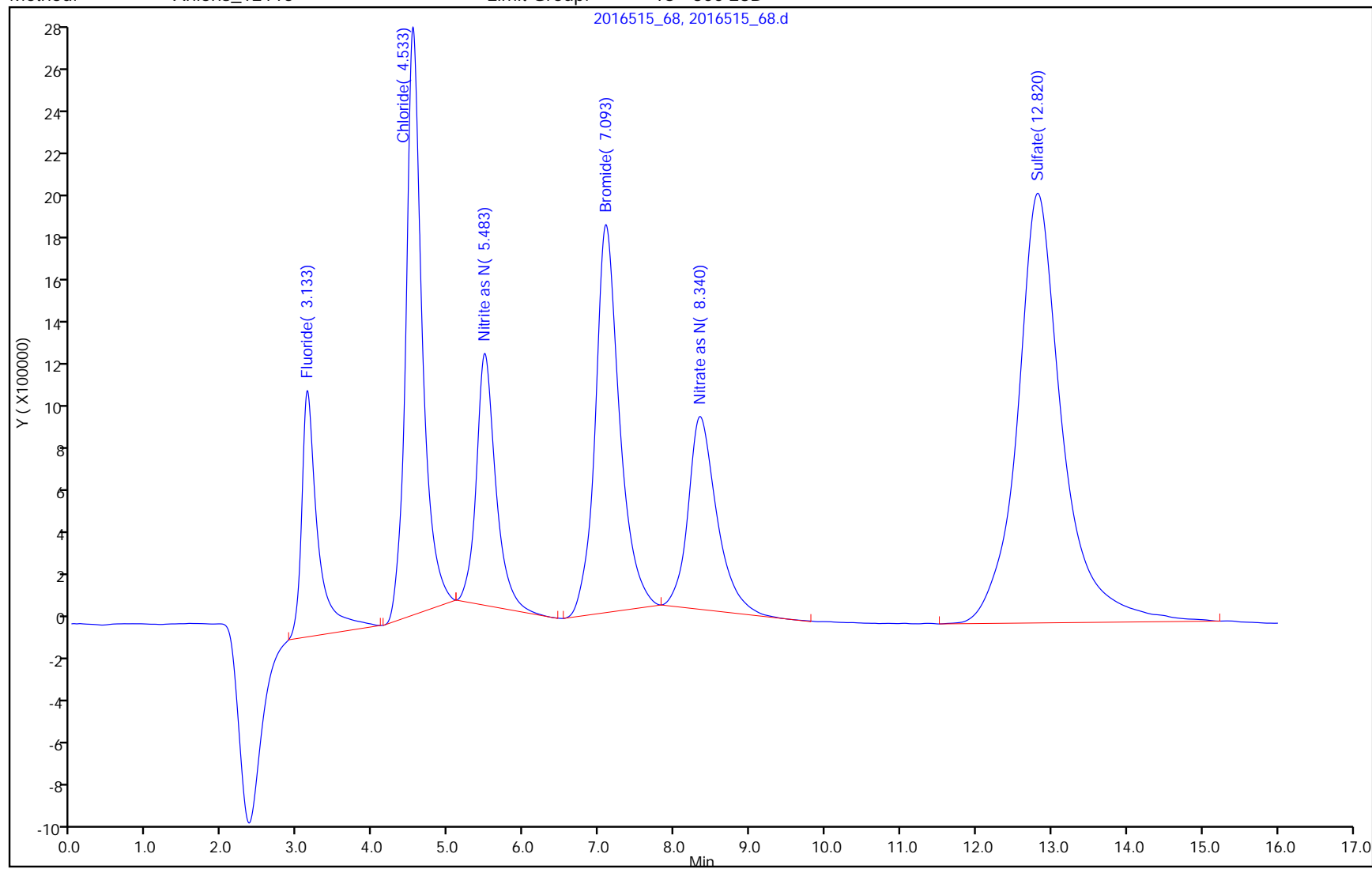
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/47 Calibration Date: 06/14/2020 07:48
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_78.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		22023676		0.765	0.750	2.0	10.0
Chloride	Lin		13683192		2.79	3.00	-7.0	10.0
Bromide	Lin		5525294		6.83	7.50	-9.0	10.0
Sulfate	Lin		11162965		7.48	7.50	-0.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-12842/47 Calibration Date: 06/14/2020 07:48
 Instrument ID: 12115 Calib Start Date: 06/01/2020 13:02
 GC Column: IC15-AS14 ID: 4.00 (mm) Calib End Date: 06/01/2020 14:27
 Lab File ID: 2016515_78.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.13	2.90	3.40
Chloride	4.53	4.32	4.82
Bromide	7.08	6.79	7.59
Sulfate	12.83	12.39	13.99

Report Date: 17-Jun-2020 09:23:09

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_78.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2020 07:48:00 ALS Bottle#: 0 Worklist Smp#: 47
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 12115
 Sublist: chrom-Anions_12115*sub2
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:23:09 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

First Level Reviewer: litwak Date: 17-Jun-2020 09:23:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.127	3.153	-0.026	16517757	0.7500	0.7646	
2 Chloride	4.527	4.570	-0.043	41049575	3.00	2.79	
3 Nitrite as N	5.477	5.550	-0.073	20823672	NC	NC	
4 Bromide	7.080	7.193	-0.113	41439706	7.50	6.83	
5 Nitrate as N	8.327	8.490	-0.163	23299438	NC	NC	
6 Sulfate	12.827	13.187	-0.360	83722236	7.50	7.48	
S 7 Nitrate Nitrite as N		0.000					ND

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_QC2_00036 Amount Added: 7.50 Units: mL

Report Date: 17-Jun-2020 09:23:09

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_78.d

Injection Date: 14-Jun-2020 07:48:00

Instrument ID: 12115

Operator ID:

Lims ID: CCV

Worklist Smp#: 47

Client ID:

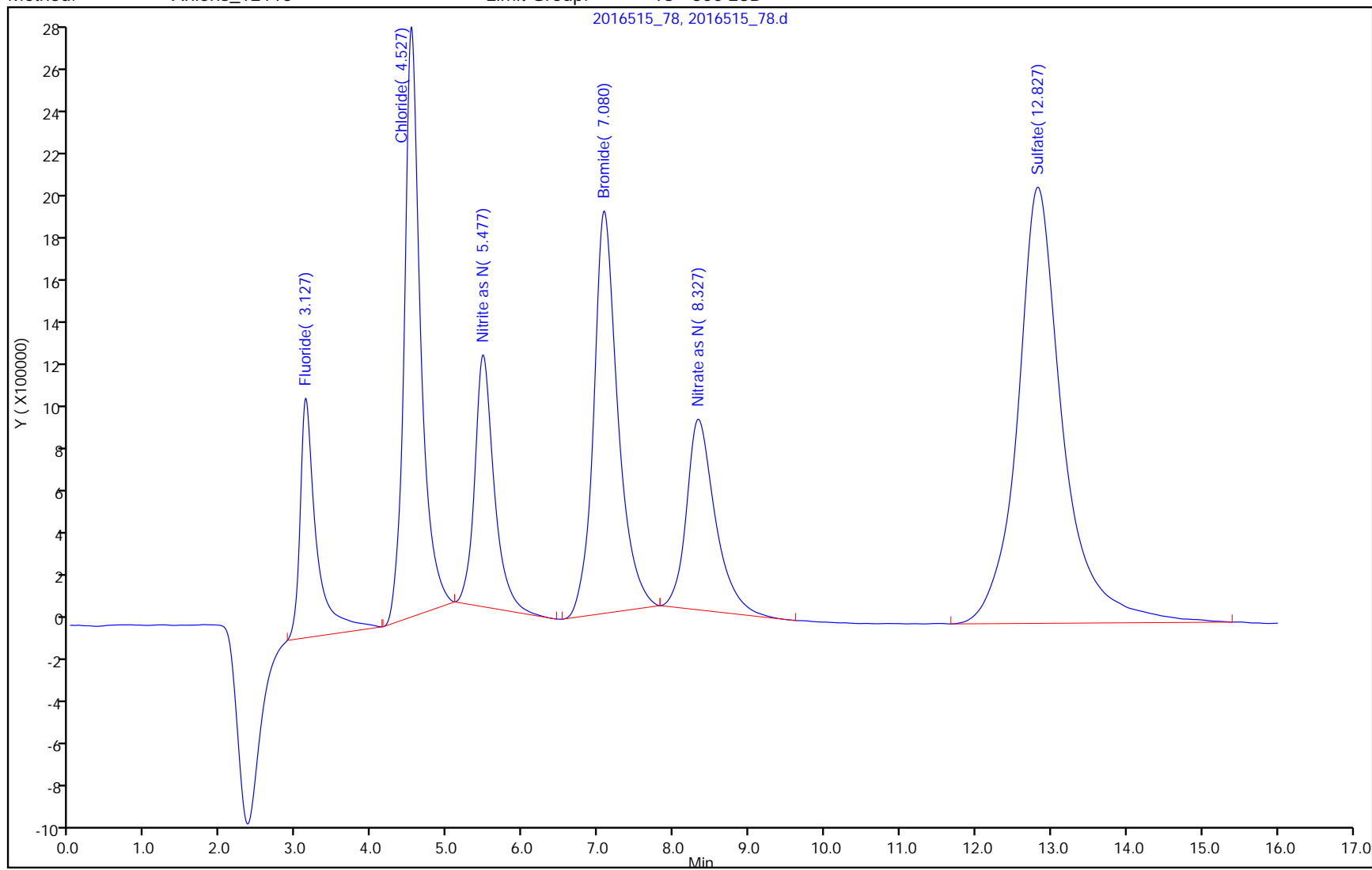
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: ICV 410-8732/7 Calibration Date: 04/29/2020 14:33
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: _____ ID: _____ Calib End Date: 04/29/2020 14:16
 Lab File ID: 2012013C_8.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		17820296		0.757	0.750	0.9	10.0
Chloride	Lin		14330511		2.95	3.00	-1.7	10.0
Bromide	Lin		5954677		7.33	7.50	-2.3	10.0
Sulfate	Lin		9981188		7.28	7.50	-3.0	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: ICV 410-8732/7 Calibration Date: 04/29/2020 14:33
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: _____ ID: _____ Calib End Date: 04/29/2020 14:16
 Lab File ID: 2012013C_8.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.21	2.96	3.46
Chloride	4.75	4.45	5.05
Bromide	7.61	7.11	8.11
Sulfate	13.86	12.86	14.86

Report Date: 19-May-2020 08:31:18

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_8.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 29-Apr-2020 14:33:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Operator ID: Instrument ID: 19052
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:31:18 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

First Level Reviewer: litwak Date: 19-May-2020 08:31:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.213	0.000	13365222	0.7500	0.7570	
2 Chloride	4.753	4.753	0.000	42991533	3.00	2.95	
3 Nitrite as N	5.817	5.817	0.000	21742697	NC	NC	
4 Bromide	7.607	7.607	0.000	44660075	7.50	7.33	
5 Nitrate as N	9.047	9.047	0.000	24449770	NC	NC	
6 Sulfate	13.863	13.863	0.000	74858911	7.50	7.28	
S 7 Nitrate Nitrite as N		0.000					ND

QC Flag Legend

Processing Flags
 NC - Not Calibrated

Reagents:

WC_IC_QC2_00007 Amount Added: 7.50 Units: mL

Report Date: 19-May-2020 08:31:18

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_8.d

Injection Date: 29-Apr-2020 14:33:00

Instrument ID: 19052

Operator ID:

Lims ID: ICV

Worklist Smp#: 7

Client ID:

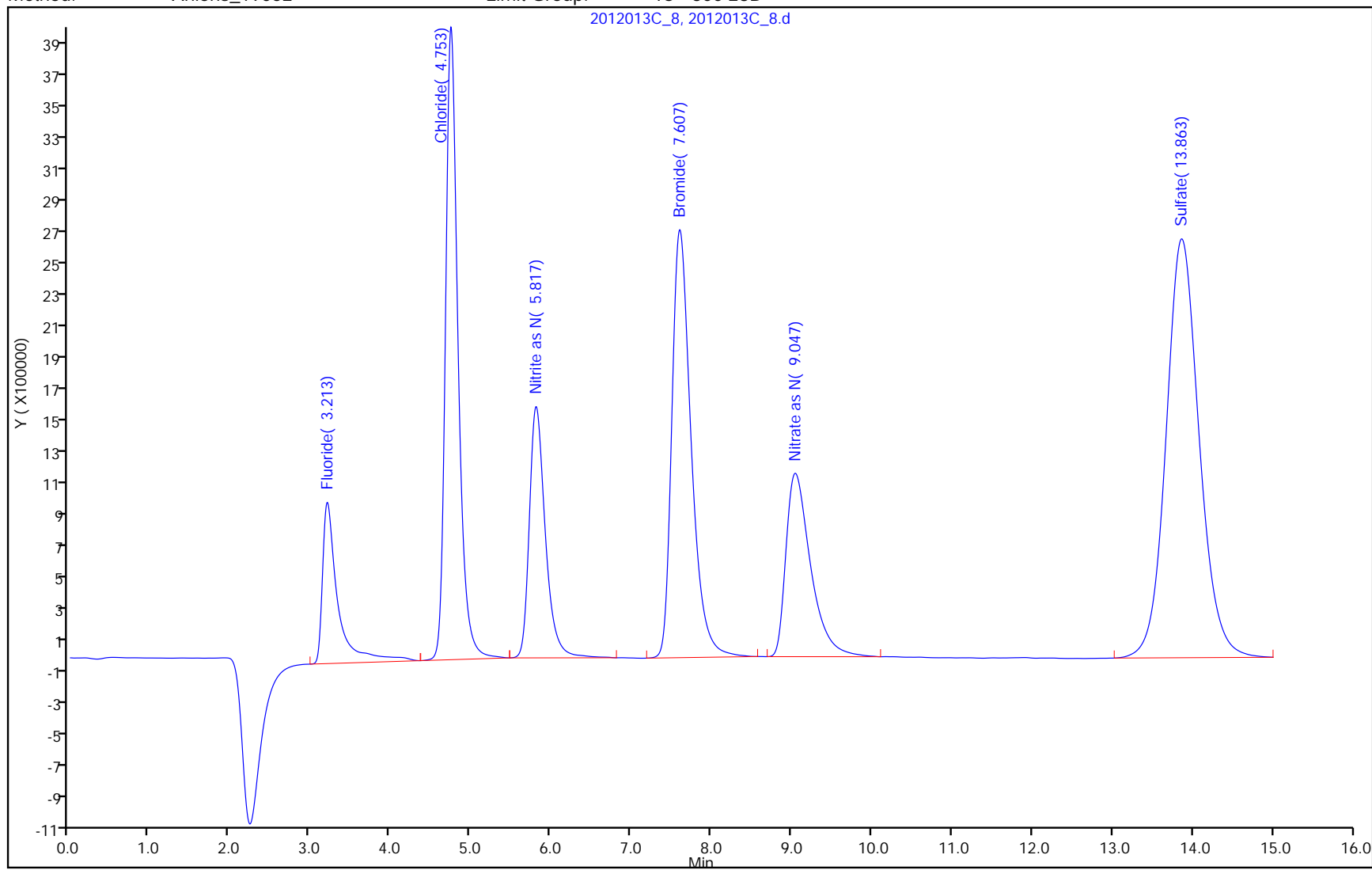
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCVRT 410-21417/1 Calibration Date: 07/10/2020 23:09
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_1.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		15978196		0.687	0.750	-8.3	10.0
Chloride	Lin		13638577		2.81	3.00	-6.5	10.0
Bromide	Lin		5654551		6.97	7.50	-7.1	10.0
Sulfate	Lin		10065278		7.34	7.50	-2.1	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCVRT 410-21417/1 Calibration Date: 07/10/2020 23:09
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_1.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.03	2.78	3.28
Chloride	4.32	4.02	4.62
Bromide	6.66	6.16	7.16
Sulfate	11.92	10.92	12.92

Report Date: 13-Jul-2020 12:40:00

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_1.d
 Lims ID: CCVRT
 Client ID:
 Sample Type: CCVRT
 Inject. Date: 10-Jul-2020 23:09:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub2
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:00 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d

Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:10:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.027	3.027	0.000	11983647	0.7500	0.6874	M
2 Chloride	4.323	4.323	0.000	40915731	3.00	2.81	
3 Nitrite as N	5.187	5.187	0.000	20911071	NC	NC	
4 Bromide	6.660	6.660	0.000	42409134	7.50	6.97	
5 Nitrate as N	7.770	7.770	0.000	22995676	NC	NC	
6 Sulfate	11.917	11.917	0.000	75489588	7.50	7.34	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:40:00

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_1.d

Injection Date: 10-Jul-2020 23:09:00

Instrument ID: 19052

Operator ID:

Lims ID: CCVRT

Worklist Smp#: 1

Client ID:

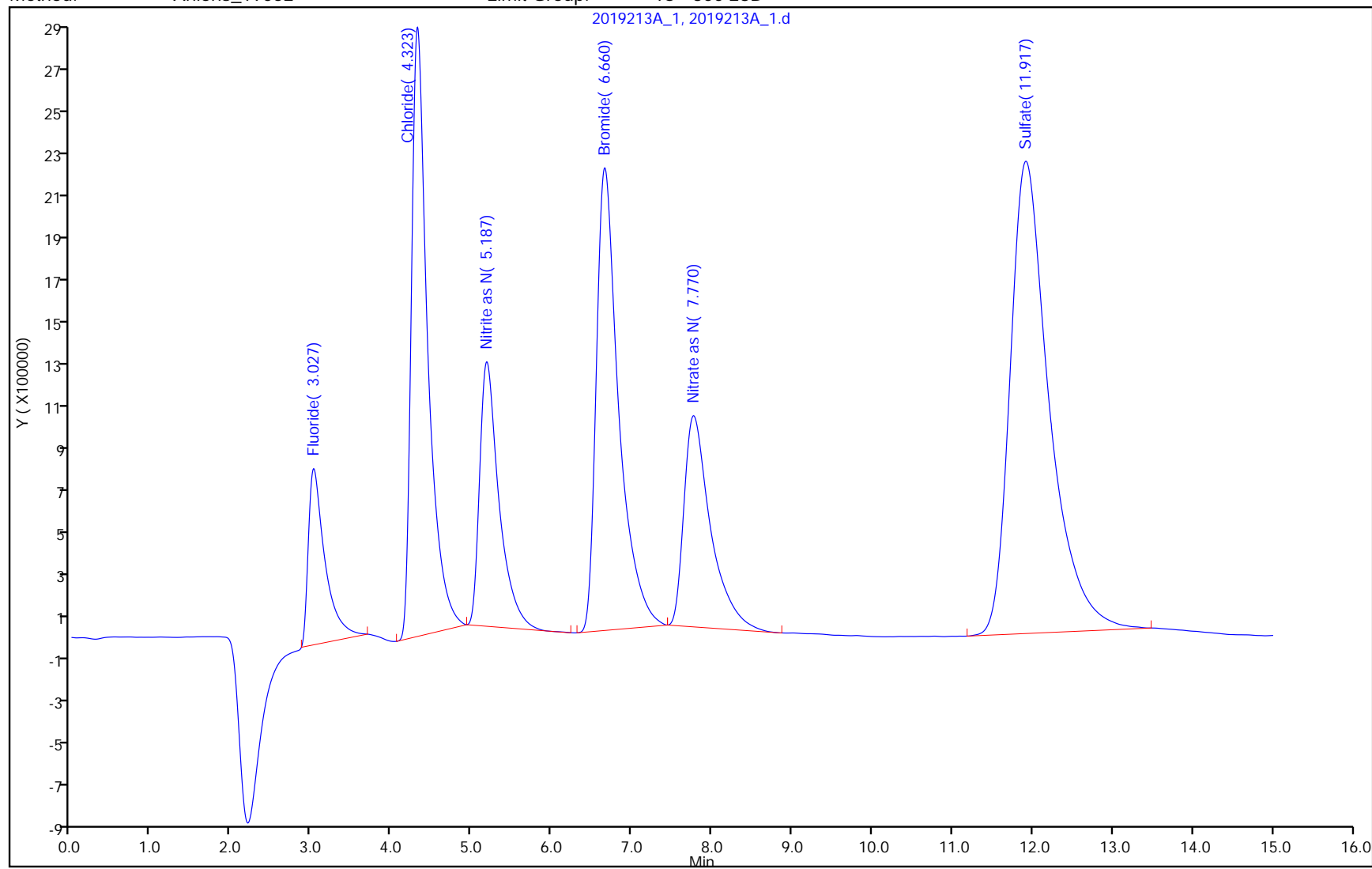
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 13-Jul-2020 12:40:00

Chrom Revision: 2.3 30-Jun-2020 12:05:54
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

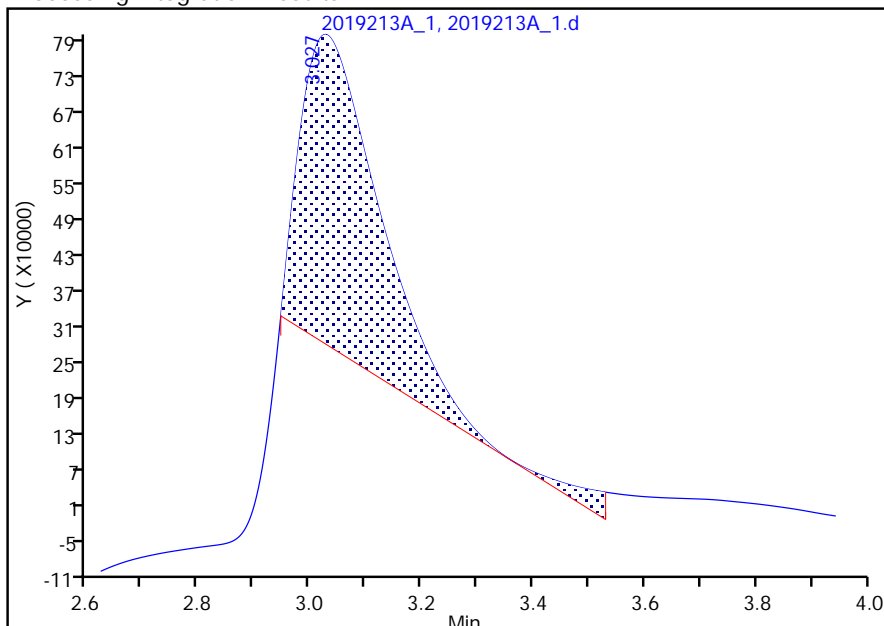
Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_1.d
 Injection Date: 10-Jul-2020 23:09:00 Instrument ID: 19052
 Lims ID: CCVRT
 Client ID:
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: Anions_19052 Limit Group: IC - 300 28D
 Column: Detector det0

1 Fluoride, CAS: 16984-48-8

Signal: 1

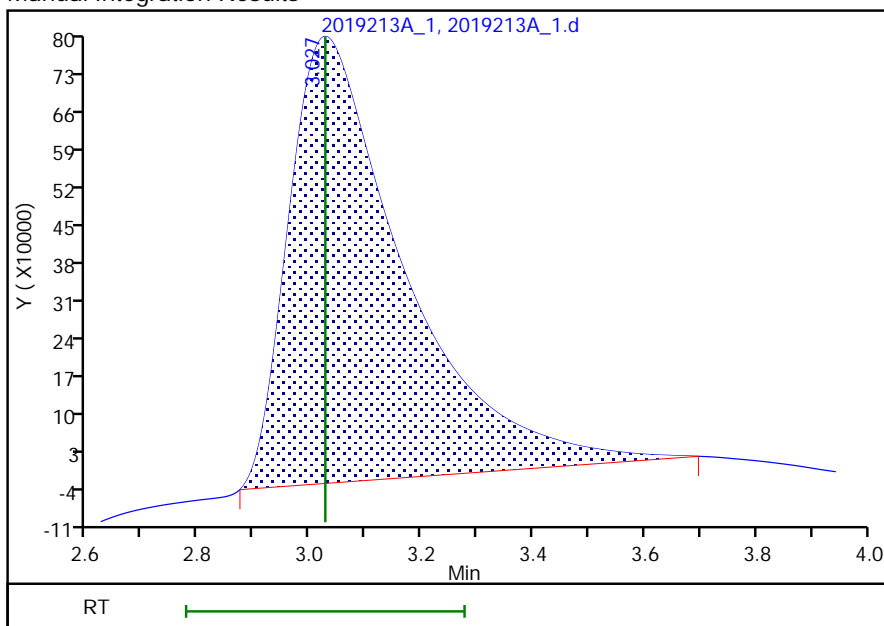
RT: 3.03
 Area: 5376244
 Amount: 0.354403
 Amount Units: ug/ml

Processing Integration Results



RT: 3.03
 Area: 11983647
 Amount: 0.687382
 Amount Units: ug/ml

Manual Integration Results



Reviewer: wilsonc, 13-Jul-2020 12:10:19
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/13 Calibration Date: 07/11/2020 02:33
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_13.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		18271952		0.774	0.750	3.2	10.0
Chloride	Lin		13814759		2.84	3.00	-5.3	10.0
Bromide	Lin		5781427		7.12	7.50	-5.1	10.0
Sulfate	Lin		10880460		7.93	7.50	5.7	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/13 Calibration Date: 07/11/2020 02:33
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_13.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.03	2.78	3.28
Chloride	4.32	4.02	4.62
Bromide	6.65	6.16	7.16
Sulfate	11.94	10.92	12.92

Report Date: 13-Jul-2020 12:40:50

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_13.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jul-2020 02:33:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub2
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:50 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:10:43

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.027	3.027	0.000	13703964	0.7500	0.7741	M
2 Chloride	4.320	4.323	-0.003	41444277	3.00	2.84	
3 Nitrite as N	5.183	5.187	-0.004	21345055	NC	NC	
4 Bromide	6.647	6.660	-0.013	43360702	7.50	7.12	
5 Nitrate as N	7.753	7.770	-0.017	23348354	NC	NC	
6 Sulfate	11.937	11.917	0.020	81603453	7.50	7.93	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:40:50

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_13.d

Injection Date: 11-Jul-2020 02:33:00

Instrument ID: 19052

Operator ID:

Lims ID: CCV

Worklist Smp#: 13

Client ID:

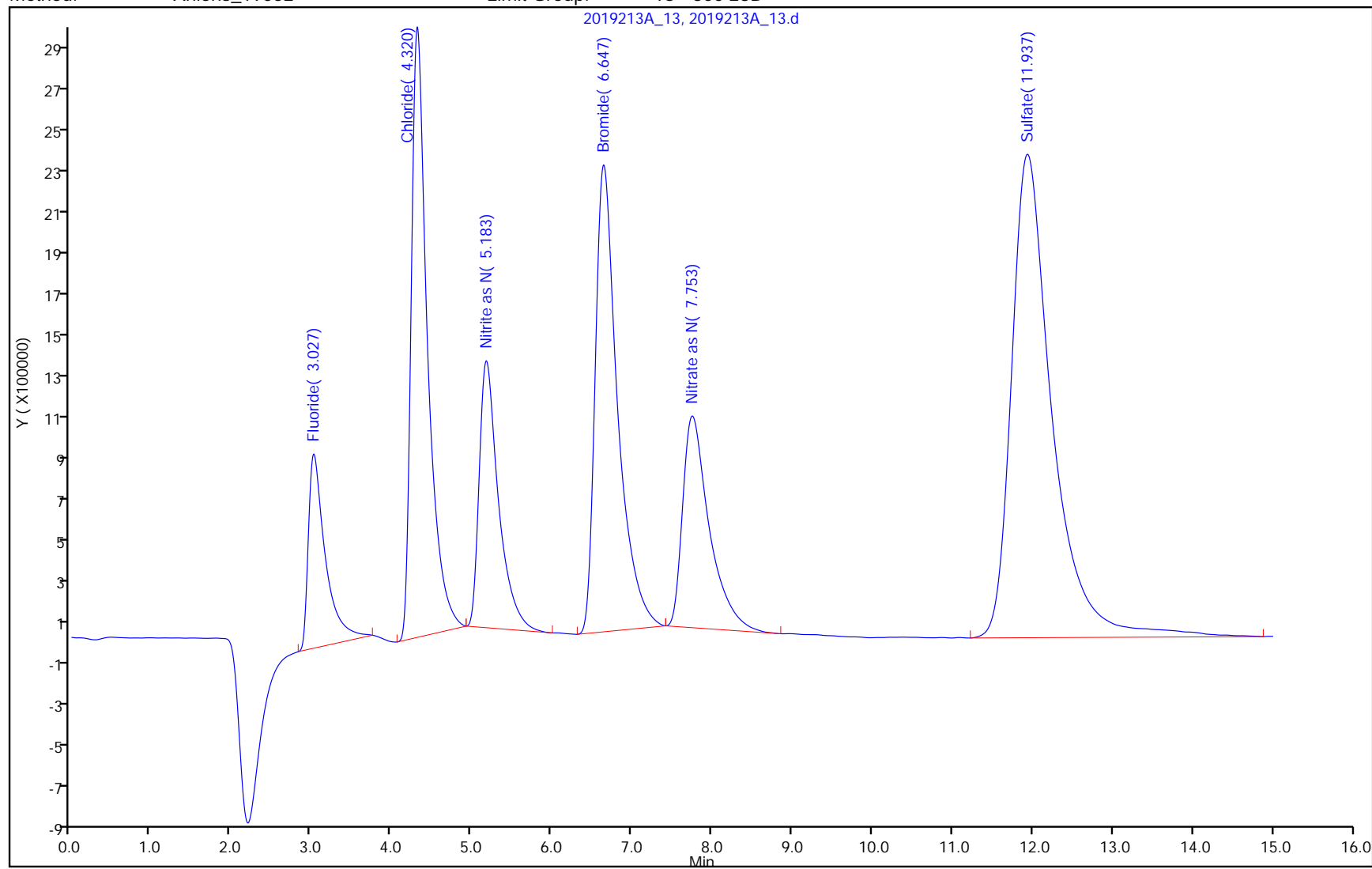
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 13-Jul-2020 12:40:50

Chrom Revision: 2.3 30-Jun-2020 12:05:54
 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

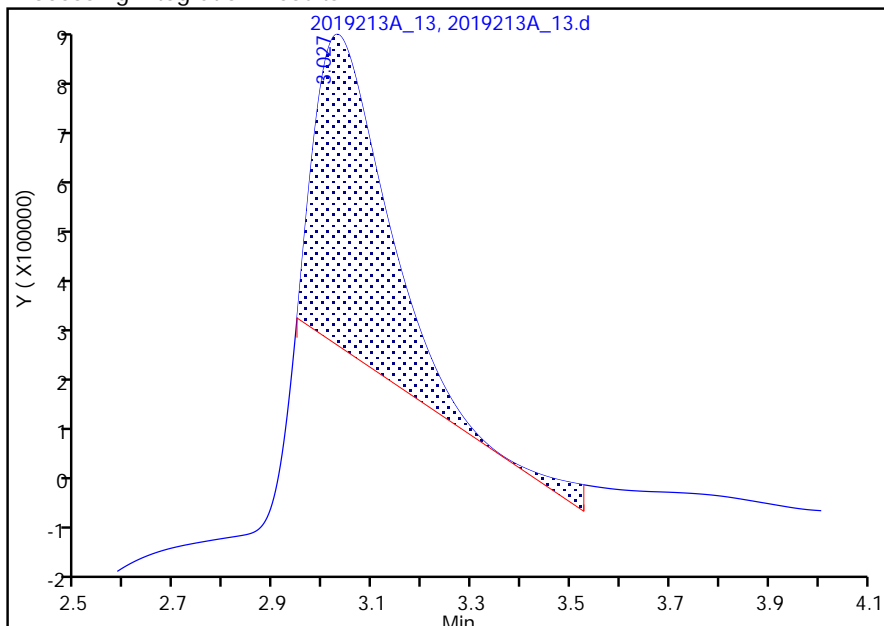
Data File:	\\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_13.d	Instrument ID:	19052
Injection Date:	11-Jul-2020 02:33:00	ALS Bottle#:	0
Lims ID:	CCV	Dil. Factor:	1.0000
Client ID:		Limit Group:	IC - 300 28D
Operator ID:		Detector	det0
Injection Vol:	1.0 ul	Worklist Smp#:	13
Method:	Anions_19052		
Column:			

1 Fluoride, CAS: 16984-48-8

Signal: 1

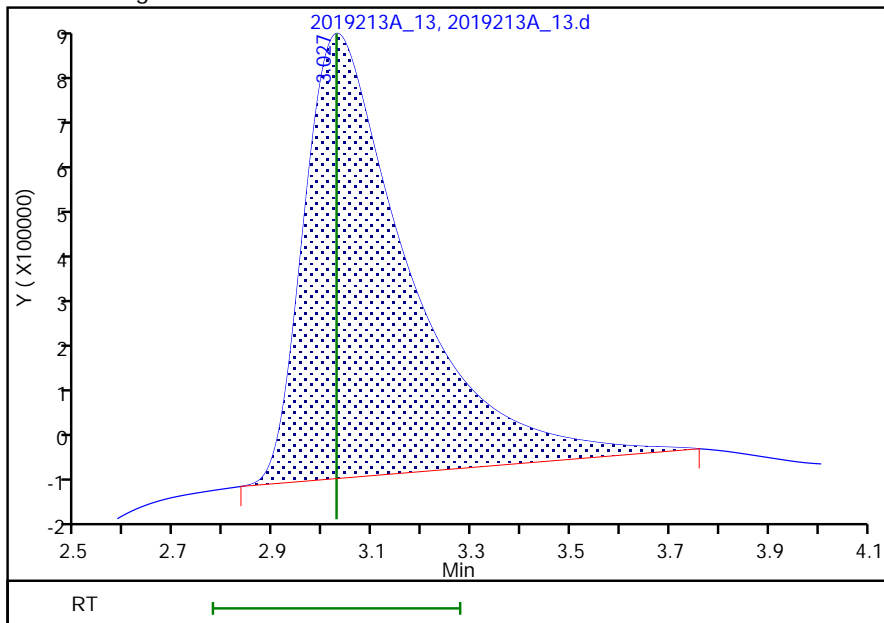
RT: 3.03
 Area: 6109583
 Amount: 0.391359
 Amount Units: ug/ml

Processing Integration Results



RT: 3.03
 Area: 13703964
 Amount: 0.774077
 Amount Units: ug/ml

Manual Integration Results



Reviewer: wilsonc, 13-Jul-2020 12:10:39
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/21 Calibration Date: 07/11/2020 04:50
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_21.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		17640640		0.750	0.750	0.0	10.0
Chloride	Lin		13916709		2.86	3.00	-4.6	10.0
Bromide	Lin		5764922		7.10	7.50	-5.3	10.0
Sulfate	Lin		10959744		7.98	7.50	6.4	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/21 Calibration Date: 07/11/2020 04:50
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_21.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.03	2.78	3.28
Chloride	4.32	4.02	4.62
Bromide	6.65	6.16	7.16
Sulfate	11.95	10.92	12.92

Report Date: 13-Jul-2020 12:40:47

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_21.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jul-2020 04:50:00 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub2
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:47 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:11:14

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.030	3.027	0.003	13230480	0.7500	0.7502	M
2 Chloride	4.323	4.323	0.000	41750127	3.00	2.86	
3 Nitrite as N	5.187	5.187	0.000	21346967	NC	NC	
4 Bromide	6.653	6.660	-0.007	43236916	7.50	7.10	
5 Nitrate as N	7.760	7.770	-0.010	23571790	NC	NC	
6 Sulfate	11.947	11.917	0.030	82198080	7.50	7.98	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:40:47

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_21.d

Injection Date: 11-Jul-2020 04:50:00

Instrument ID: 19052

Operator ID:

Lims ID: CCV

Worklist Smp#: 21

Client ID:

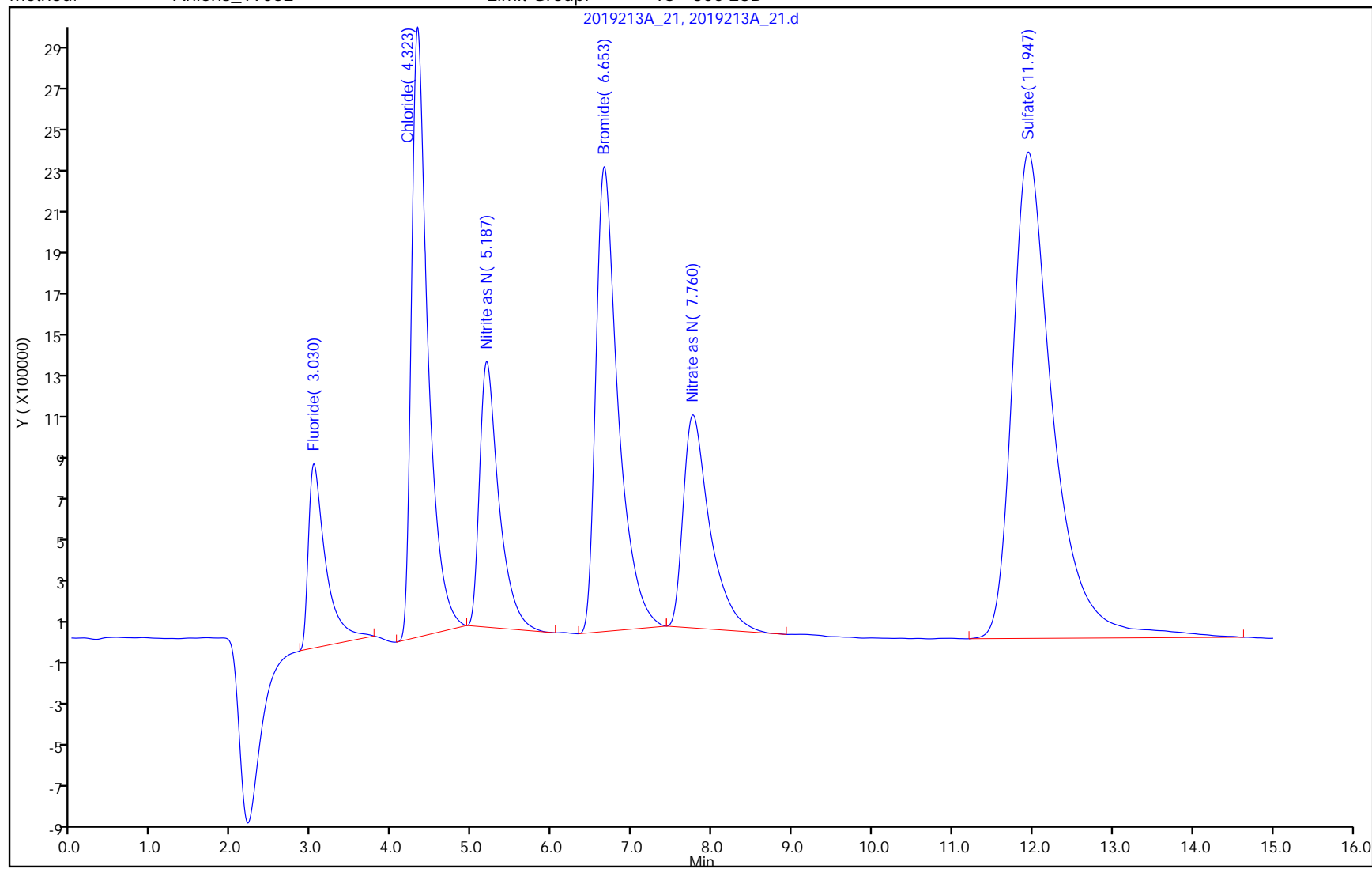
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 13-Jul-2020 12:40:47

Chrom Revision: 2.3 30-Jun-2020 12:05:54
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

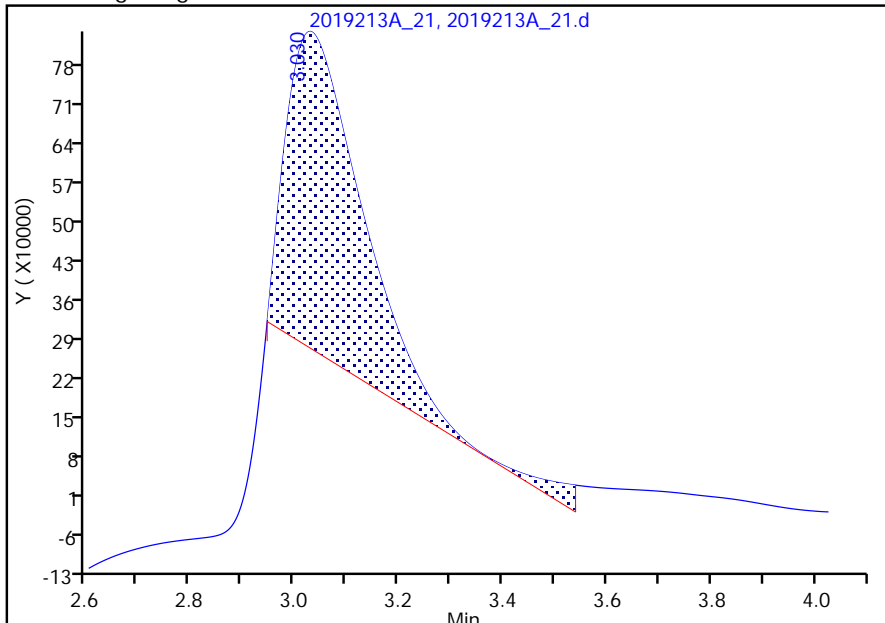
Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_21.d
Injection Date: 11-Jul-2020 04:50:00 Instrument ID: 19052
Lims ID: CCV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Anions_19052 Limit Group: IC - 300 28D
Column: Detector det0

1 Fluoride, CAS: 16984-48-8

Signal: 1

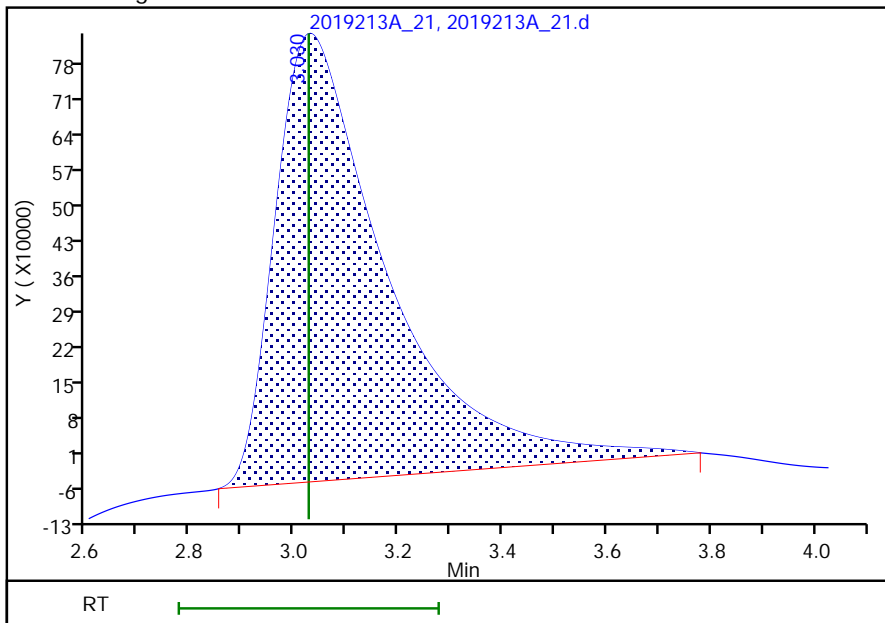
RT: 3.03
Area: 5959163
Amount: 0.383779
Amount Units: ug/ml

Processing Integration Results



RT: 3.03
Area: 13230480
Amount: 0.750216
Amount Units: ug/ml

Manual Integration Results



Reviewer: wilsonc, 13-Jul-2020 12:11:11
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/33 Calibration Date: 07/11/2020 08:14
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_33.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		17979235		0.763	0.750	1.7	10.0
Chloride	Lin		13920793		2.86	3.00	-4.5	10.0
Bromide	Lin		5794640		7.14	7.50	-4.9	10.0
Sulfate	Lin		10849792		7.90	7.50	5.4	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/33 Calibration Date: 07/11/2020 08:14
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_33.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.03	2.78	3.28
Chloride	4.32	4.02	4.62
Bromide	6.65	6.16	7.16
Sulfate	11.96	10.92	12.92

Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_33.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jul-2020 08:14:00 ALS Bottle#: 0 Worklist Smp#: 33
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub2
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:14:32

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.030	3.027	0.003	13484426	0.7500	0.7630	M
2 Chloride	4.323	4.323	0.000	41762378	3.00	2.86	
3 Nitrite as N	5.187	5.187	0.000	21419062	NC	NC	
4 Bromide	6.653	6.660	-0.007	43459802	7.50	7.14	
5 Nitrate as N	7.757	7.770	-0.013	23482525	NC	NC	
6 Sulfate	11.960	11.917	0.043	81373438	7.50	7.90	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_33.d

Injection Date: 11-Jul-2020 08:14:00

Instrument ID: 19052

Operator ID:

Lims ID: CCV

Worklist Smp#: 33

Client ID:

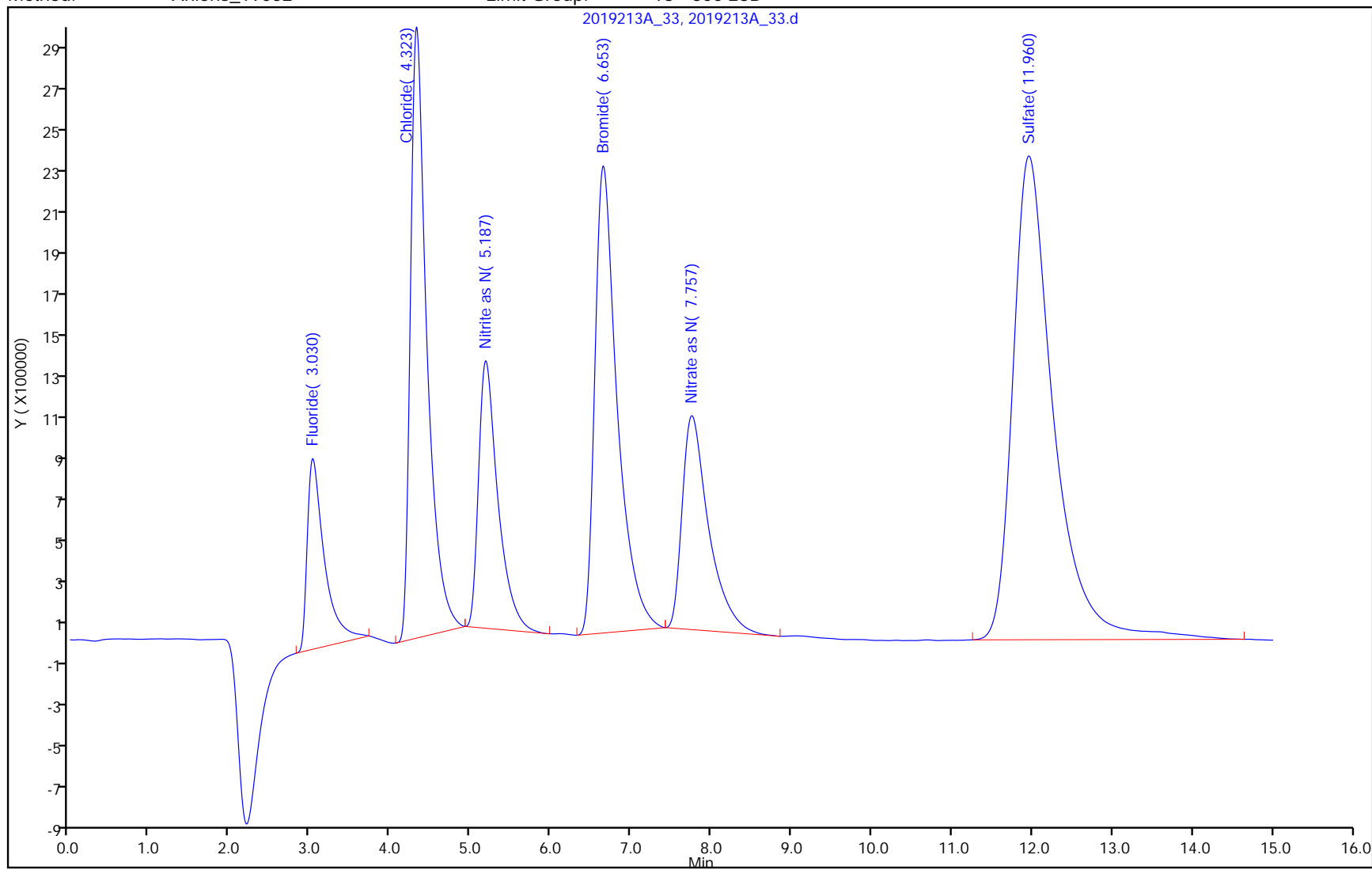
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

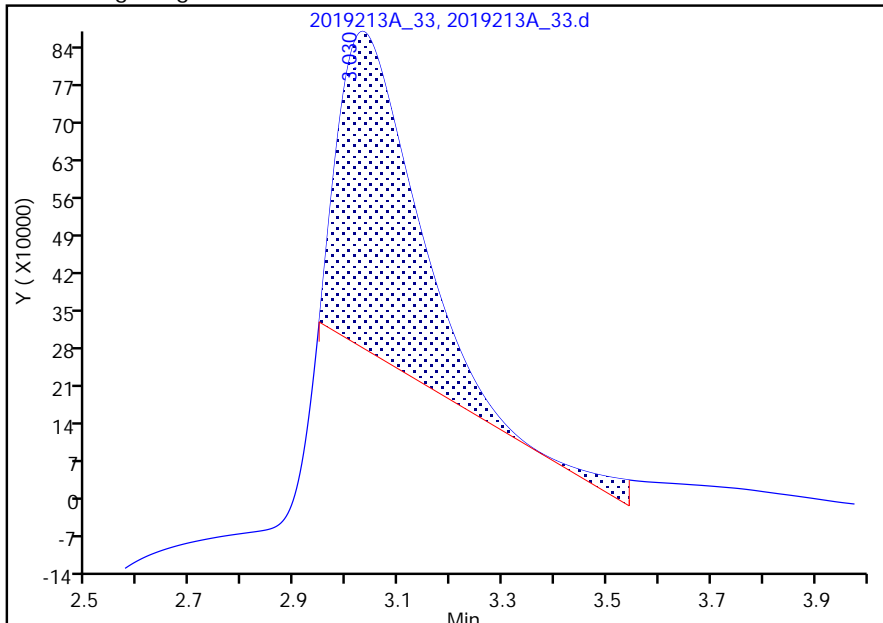
Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_33.d
Injection Date: 11-Jul-2020 08:14:00 Instrument ID: 19052
Lims ID: CCV
Client ID:
Operator ID:
Injection Vol: 1.0 ul
Method: Anions_19052
Column:
ALS Bottle#: 0 Worklist Smp#: 33
Dil. Factor: 1.0000
Limit Group: IC - 300 28D
Detector: det0

1 Fluoride, CAS: 16984-48-8

Signal: 1

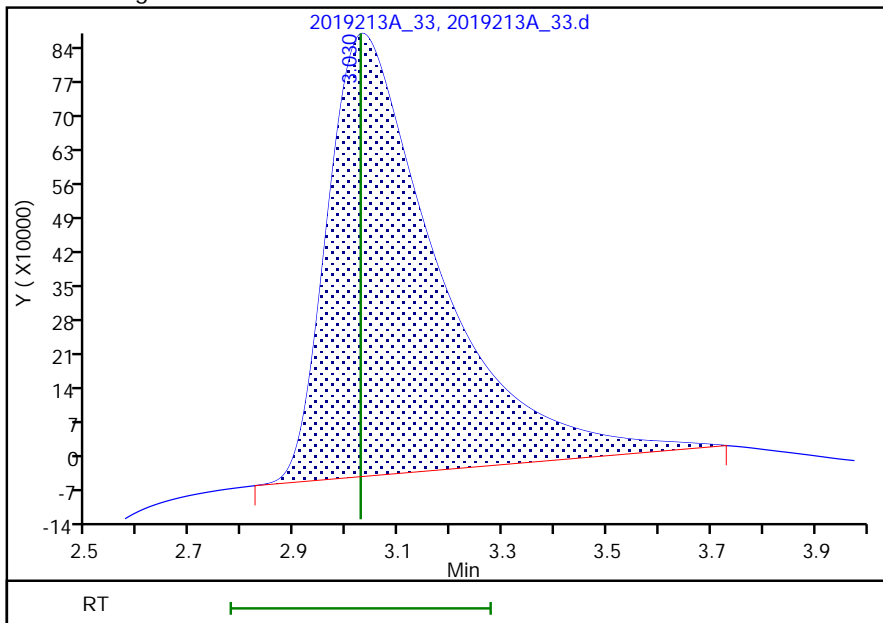
RT: 3.03
Area: 6267224
Amount: 0.399304
Amount Units: ug/ml

Processing Integration Results



RT: 3.03
Area: 13484426
Amount: 0.763013
Amount Units: ug/ml

Manual Integration Results



Reviewer: wilsonc, 13-Jul-2020 12:14:29
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/39 Calibration Date: 07/11/2020 09:56
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_39.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin		17041983		0.728	0.750	-3.0	10.0
Chloride	Lin		13856109		2.85	3.00	-5.0	10.0
Bromide	Lin		5736783		7.07	7.50	-5.8	10.0
Sulfate	Lin		10659722		7.77	7.50	3.6	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Lab Sample ID: CCV 410-21417/39 Calibration Date: 07/11/2020 09:56
 Instrument ID: 19052 Calib Start Date: 04/29/2020 12:51
 GC Column: IC06-AS14 ID: 4.00 (mm) Calib End Date: 04/29/2020 14:16
 Lab File ID: 2019213A_39.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.03	2.78	3.28
Chloride	4.32	4.02	4.62
Bromide	6.64	6.16	7.16
Sulfate	11.96	10.92	12.92

Report Date: 13-Jul-2020 12:41:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_39.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jul-2020 09:56:00 ALS Bottle#: 0 Worklist Smp#: 39
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCV
 Operator ID: Instrument ID: 19052
 Sublist: chrom-Anions_19052*sub2
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:41:48 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:40:07

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.030	3.027	0.003	12781487	0.7500	0.7276	M
2 Chloride	4.323	4.323	0.000	41568327	3.00	2.85	
3 Nitrite as N	5.183	5.187	-0.004	21227728	NC	NC	
4 Bromide	6.643	6.660	-0.017	43025873	7.50	7.07	
5 Nitrate as N	7.743	7.770	-0.027	23274175	NC	NC	
6 Sulfate	11.957	11.917	0.040	79947914	7.50	7.77	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:41:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_39.d

Injection Date: 11-Jul-2020 09:56:00

Instrument ID: 19052

Operator ID:

Lims ID: CCV

Worklist Smp#: 39

Client ID:

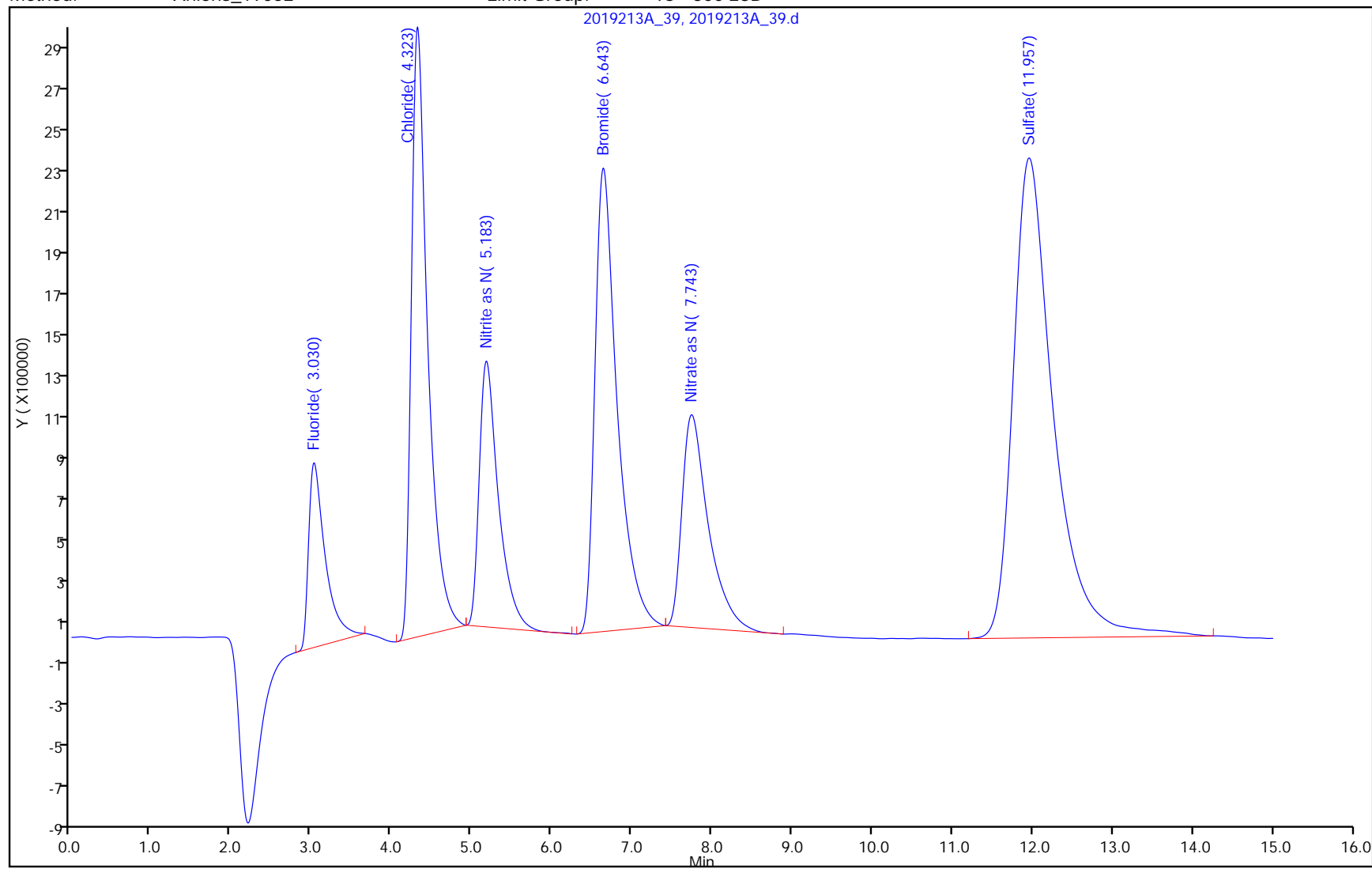
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 13-Jul-2020 12:41:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

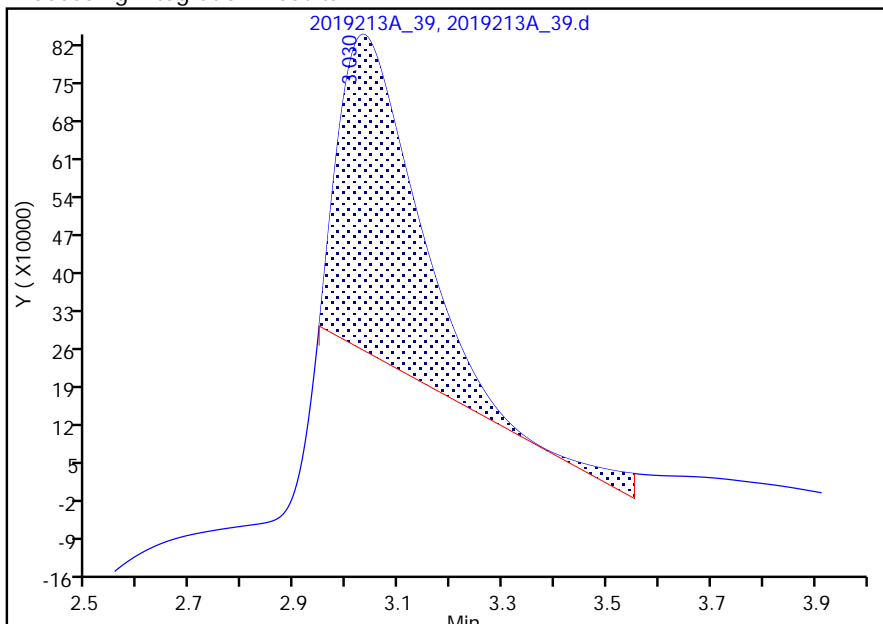
Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_39.d
Injection Date: 11-Jul-2020 09:56:00 Instrument ID: 19052
Lims ID: CCV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: Anions_19052 Limit Group: IC - 300 28D
Column: Detector det0

1 Fluoride, CAS: 16984-48-8

Signal: 1

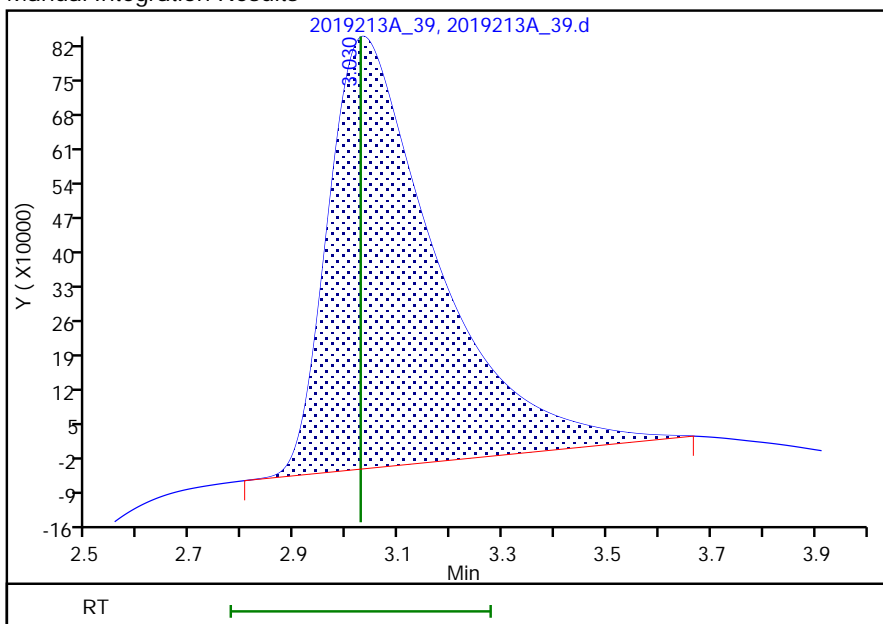
RT: 3.03
Area: 6269403
Amount: 0.399414
Amount Units: ug/ml

Processing Integration Results



RT: 3.03
Area: 12781487
Amount: 0.727589
Amount Units: ug/ml

Manual Integration Results



Reviewer: wilsonc, 13-Jul-2020 12:39:38
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-12842/4
 Matrix: Water Lab File ID: 2016515_35.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/13/2020 19:32
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:31

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_35.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 13-Jun-2020 19:32:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:29 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00036 Amount Added: 0.00 Units: mL

Report Date: 17-Jun-2020 09:22:31

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_35.d

Injection Date: 13-Jun-2020 19:32:00

Instrument ID: 12115

Operator ID:

Lims ID: MB

Worklist Smp#: 4

Client ID:

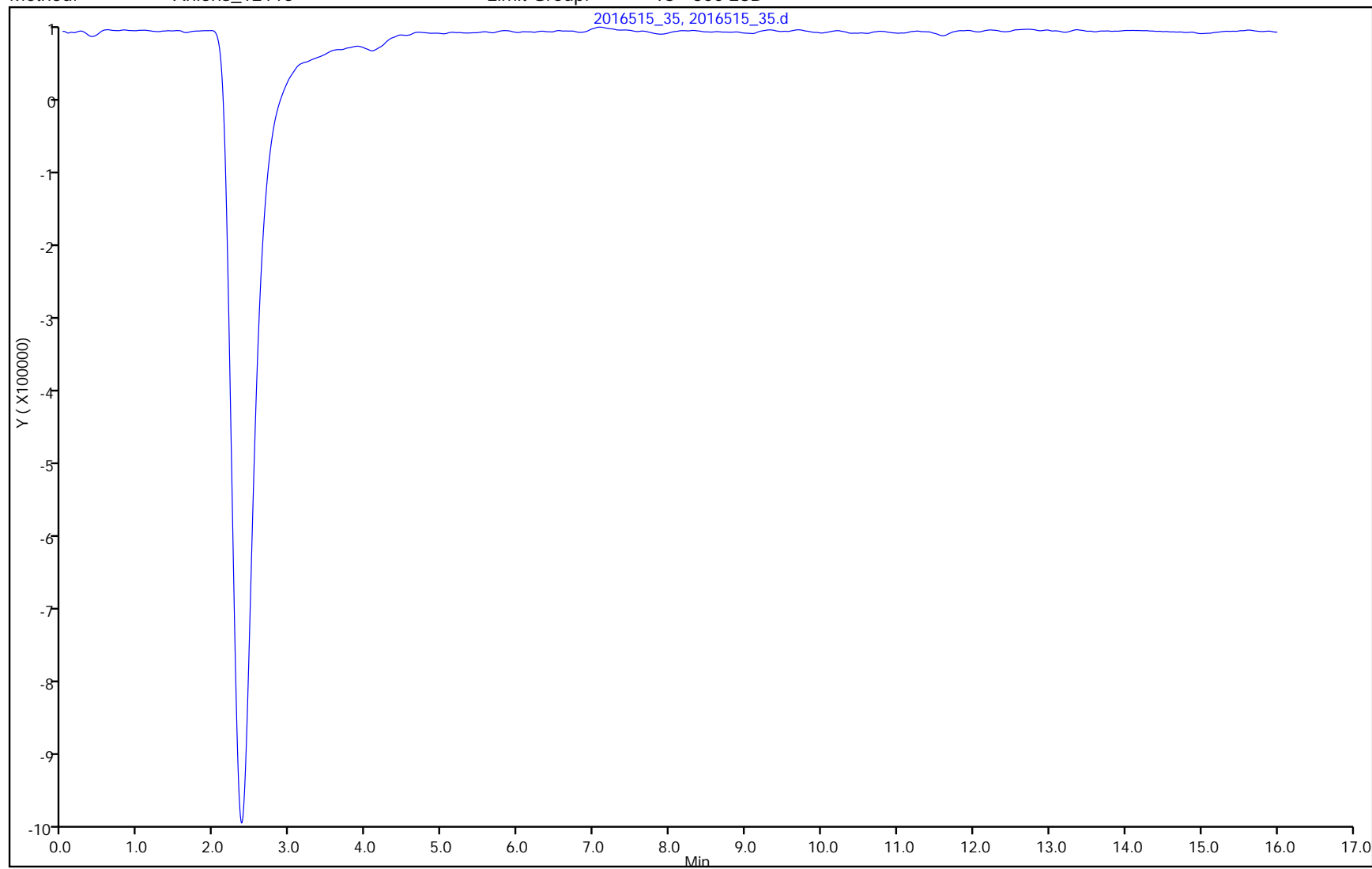
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-21417/20
 Matrix: Water Lab File ID: 2019213A_20.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 04:33
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 13-Jul-2020 12:40:47

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_20.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 11-Jul-2020 04:33:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:47 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride		4.323				ND	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate	11.970	11.917	0.053	1618313		0.2402	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00082 Amount Added: 0.00 Units: mL

Report Date: 13-Jul-2020 12:40:47

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_20.d

Injection Date: 11-Jul-2020 04:33:00

Instrument ID: 19052

Operator ID:

Lims ID: MB

Worklist Smp#: 20

Client ID:

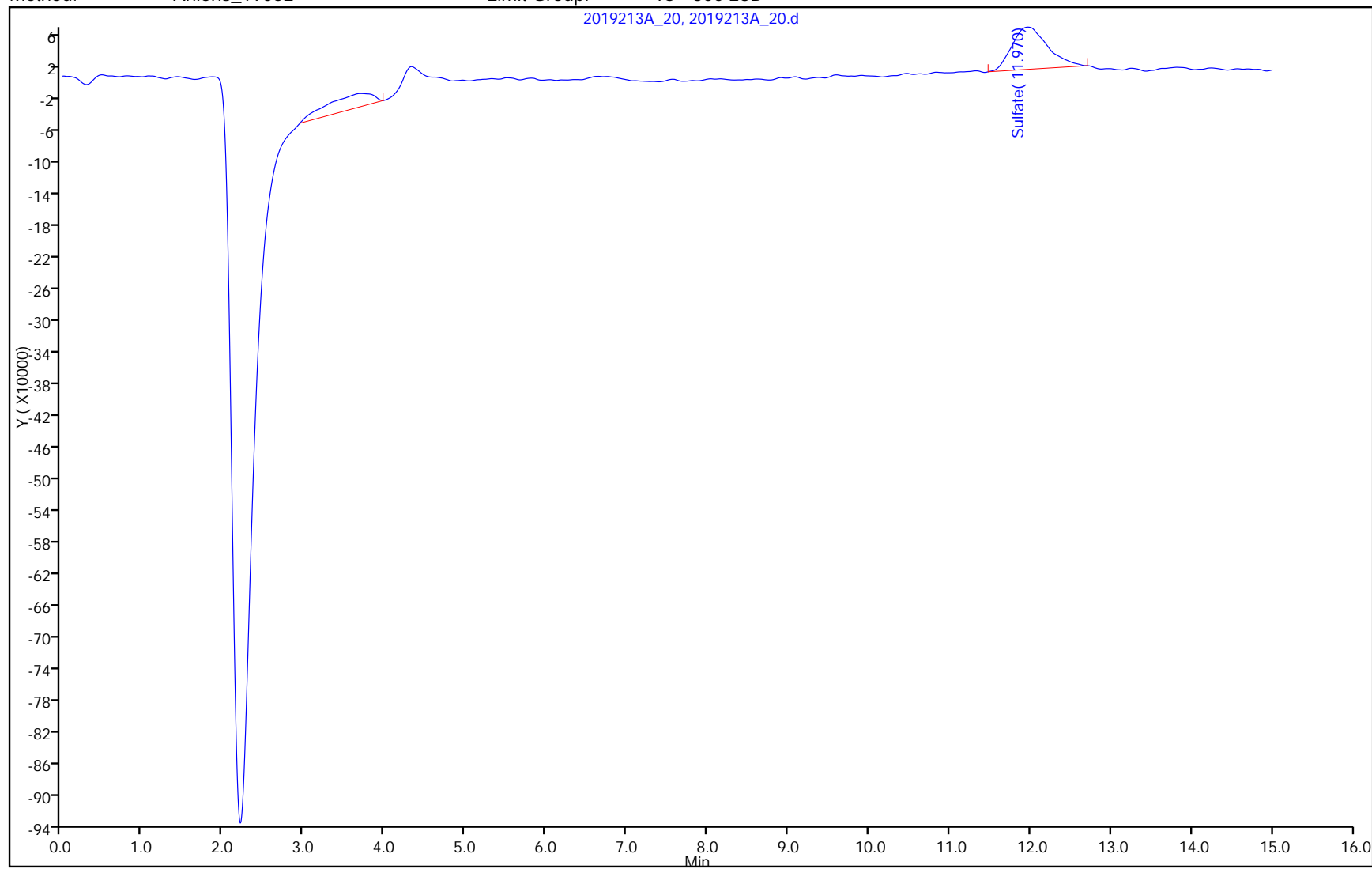
ALS Bottle#: 0

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-21417/24
 Matrix: Water Lab File ID: 2019213A_24.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 05:41
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 13-Jul-2020 12:40:45

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_24.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 11-Jul-2020 05:41:00 ALS Bottle#: 0 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride	4.333	4.323	0.010	488934		0.0303	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate	11.990	11.917	0.073	558817		0.1383	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00082 Amount Added: 0.00 Units: mL

Report Date: 13-Jul-2020 12:40:45

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_24.d

Injection Date: 11-Jul-2020 05:41:00

Instrument ID: 19052

Operator ID:

Lims ID: MB

Worklist Smp#: 24

Client ID:

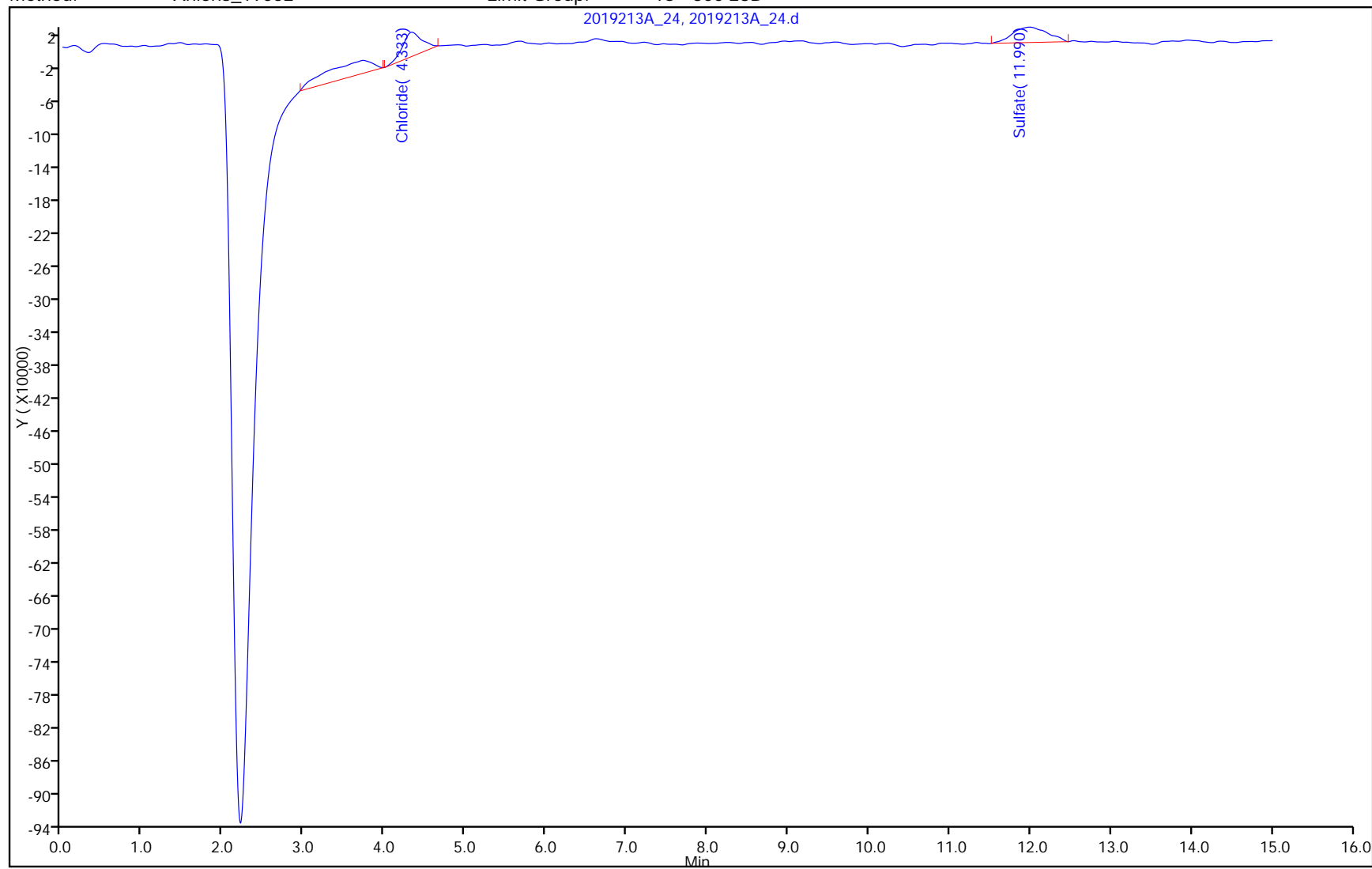
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-12842/2
 Matrix: Water Lab File ID: 2016515_2.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/13/2020 18:58
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:30

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_2.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 13-Jun-2020 18:58:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:29 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00036 Amount Added: 0.00 Units: mL

Report Date: 17-Jun-2020 09:22:30

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_2.d

Injection Date: 13-Jun-2020 18:58:00

Instrument ID: 12115

Operator ID:

Lims ID: CCB

Worklist Smp#: 2

Client ID:

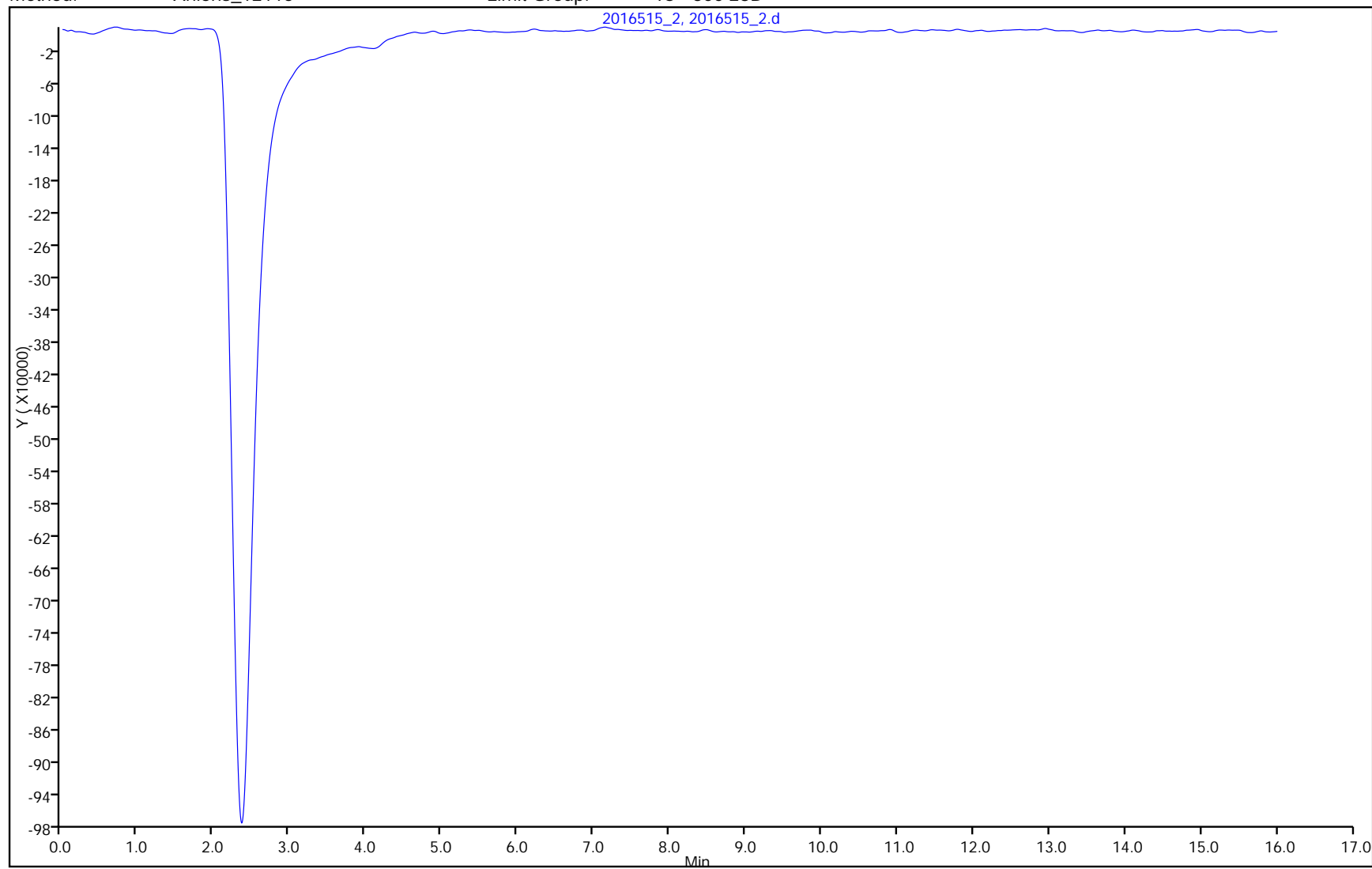
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-12842/14
 Matrix: Water Lab File ID: 2016515_45.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/13/2020 22:23
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:34

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_45.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 13-Jun-2020 22:23:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:33 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00036 Amount Added: 0.00 Units: mL

Report Date: 17-Jun-2020 09:22:34

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_45.d

Injection Date: 13-Jun-2020 22:23:00

Instrument ID: 12115

Operator ID:

Lims ID: CCB

Worklist Smp#: 14

Client ID:

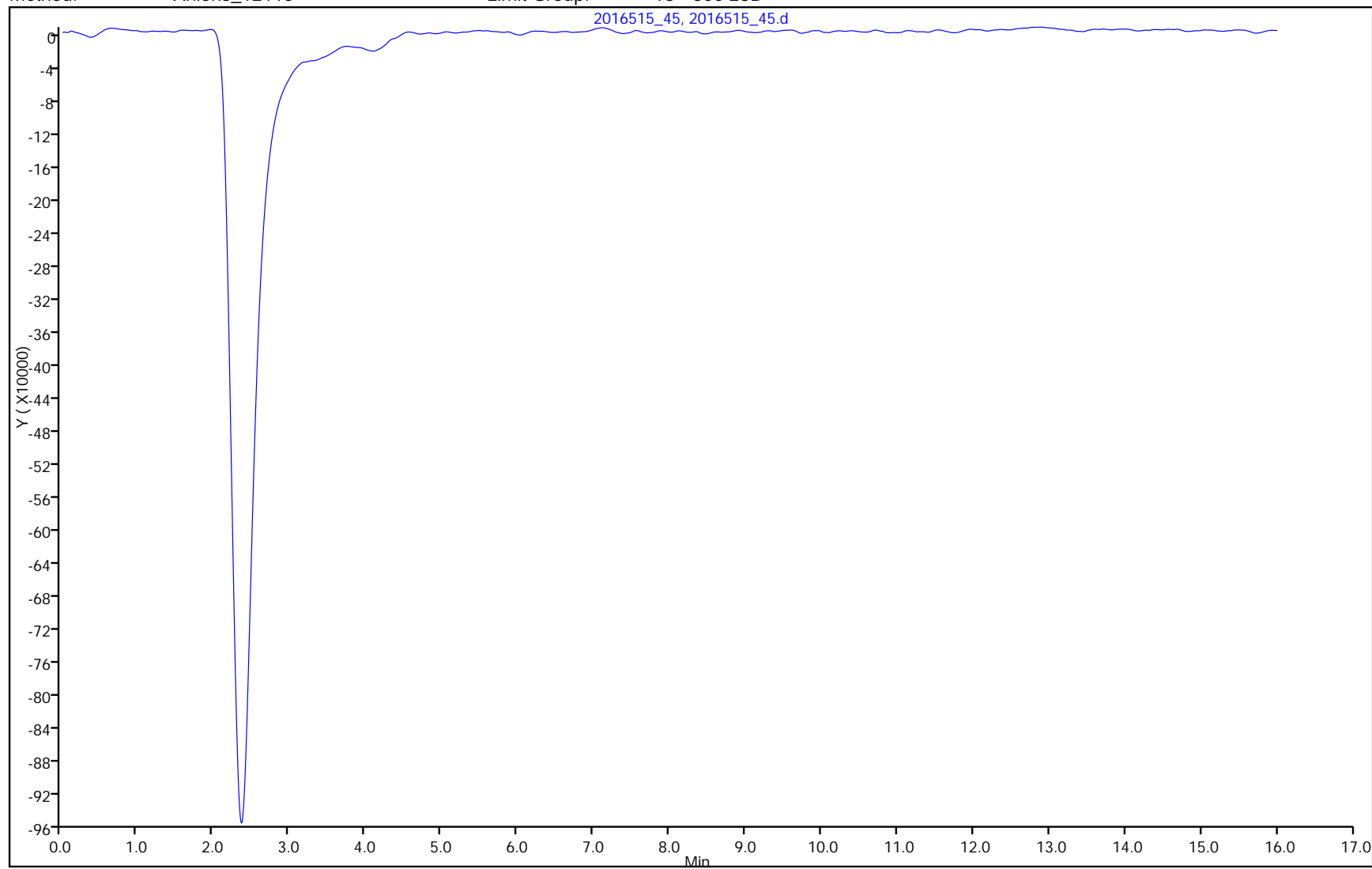
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-12842/26
 Matrix: Water Lab File ID: 2016515_57.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 01:48
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:37

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_57.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 14-Jun-2020 01:48:00 ALS Bottle#: 0 Worklist Smp#: 26
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:37 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00036 Amount Added: 0.00 Units: mL

Report Date: 17-Jun-2020 09:22:37

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_57.d

Injection Date: 14-Jun-2020 01:48:00

Instrument ID: 12115

Operator ID:

Lims ID: CCB

Worklist Smp#: 26

Client ID:

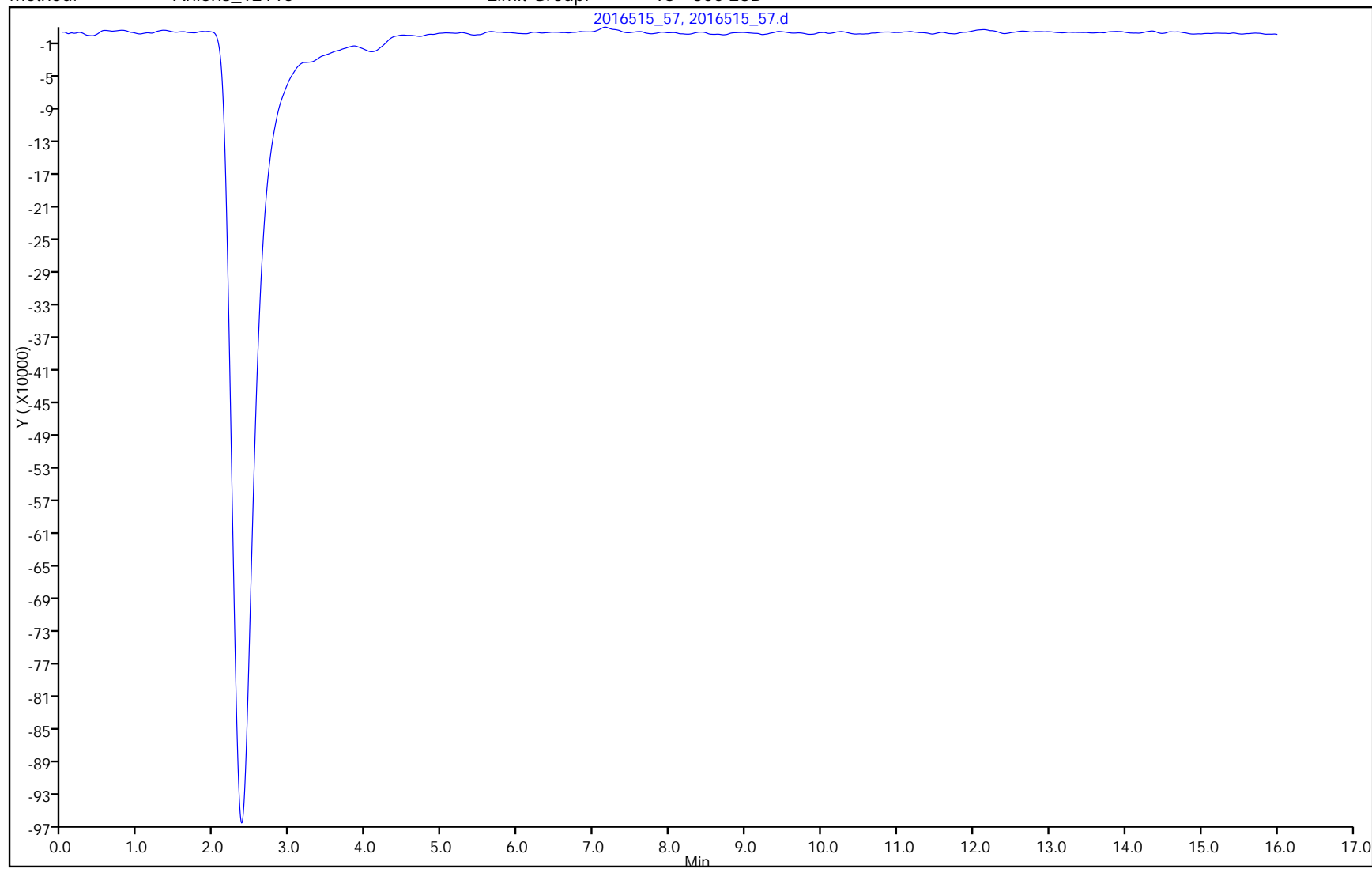
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-12842/38
 Matrix: Water Lab File ID: 2016515_69.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 05:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:41

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_69.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 14-Jun-2020 05:14:00 ALS Bottle#: 0 Worklist Smp#: 38
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00036 Amount Added: 0.00 Units: mL

Report Date: 17-Jun-2020 09:22:41

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_69.d

Injection Date: 14-Jun-2020 05:14:00

Instrument ID: 12115

Operator ID:

Lims ID: CCB

Worklist Smp#: 38

Client ID:

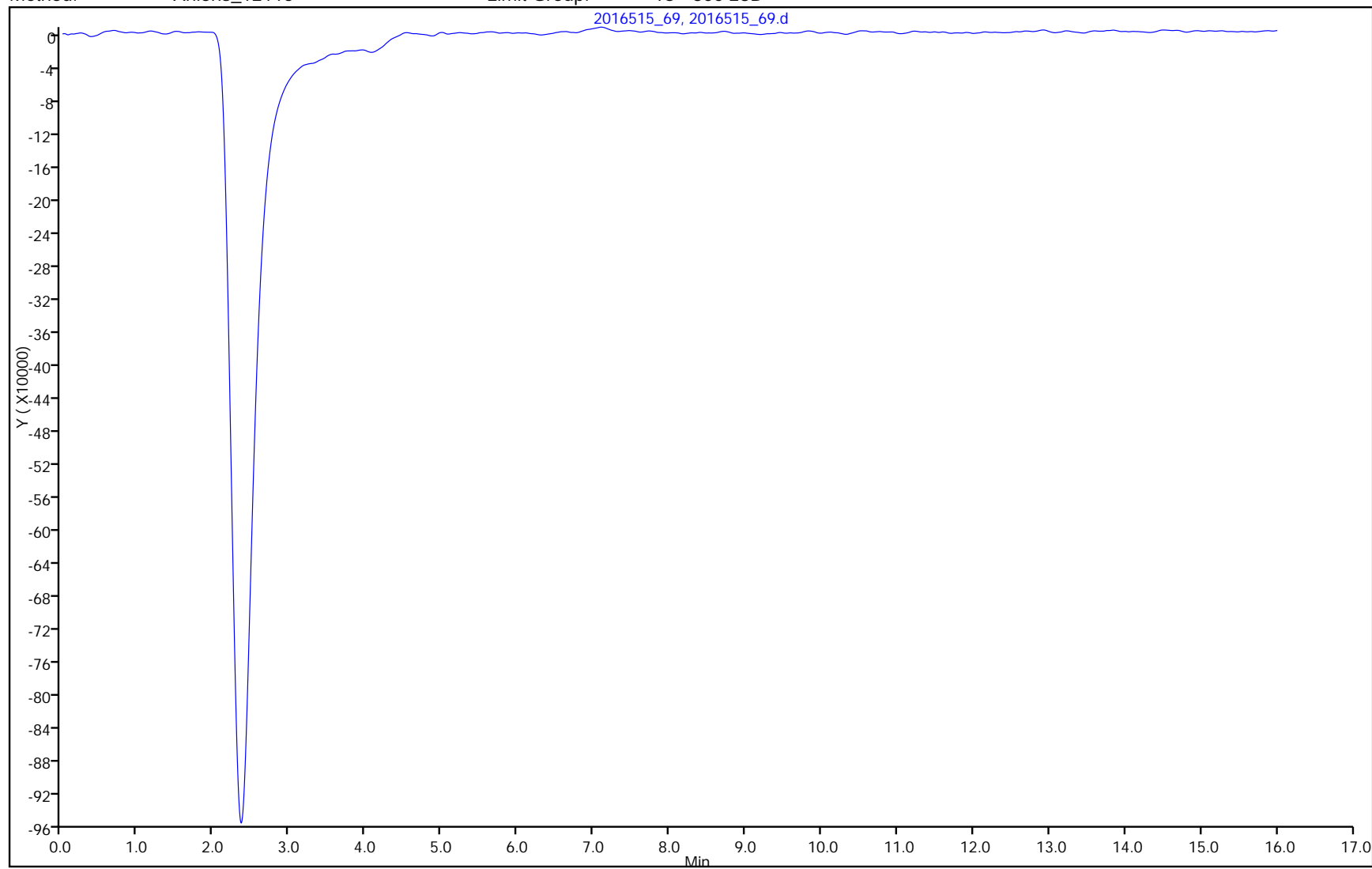
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-12842/48
 Matrix: Water Lab File ID: 2016515_79.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 06/14/2020 08:05
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:43

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_79.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 14-Jun-2020 08:05:00 ALS Bottle#: 0 Worklist Smp#: 48
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:40 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.153				ND	
2 Chloride		4.570				ND	
3 Nitrite as N		5.550				ND	
4 Bromide		7.193				ND	
5 Nitrate as N		8.490				ND	
6 Sulfate		13.187				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00036 Amount Added: 0.00 Units: mL

Report Date: 17-Jun-2020 09:22:43

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_79.d

Injection Date: 14-Jun-2020 08:05:00

Instrument ID: 12115

Operator ID:

Lims ID: CCB

Worklist Smp#: 48

Client ID:

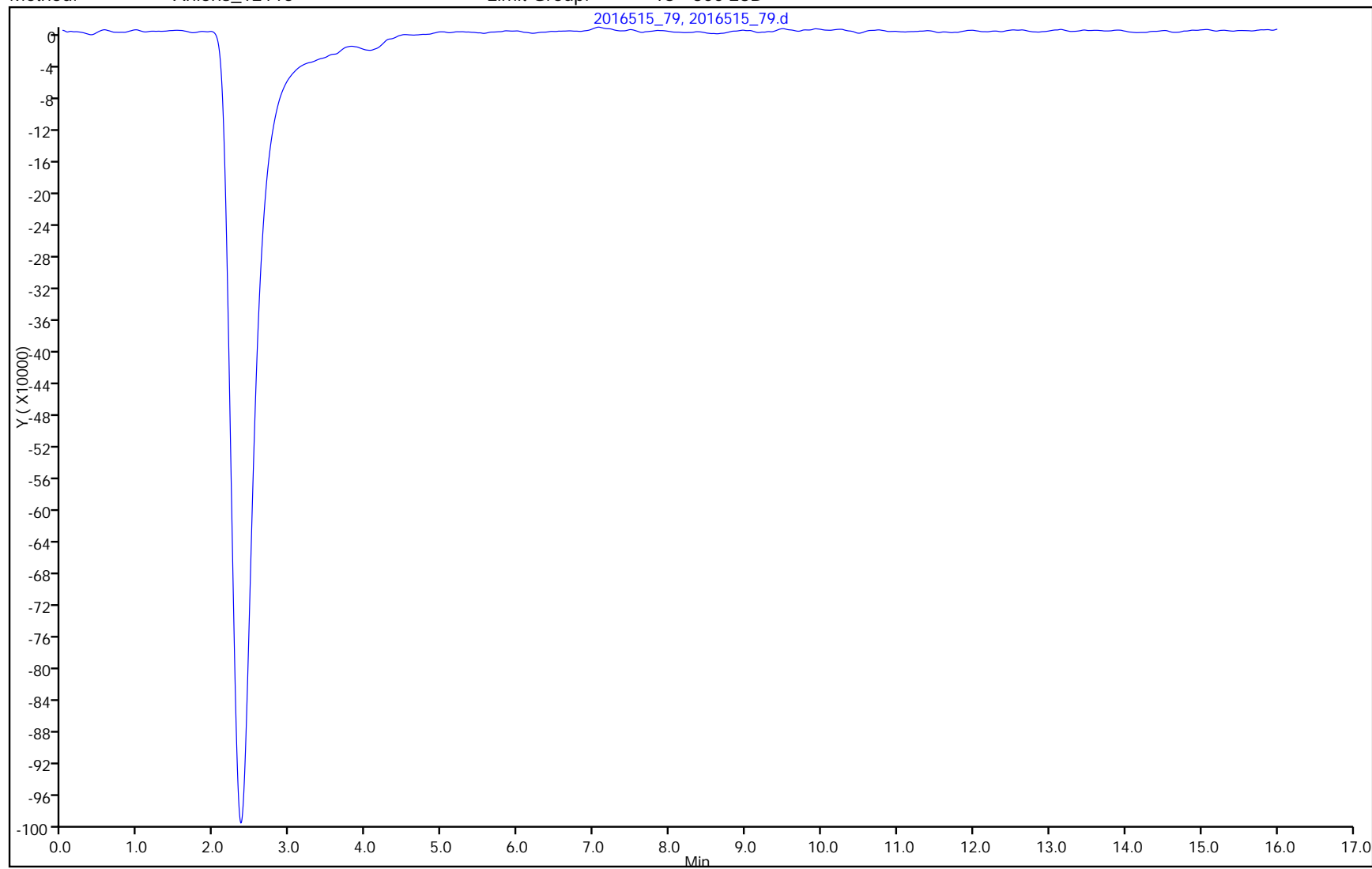
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-21417/14
 Matrix: Water Lab File ID: 2019213A_14.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 02:50
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 13-Jul-2020 12:40:49

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_14.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 11-Jul-2020 02:50:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:47 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride		4.323				ND	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate		11.917				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00082 Amount Added: 0.00 Units: mL

Report Date: 13-Jul-2020 12:40:49

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_14.d

Injection Date: 11-Jul-2020 02:50:00

Instrument ID: 19052

Operator ID:

Lims ID: CCB

Worklist Smp#: 14

Client ID:

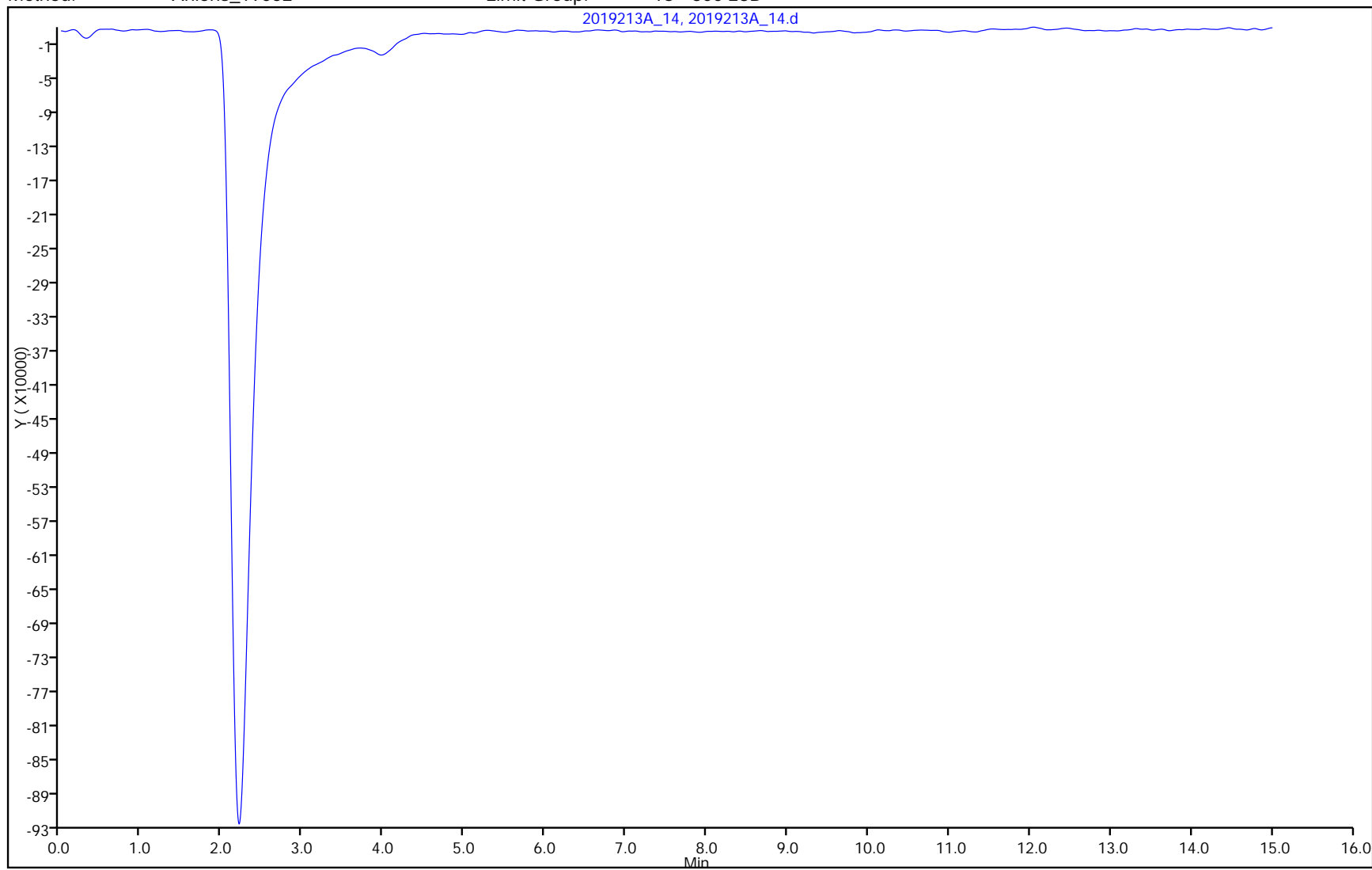
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-21417/22
 Matrix: Water Lab File ID: 2019213A_22.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 05:07
 Con. Extract Vol.: 1.0 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U M	1.0	0.90	0.30

Report Date: 14-Jul-2020 13:18:36

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_22.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 11-Jul-2020 05:07:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 14-Jul-2020 13:18:31 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1017

First Level Reviewer: gerhartd Date: 14-Jul-2020 13:18:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride		4.323				ND	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate	11.993	11.917	0.076	739732		0.1557	Ma
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Review Flags
 M - Manually Integrated
 a - User Assigned ID

Reagents:

WC_IC_QC2_00082 Amount Added: 0.00 Units: mL

Report Date: 14-Jul-2020 13:18:36

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_22.d

Injection Date: 11-Jul-2020 05:07:00

Instrument ID: 19052

Operator ID:

Lims ID: CCB

Worklist Smp#: 22

Client ID:

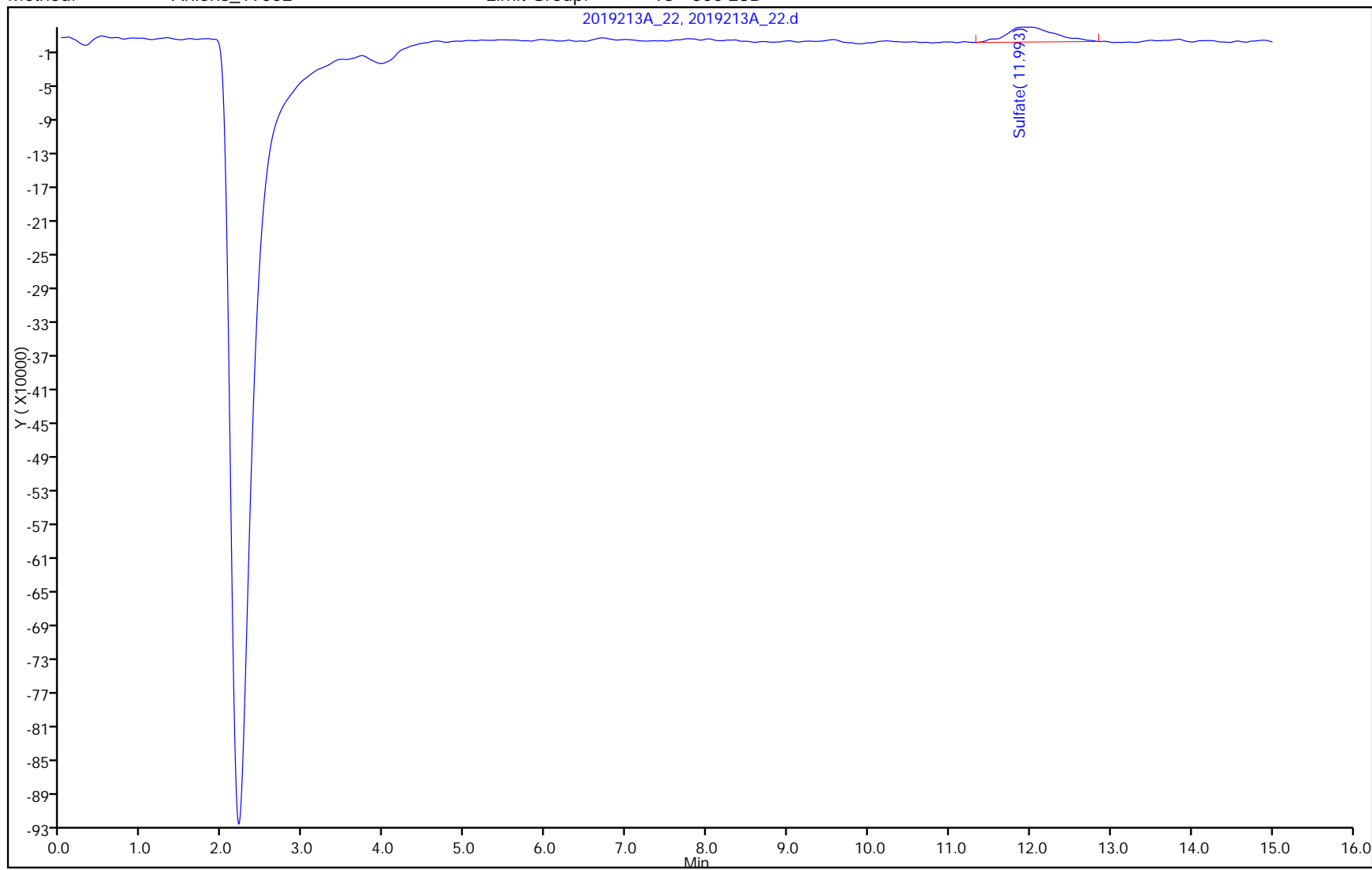
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



Report Date: 14-Jul-2020 13:18:36

Chrom Revision: 2.3 30-Jun-2020 12:05:54
Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_22.d		
Injection Date:	11-Jul-2020 05:07:00	Instrument ID:	19052
Lims ID:	CCB		
Client ID:			
Operator ID:		ALS Bottle#:	0
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	Anions_19052	Limit Group:	IC - 300 28D
Column:		Detector	det0

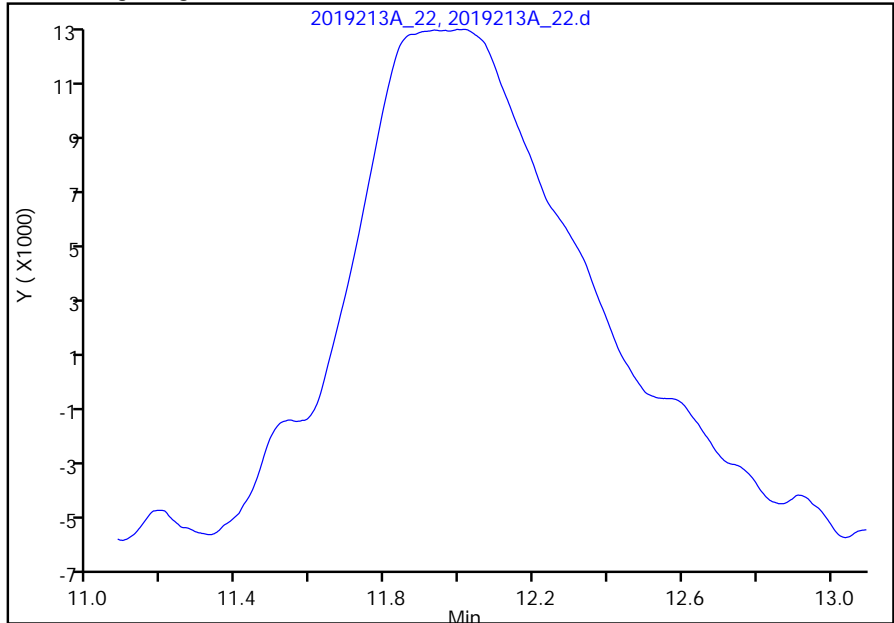
Worklist Smp#: 22

6 Sulfate, CAS: 14808-79-8

Signal: 1

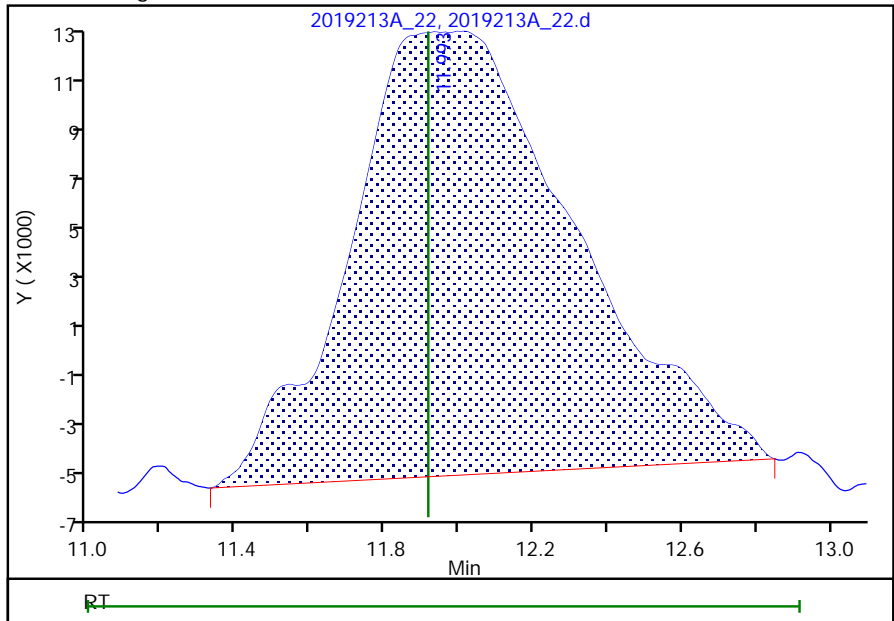
Not Detected
Expected RT: 11.92

Processing Integration Results



RT: 11.99
 Area: 739732
 Amount: 0.155724
 Amount Units: ug/ml

Manual Integration Results



Reviewer: gerhardt, 14-Jul-2020 13:18:26
 Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-21417/34
 Matrix: Water Lab File ID: 2019213A_34.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 08:31
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_34.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 11-Jul-2020 08:31:00 ALS Bottle#: 0 Worklist Smp#: 34
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:40 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride		4.323				ND	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate		11.917				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00082 Amount Added: 0.00 Units: mL

Report Date: 13-Jul-2020 12:40:42

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_34.d

Injection Date: 11-Jul-2020 08:31:00

Instrument ID: 19052

Operator ID:

Lims ID: CCB

Worklist Smp#: 34

Client ID:

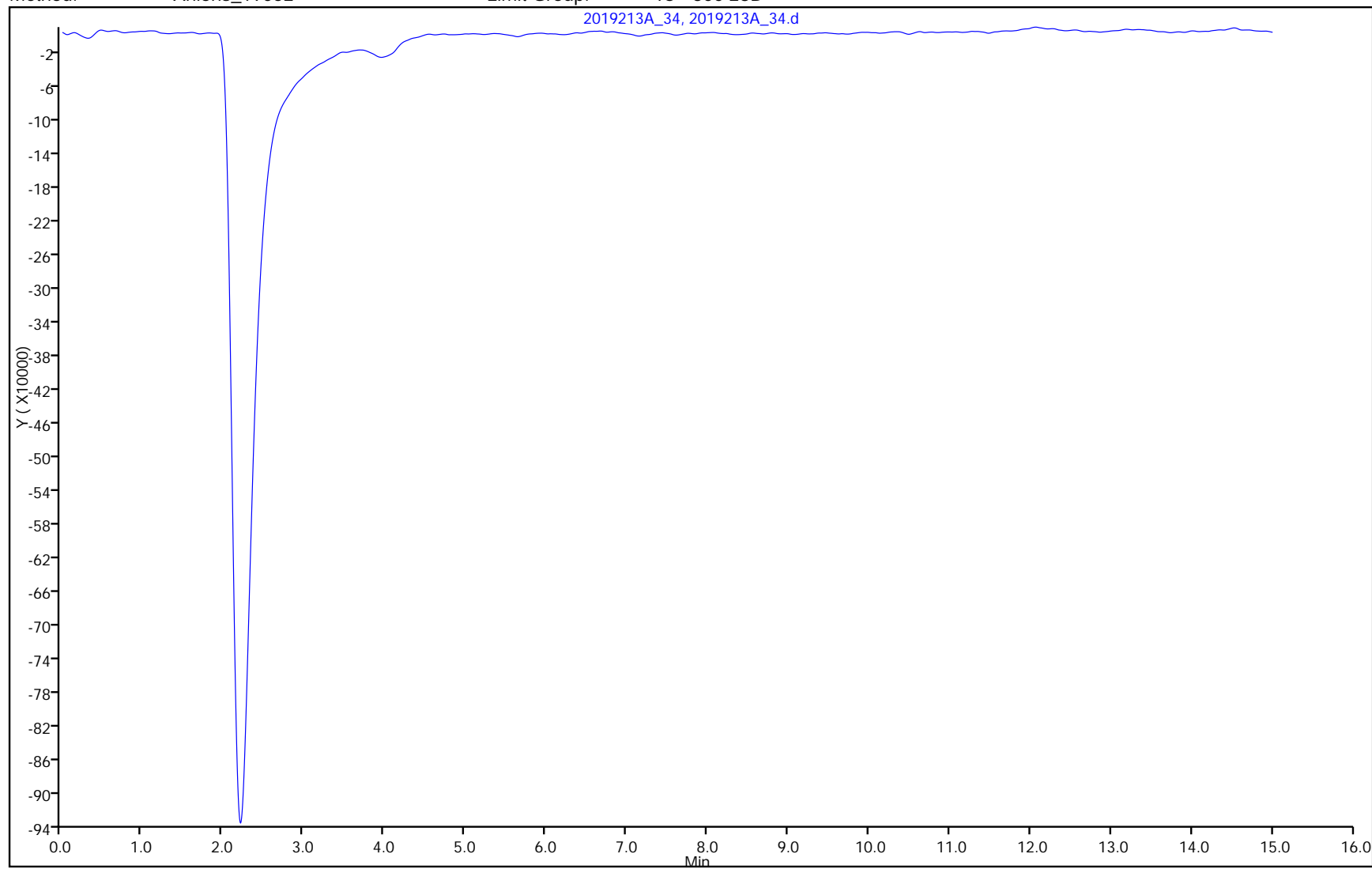
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 410-21417/40
 Matrix: Water Lab File ID: 2019213A_40.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 10:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 13-Jul-2020 12:41:49

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_40.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 11-Jul-2020 10:14:00 ALS Bottle#: 0 Worklist Smp#: 40
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: CCB
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:41:48 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:40:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride		4.323				ND	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate		11.917				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00082 Amount Added: 0.00 Units: mL

Report Date: 13-Jul-2020 12:41:49

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_40.d

Injection Date: 11-Jul-2020 10:14:00

Instrument ID: 19052

Operator ID:

Lims ID: CCB

Worklist Smp#: 40

Client ID:

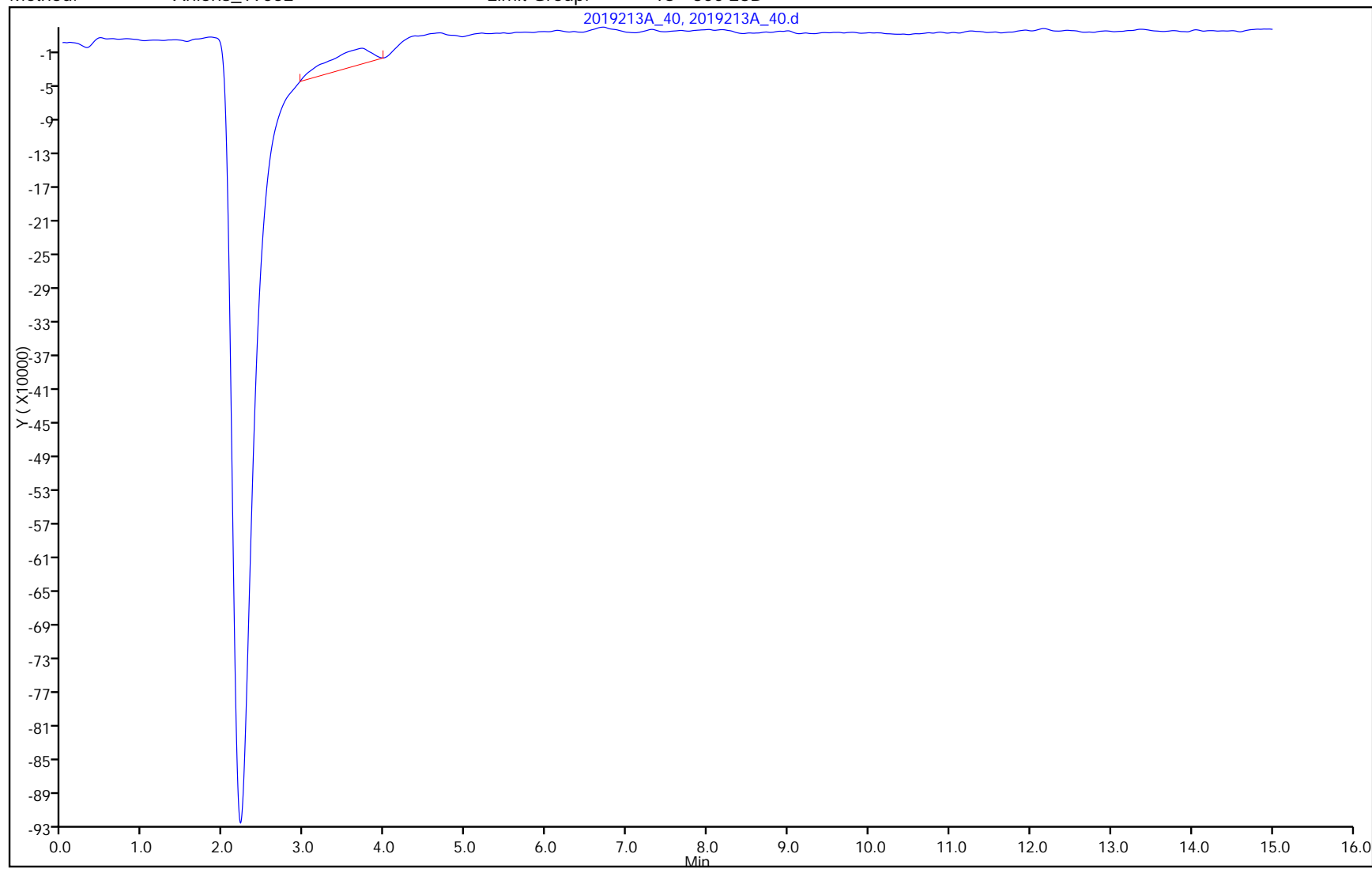
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: ICB 410-8732/8
 Matrix: Water Lab File ID: 2012013C_9.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 04/29/2020 14:50
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: _____ ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 8732 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	0.40	U	0.50	0.40	0.25
16887-00-6	Chloride	0.30	U	0.40	0.30	0.20
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Report Date: 19-May-2020 08:30:46

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_9.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 29-Apr-2020 14:50:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ICB
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 19-May-2020 08:30:46 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1029

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.217				ND	
2 Chloride		4.760				ND	
3 Nitrite as N		5.810				ND	
4 Bromide		7.597				ND	
5 Nitrate as N		8.963				ND	
6 Sulfate		13.853				ND	
S 7 Nitrate Nitrite as N		0.000				ND	

Reagents:

WC_IC_QC2_00007 Amount Added: 0.00 Units: mL

Report Date: 19-May-2020 08:30:46

Chrom Revision: 2.3 18-May-2020 21:51:32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_9.d

Injection Date: 29-Apr-2020 14:50:00

Instrument ID: 19052

Operator ID:

Lims ID: ICB

Worklist Smp#: 8

Client ID:

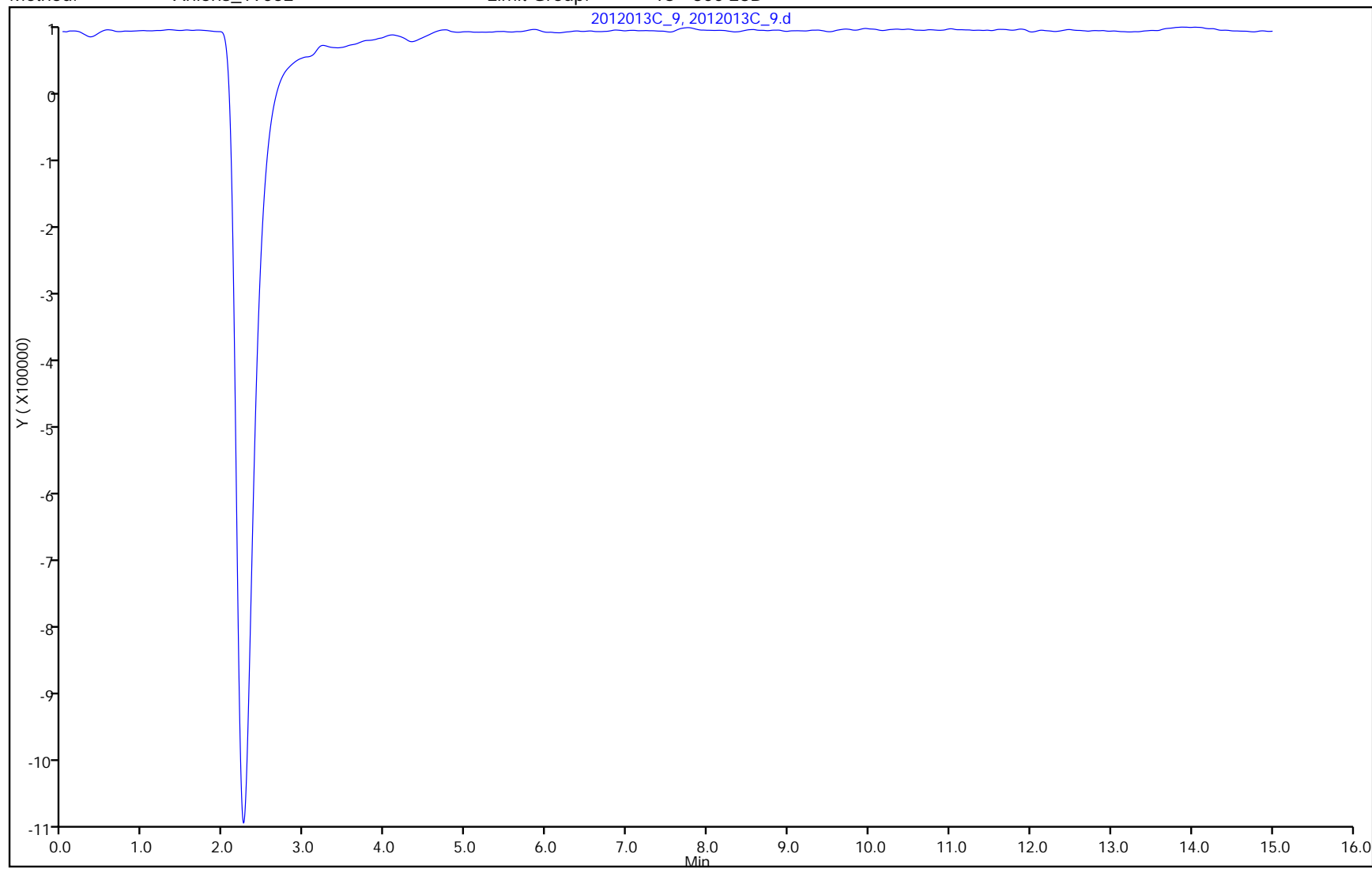
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-12842/3
 Matrix: Water Lab File ID: 2016515_34.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: _____ Date Analyzed: 06/13/2020 19:15
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC15-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 12842 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	7.06		0.50	0.40	0.25
16887-00-6	Chloride	2.89		0.40	0.30	0.20
14808-79-8	Sulfate	7.30		1.0	0.90	0.30

Report Date: 17-Jun-2020 09:22:30

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_34.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 13-Jun-2020 19:15:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 3305-30720
 Operator ID: Instrument ID: 12115
 Method: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\Anions_12115.m
 Limit Group: IC - 300 28D
 Last Update: 17-Jun-2020 09:22:29 Calib Date: 01-Jun-2020 14:27:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\12115\20200615-3361.b\2015315C_6.d
 Column 1 : Det: det0
 Process Host: CTX1060

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.130	3.153	-0.023	16104813	0.7500	0.7458	
2 Chloride	4.530	4.570	-0.040	42496317	3.00	2.89	
3 Nitrite as N	5.480	5.550	-0.070	21411297	NC	NC	
4 Bromide	7.080	7.193	-0.113	42953202	7.50	7.06	
5 Nitrate as N	8.327	8.490	-0.163	24174199	NC	NC	
6 Sulfate	12.817	13.187	-0.370	81701173	7.50	7.30	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

WC_IC_QC2_00036

Amount Added: 7.50

Units: mL

Report Date: 17-Jun-2020 09:22:30

Chrom Revision: 2.3 13-Jun-2020 09:53:24

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\12115\20200613-3305.b\2016515_34.d

Injection Date: 13-Jun-2020 19:15:00

Instrument ID: 12115

Operator ID:

Lims ID: LCS

Worklist Smp#: 3

Client ID:

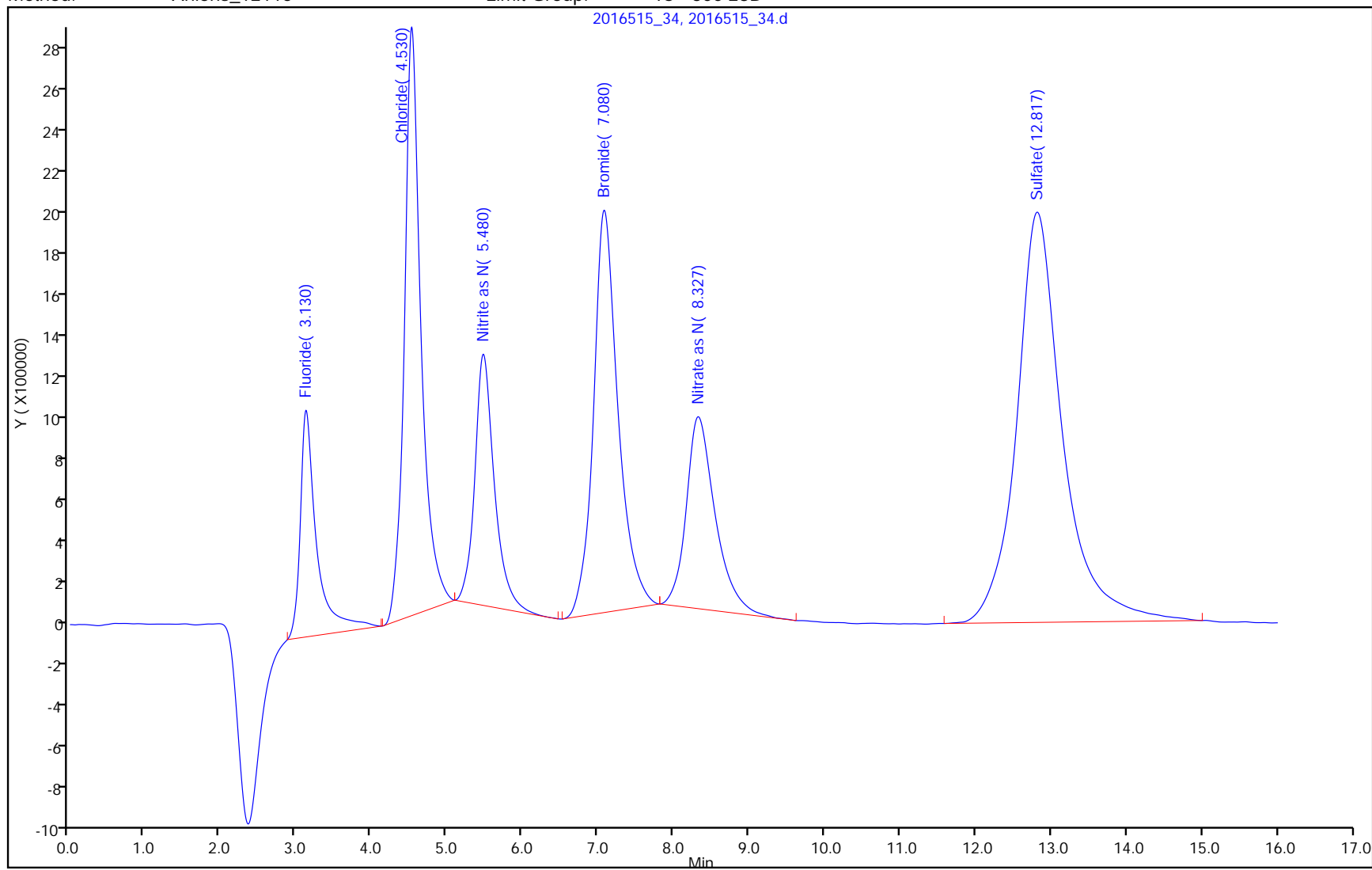
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_12115

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-21417/19
 Matrix: Water Lab File ID: 2019213A_19.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 04:16
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	6.94		0.50	0.40	0.25
16887-00-6	Chloride	2.81		0.40	0.30	0.20
14808-79-8	Sulfate	7.67		1.0	0.90	0.30

Report Date: 13-Jul-2020 12:40:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_19.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 11-Jul-2020 04:16:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:47 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:11:03

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.030	3.027	0.003	13053071	0.7500	0.7413	M
2 Chloride	4.320	4.323	-0.003	41026420	3.00	2.81	
3 Nitrite as N	5.180	5.187	-0.007	20943844	NC	NC	
4 Bromide	6.640	6.660	-0.020	42210241	7.50	6.94	
5 Nitrate as N	7.740	7.770	-0.030	22904360	NC	NC	
6 Sulfate	11.947	11.917	0.030	78962334	7.50	7.67	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:40:48

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_19.d

Injection Date: 11-Jul-2020 04:16:00

Instrument ID: 19052

Operator ID:

Lims ID: LCS

Worklist Smp#: 19

Client ID:

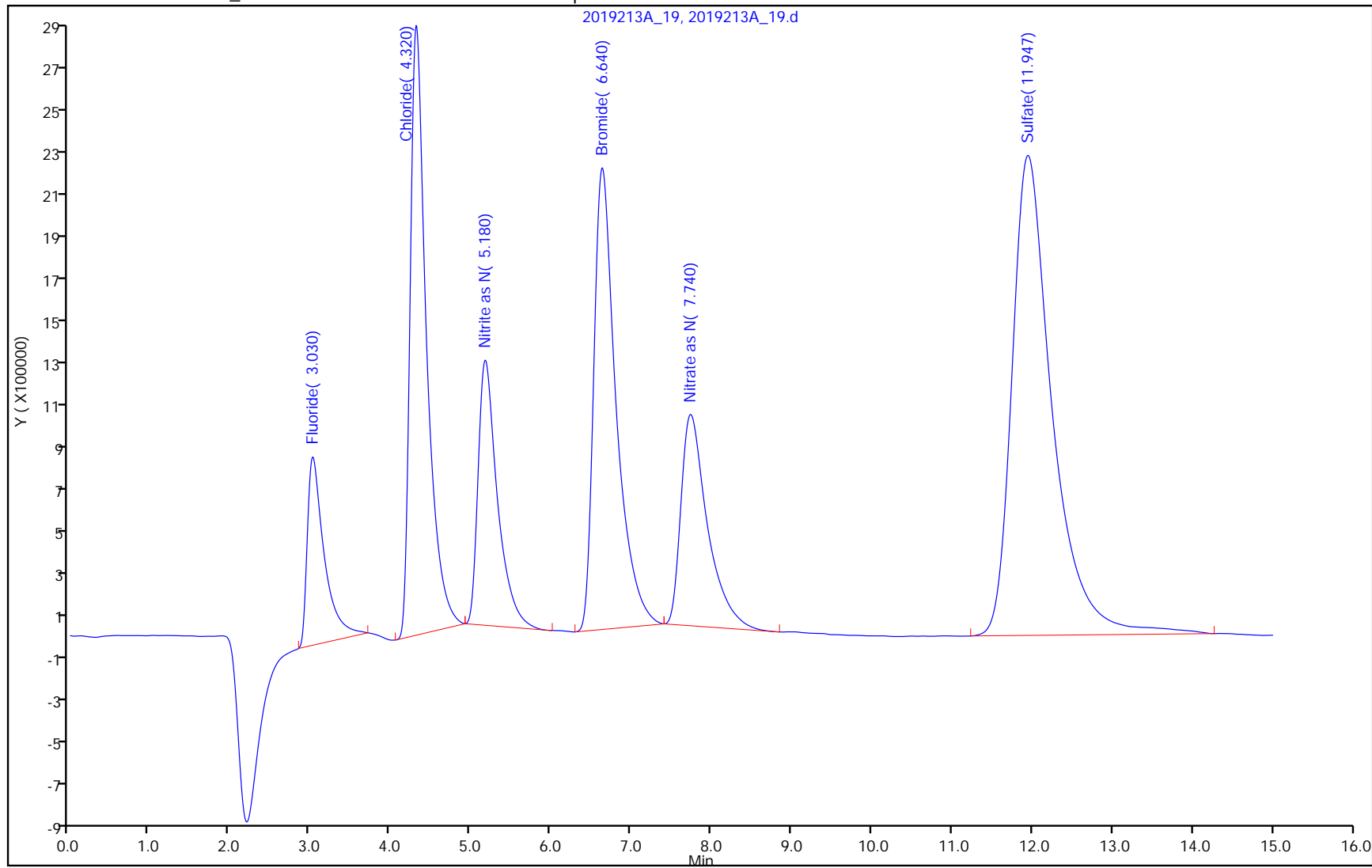
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-21417/23
 Matrix: Water Lab File ID: 2019213A_23.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 05:24
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	6.91		0.50	0.40	0.25
16887-00-6	Chloride	2.81		0.40	0.30	0.20
14808-79-8	Sulfate	7.59		1.0	0.90	0.30

Report Date: 13-Jul-2020 12:40:46

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_23.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 11-Jul-2020 05:24:00 ALS Bottle#: 0 Worklist Smp#: 23
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045
 First Level Reviewer: wilsonc Date: 13-Jul-2020 12:11:26

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.033	3.027	0.006	12363359	0.7500	0.7065	M
2 Chloride	4.323	4.323	0.000	40997805	3.00	2.81	
3 Nitrite as N	5.187	5.187	0.000	20877567	NC	NC	
4 Bromide	6.650	6.660	-0.010	42018788	7.50	6.91	
5 Nitrate as N	7.753	7.770	-0.017	22988934	NC	NC	
6 Sulfate	11.947	11.917	0.030	78113645	7.50	7.59	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 7.50 Units: mL

Report Date: 13-Jul-2020 12:40:46

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_23.d

Injection Date: 11-Jul-2020 05:24:00

Instrument ID: 19052

Operator ID:

Lims ID: LCS

Worklist Smp#: 23

Client ID:

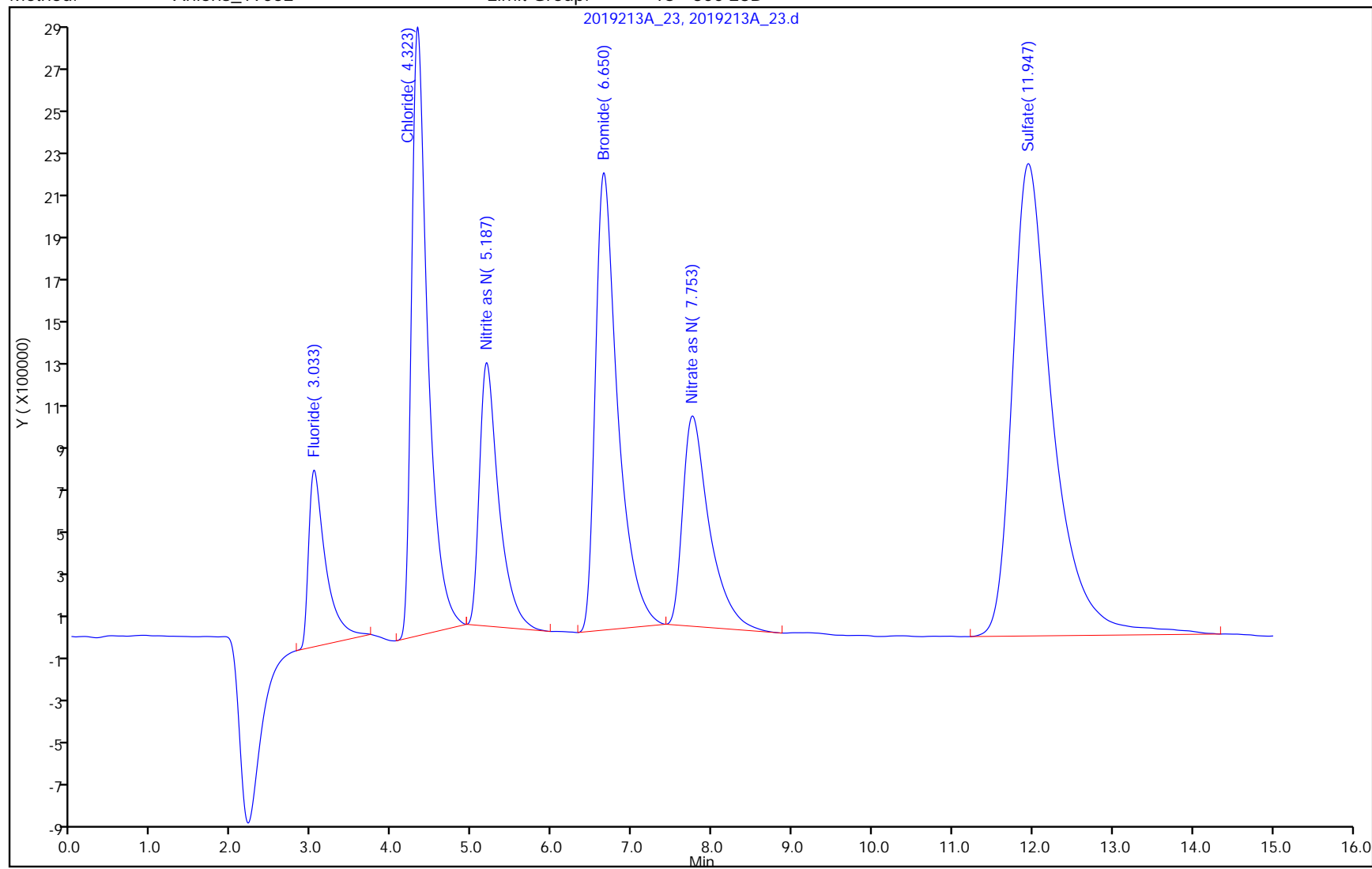
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 MS Lab Sample ID: 410-3144-3 MS
 Matrix: Water Lab File ID: 2019213A_27.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 06:32
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	24.6	D	2.5	2.0	1.3
14808-79-8	Sulfate	59.3	J1 D	5.0	4.5	1.5

Report Date: 13-Jul-2020 12:40:44

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_27.d
 Lims ID: 410-3144-B-3 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 11-Jul-2020 06:32:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-3 MS
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:13:40

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.033	3.027	0.006	10888513	0.1000	0.6322	M
2 Chloride	4.340	4.323	0.017	159820709	0.4000	11.0	E
3 Nitrite as N	5.190	5.187	0.003	14498059	NC	NC	
4 Bromide	6.657	6.660	-0.003	29545400	1.00	4.93	
5 Nitrate as N	7.767	7.770	-0.003	16246966	NC	NC	
6 Sulfate	11.950	11.917	0.033	122493218	1.00	11.9	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

WC_IC_QC2_00082

Amount Added: 0.50

Units: mL

Report Date: 13-Jul-2020 12:40:44

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_27.d

Injection Date: 11-Jul-2020 06:32:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-3 MS

Worklist Smp#: 27

Client ID:

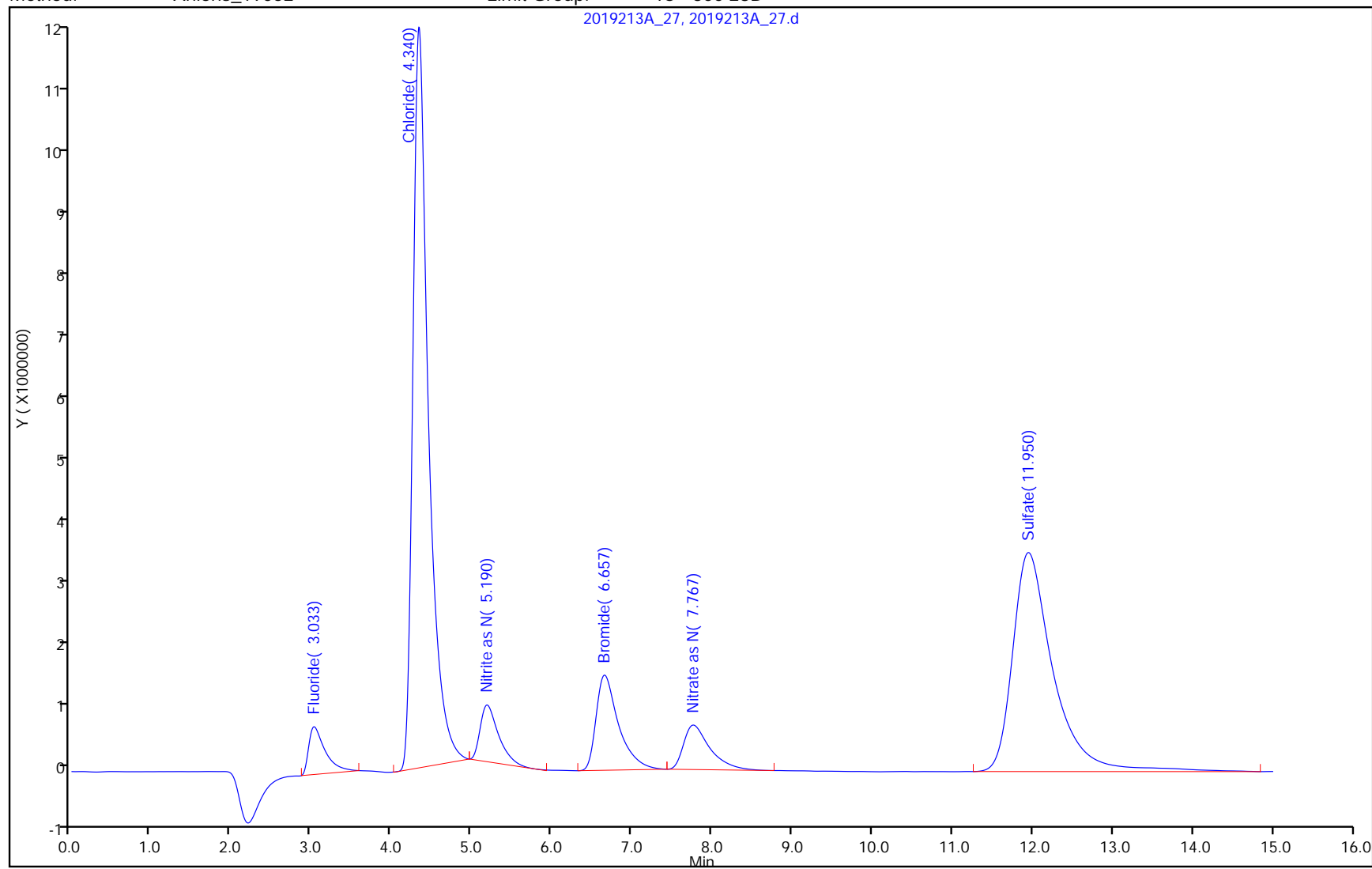
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 MS Lab Sample ID: 410-3144-3 MS
 Matrix: Water Lab File ID: 2019213A_30.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 07:23
 Con. Extract Vol.: _____ Dilution Factor: 500
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2500	D	250	200	130
16887-00-6	Chloride	1040	J1 D	200	150	100
14808-79-8	Sulfate	2710	D	500	450	150

Report Date: 13-Jul-2020 12:40:43

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_30.d
 Lims ID: 410-3144-B-3 MS
 Client ID:
 Sample Type: MS
 Inject. Date: 11-Jul-2020 07:23:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 1.0 ul Dil. Factor: 500.0000
 Sample Info: 410-3144-b-3 MS
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

First Level Reviewer: wilsonc Date: 13-Jul-2020 12:13:58

Compound	RT (min.)	Exp RT (min.)	Dit RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.030	3.027	0.003	10894928	0.001000	0.6325	M
2 Chloride	4.323	4.323	0.000	30430765	0.004000	2.09	
3 Nitrite as N	5.187	5.187	0.000	14923368	NC	NC	
4 Bromide	6.653	6.660	-0.007	30010651	0.0100	5.00	
5 Nitrate as N	7.763	7.770	-0.007	16605174	NC	NC	
6 Sulfate	11.950	11.917	0.033	55425291	0.0100	5.41	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
 NC - Not Calibrated
 Review Flags
 M - Manually Integrated

Reagents:

WC_IC_QC2_00082 Amount Added: 2.50 Units: mL

Report Date: 13-Jul-2020 12:40:43

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_30.d

Injection Date: 11-Jul-2020 07:23:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-3 MS

Worklist Smp#: 30

Client ID:

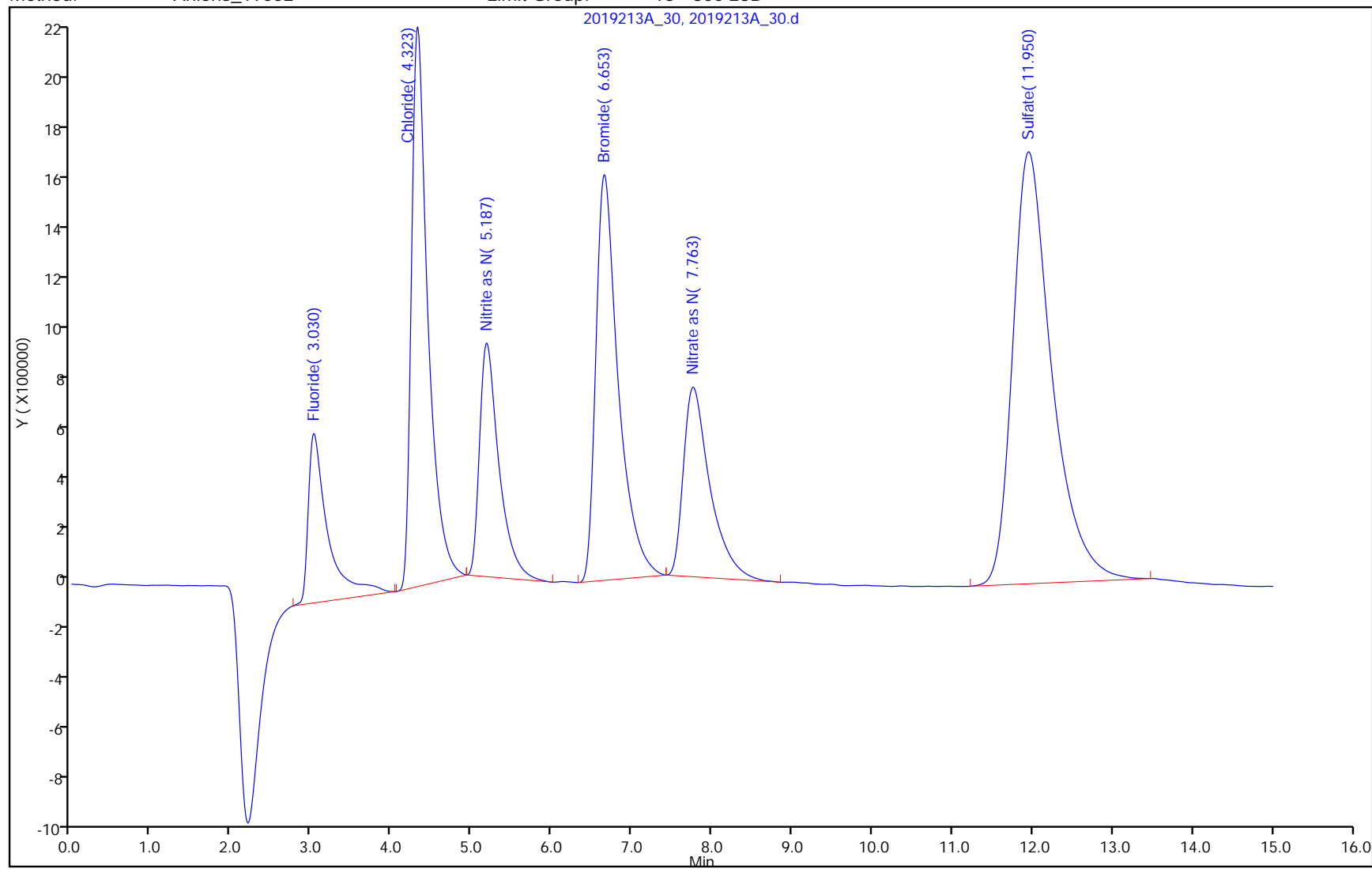
Injection Vol: 1.0 ul

Dil. Factor: 500.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 DU Lab Sample ID: 410-3144-3 DU
 Matrix: Water Lab File ID: 2019213A_26.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 06:15
 Con. Extract Vol.: _____ Dilution Factor: 5
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	2.0	U	2.5	2.0	1.3
14808-79-8	Sulfate	29.8	D	5.0	4.5	1.5

Report Date: 13-Jul-2020 12:40:45

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_26.d
 Lims ID: 410-3144-B-3 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 11-Jul-2020 06:15:00 ALS Bottle#: 0 Worklist Smp#: 26
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 410-3144-b-3 DU
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.040	3.027	0.013	998207		0.1338	
2 Chloride	4.340	4.323	0.017	126043738		8.65	E
3 Nitrite as N	5.153	5.187	-0.034	444086		NC	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate	11.953	11.917	0.036	61134795		5.96	
S 7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

Report Date: 13-Jul-2020 12:40:45

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_26.d

Injection Date: 11-Jul-2020 06:15:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-3 DU

Worklist Smp#: 26

Client ID:

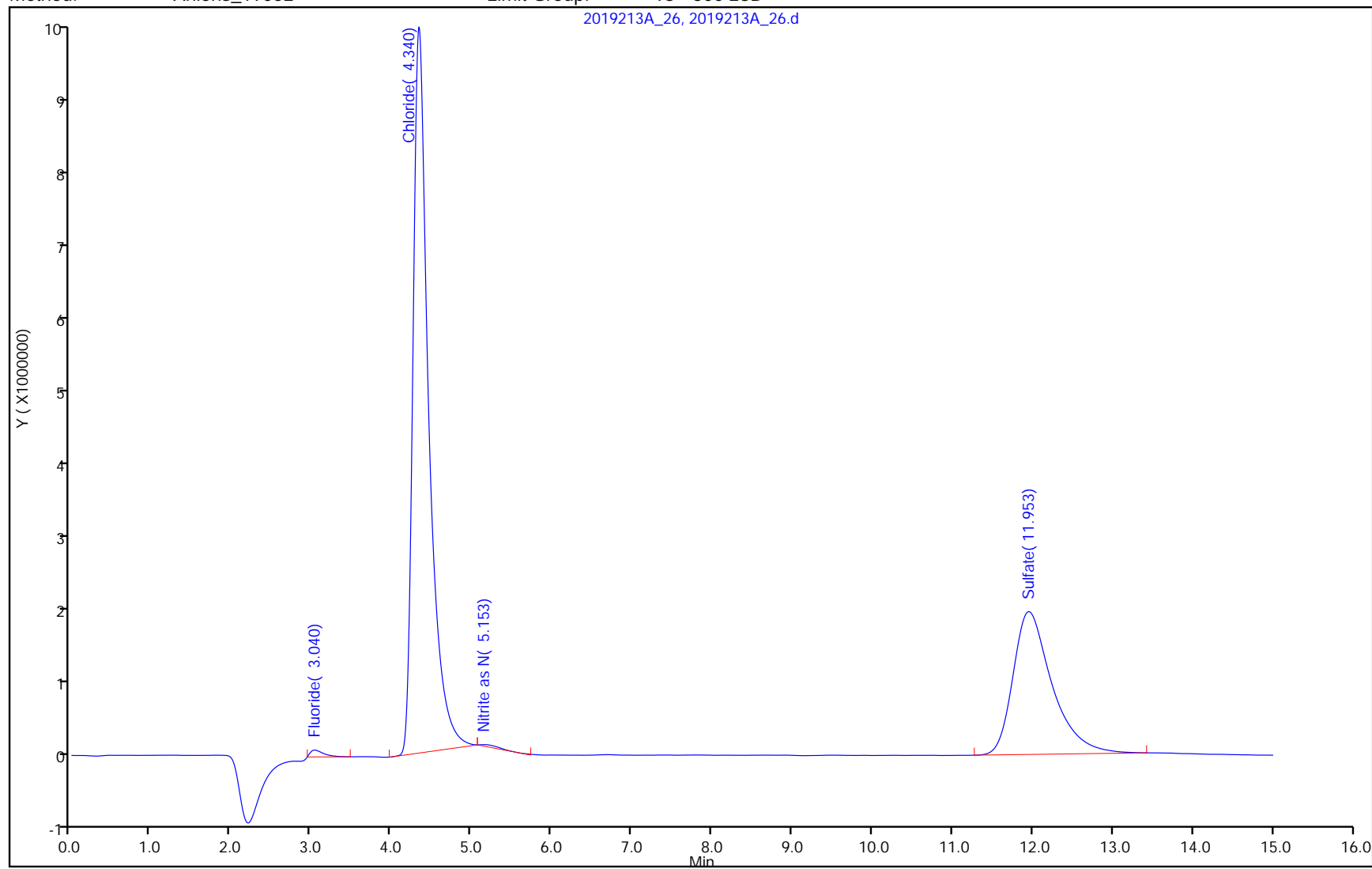
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 DU Lab Sample ID: 410-3144-3 DU
 Matrix: Water Lab File ID: 2019213A_29.d
 Analysis Method: 300.0 Date Collected: 06/02/2020 10:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1 (mL) Date Analyzed: 07/11/2020 07:06
 Con. Extract Vol.: _____ Dilution Factor: 500
 Injection Volume: 1 (uL) GC Column: IC06-AS14 ID: 4 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 21417 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
24959-67-9	Bromide	200	U	250	200	130
16887-00-6	Chloride	190	J D	200	150	100
14808-79-8	Sulfate	450	U	500	450	150

Report Date: 13-Jul-2020 12:40:44

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_29.d
 Lims ID: 410-3144-B-3 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 11-Jul-2020 07:06:00 ALS Bottle#: 0 Worklist Smp#: 29
 Injection Vol: 1.0 ul Dil. Factor: 500.0000
 Sample Info: 410-3144-b-3 DU
 Misc. Info.: 32076-5291
 Operator ID: Instrument ID: 19052
 Method: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\Anions_19052.m
 Limit Group: IC - 300 28D
 Last Update: 13-Jul-2020 12:40:42 Calib Date: 29-Apr-2020 14:16:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19052\20200519-2329.b\2012013C_7.d
 Column 1 : Det: det0
 Process Host: CTX1045

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.027				ND	
2 Chloride	4.320	4.323	-0.003	5571110		0.3793	
3 Nitrite as N		5.187				ND	
4 Bromide		6.660				ND	
5 Nitrate as N		7.770				ND	
6 Sulfate	11.957	11.917	0.040	1696250		0.2476	
S 7 Nitrate Nitrite as N		0.000				ND	

Report Date: 13-Jul-2020 12:40:44

Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19052\20200710-5291.b\2019213A_29.d

Injection Date: 11-Jul-2020 07:06:00

Instrument ID: 19052

Operator ID:

Lims ID: 410-3144-B-3 DU

Worklist Smp#: 29

Client ID:

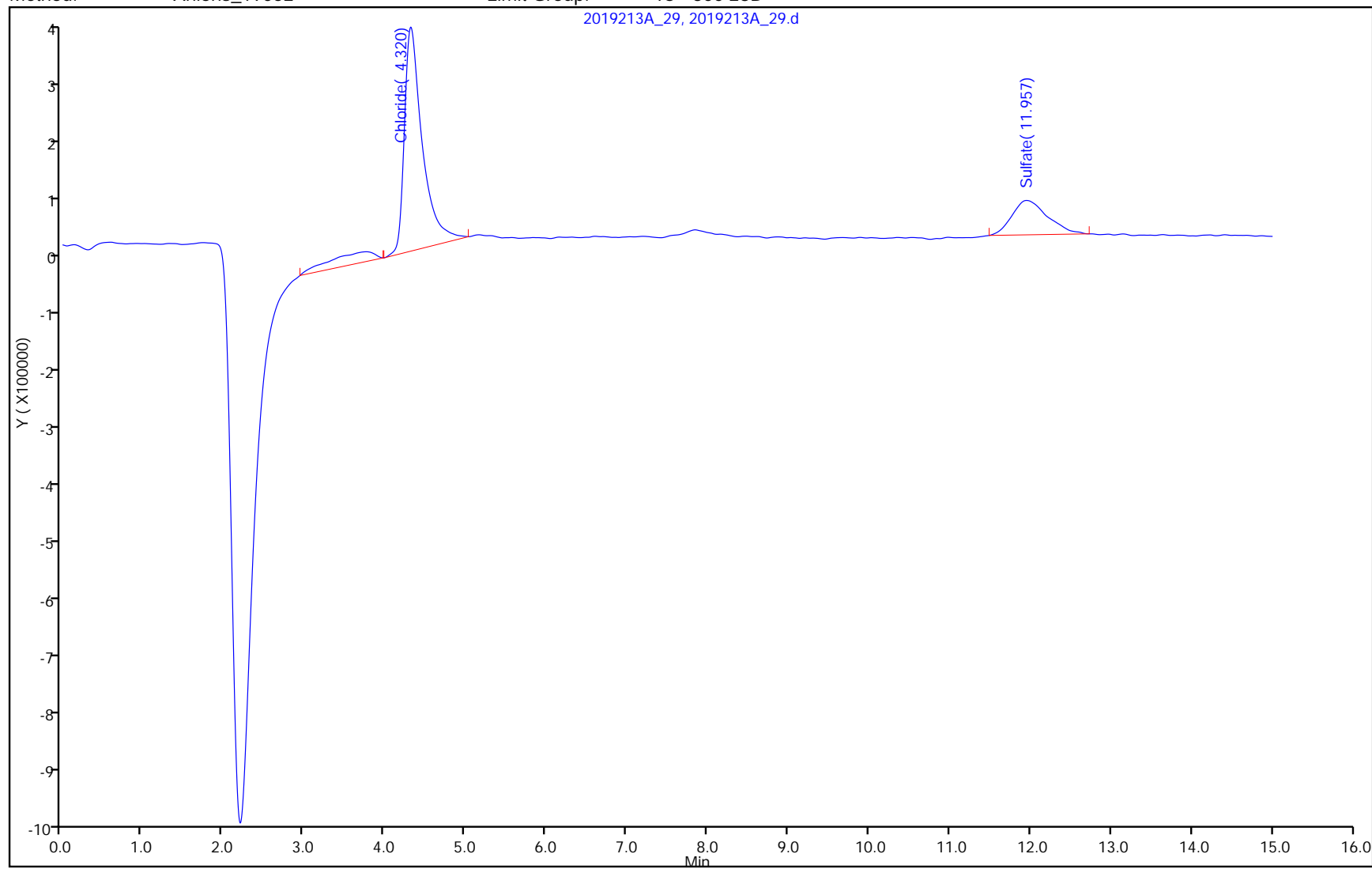
Injection Vol: 1.0 ul

Dil. Factor: 500.0000

ALS Bottle#: 0

Method: Anions_19052

Limit Group: IC - 300 28D



HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19052 Start Date: 04/29/2020 12:51Analysis Batch Number: 8732 End Date: 04/29/2020 15:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 410-8732/1		04/29/2020 12:51	1	2012013C_2.d	
IC 410-8732/2		04/29/2020 13:08	1	2012013C_3.d	
IC 410-8732/3		04/29/2020 13:25	1	2012013C_4.d	
IC 410-8732/4		04/29/2020 13:42	1	2012013C_5.d	
IC 410-8732/5		04/29/2020 13:59	1	2012013C_6.d	
IC 410-8732/6		04/29/2020 14:16	1	2012013C_7.d	
ICV 410-8732/7		04/29/2020 14:33	1	2012013C_8.d	
ICB 410-8732/8		04/29/2020 14:50	1	2012013C_9.d	
ZZZZZ		04/29/2020 15:07	1		
ZZZZZ		04/29/2020 15:24	1		

300.0

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 12115 Start Date: 06/13/2020 18:40

Analysis Batch Number: 12842 End Date: 06/14/2020 08:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 410-12842/1		06/13/2020 18:40	1	2016515_1.d	IC15-AS14 4 (mm)
CCB 410-12842/2		06/13/2020 18:58	1	2016515_2.d	IC15-AS14 4 (mm)
LCS 410-12842/3		06/13/2020 19:15	1	2016515_34.d	IC15-AS14 4 (mm)
MB 410-12842/4		06/13/2020 19:32	1	2016515_35.d	IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 19:49	5		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 20:06	500		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 20:23	5		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 20:40	500		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 20:57	5		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 21:14	500		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 21:32	5		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 21:49	5		IC15-AS14 4 (mm)
CCV 410-12842/13		06/13/2020 22:06	1	2016515_44.d	IC15-AS14 4 (mm)
CCB 410-12842/14		06/13/2020 22:23	1	2016515_45.d	IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 22:40	500		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 22:57	5		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 23:14	500		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 23:31	5		IC15-AS14 4 (mm)
ZZZZZ		06/13/2020 23:48	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 00:06	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 00:23	20		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 00:40	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 00:57	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 01:14	500		IC15-AS14 4 (mm)
CCV 410-12842/25		06/14/2020 01:31	1	2016515_56.d	IC15-AS14 4 (mm)
CCB 410-12842/26		06/14/2020 01:48	1	2016515_57.d	IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 02:05	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 02:22	50		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 02:40	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 02:57	50		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 03:14	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 03:31	50		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 03:48	5		IC15-AS14 4 (mm)
ZZZZZ		06/14/2020 04:05	500		IC15-AS14 4 (mm)
410-3144-1		06/14/2020 04:22	5	2016515_66.d	IC15-AS14 4 (mm)
410-3144-1		06/14/2020 04:39	50	2016515_67.d	IC15-AS14 4 (mm)
CCV 410-12842/37		06/14/2020 04:56	1	2016515_68.d	IC15-AS14 4 (mm)
CCB 410-12842/38		06/14/2020 05:14	1	2016515_69.d	IC15-AS14 4 (mm)
410-3144-2		06/14/2020 05:31	5	2016515_70.d	IC15-AS14 4 (mm)
410-3144-2		06/14/2020 05:48	50	2016515_71.d	IC15-AS14 4 (mm)
410-3144-3		06/14/2020 06:05	5	2016515_72.d	IC15-AS14 4 (mm)
410-3144-3		06/14/2020 06:22	50	2016515_73.d	IC15-AS14 4 (mm)
410-3144-4		06/14/2020 06:39	5	2016515_74.d	IC15-AS14 4 (mm)
410-3144-4		06/14/2020 06:56	50	2016515_75.d	IC15-AS14 4 (mm)
410-3144-5		06/14/2020 07:13	5	2016515_76.d	IC15-AS14 4 (mm)

300.0

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 12115 Start Date: 06/13/2020 18:40Analysis Batch Number: 12842 End Date: 06/14/2020 08:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
410-3144-5		06/14/2020 07:30	50	2016515_77.d	IC15-AS14 4 (mm)
CCV 410-12842/47		06/14/2020 07:48	1	2016515_78.d	IC15-AS14 4 (mm)
CCB 410-12842/48		06/14/2020 08:05	1	2016515_79.d	IC15-AS14 4 (mm)

300.0

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 12115 Start Date: 06/01/2020 13:02

Analysis Batch Number: 13072 End Date: 06/01/2020 15:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 410-13072/1		06/01/2020 13:02	1	2015315C_1.d	IC15-AS14 4 (mm)
IC 410-13072/2		06/01/2020 13:19	1	2015315C_2.d	IC15-AS14 4 (mm)
IC 410-13072/3		06/01/2020 13:36	1	2015315C_3.d	IC15-AS14 4 (mm)
IC 410-13072/4		06/01/2020 13:53	1	2015315C_4.d	IC15-AS14 4 (mm)
IC 410-13072/5		06/01/2020 14:10	1	2015315C_5.d	IC15-AS14 4 (mm)
IC 410-13072/6		06/01/2020 14:27	1	2015315C_6.d	IC15-AS14 4 (mm)
ICV 410-13072/7		06/01/2020 14:45	1		IC15-AS14 4 (mm)
ICB 410-13072/8		06/01/2020 15:02	1		IC15-AS14 4 (mm)
ZZZZZ		06/01/2020 15:19	1		IC15-AS14 4 (mm)
ZZZZZ		06/01/2020 15:36	1		IC15-AS14 4 (mm)

300.0

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.:

Instrument ID: 19052Start Date: 07/10/2020 23:09Analysis Batch Number: 21417End Date: 07/11/2020 10:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-21417/1		07/10/2020 23:09	1	2019213A_1.d	IC06-AS14 4 (mm)
CCB 410-21417/2		07/10/2020 23:26	1		IC06-AS14 4 (mm)
ZZZZZ		07/10/2020 23:43	5		IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 00:00	5		IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 00:17	5		IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 00:34	5		IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 00:51	5		IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 02:16	500		IC06-AS14 4 (mm)
CCV 410-21417/13		07/11/2020 02:33	1	2019213A_13.d	IC06-AS14 4 (mm)
CCB 410-21417/14		07/11/2020 02:50	1	2019213A_14.d	IC06-AS14 4 (mm)
410-3144-1		07/11/2020 03:08	5	2019213A_15.d	IC06-AS14 4 (mm)
410-3144-1		07/11/2020 03:25	500	2019213A_16.d	IC06-AS14 4 (mm)
410-3144-2		07/11/2020 03:42	5	2019213A_17.d	IC06-AS14 4 (mm)
410-3144-2		07/11/2020 03:59	500	2019213A_18.d	IC06-AS14 4 (mm)
LCS 410-21417/19		07/11/2020 04:16	1	2019213A_19.d	IC06-AS14 4 (mm)
MB 410-21417/20		07/11/2020 04:33	1	2019213A_20.d	IC06-AS14 4 (mm)
CCV 410-21417/21		07/11/2020 04:50	1	2019213A_21.d	IC06-AS14 4 (mm)
CCB 410-21417/22		07/11/2020 05:07	1	2019213A_22.d	IC06-AS14 4 (mm)
LCS 410-21417/23		07/11/2020 05:24	1	2019213A_23.d	IC06-AS14 4 (mm)
MB 410-21417/24		07/11/2020 05:41	1	2019213A_24.d	IC06-AS14 4 (mm)
410-3144-3		07/11/2020 05:58	5	2019213A_25.d	IC06-AS14 4 (mm)
410-3144-3 DU		07/11/2020 06:15	5	2019213A_26.d	IC06-AS14 4 (mm)
410-3144-3 MS		07/11/2020 06:32	5	2019213A_27.d	IC06-AS14 4 (mm)
410-3144-3		07/11/2020 06:49	500	2019213A_28.d	IC06-AS14 4 (mm)
410-3144-3 DU		07/11/2020 07:06	500	2019213A_29.d	IC06-AS14 4 (mm)
410-3144-3 MS		07/11/2020 07:23	500	2019213A_30.d	IC06-AS14 4 (mm)
410-3144-4		07/11/2020 07:40	5	2019213A_31.d	IC06-AS14 4 (mm)
410-3144-4		07/11/2020 07:57	500	2019213A_32.d	IC06-AS14 4 (mm)
CCV 410-21417/33		07/11/2020 08:14	1	2019213A_33.d	IC06-AS14 4 (mm)
CCB 410-21417/34		07/11/2020 08:31	1	2019213A_34.d	IC06-AS14 4 (mm)
410-3144-5		07/11/2020 08:48	5	2019213A_35.d	IC06-AS14 4 (mm)
410-3144-5		07/11/2020 09:05	500	2019213A_36.d	IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 09:22	500		IC06-AS14 4 (mm)
ZZZZZ		07/11/2020 09:39	500		IC06-AS14 4 (mm)
CCV 410-21417/39		07/11/2020 09:56	1	2019213A_39.d	IC06-AS14 4 (mm)
CCB 410-21417/40		07/11/2020 10:14	1	2019213A_40.d	IC06-AS14 4 (mm)

300.0

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19052Start Date: 07/14/2020 08:22Analysis Batch Number: 21962End Date: 07/14/2020 20:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-21962/1		07/14/2020 08:22	1		IC06-AS14 4 (mm)
CCB 410-21962/2		07/14/2020 08:39	1		IC06-AS14 4 (mm)
LCS 410-21962/3		07/14/2020 08:56	1	2019513A_3.d	IC06-AS14 4 (mm)
MB 410-21962/4		07/14/2020 09:13	1	2019513A_4.d	IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 09:30	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 09:47	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 10:04	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 10:21	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 10:38	500		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 10:55	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 11:12	500		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 11:29	50000		IC06-AS14 4 (mm)
CCV 410-21962/13		07/14/2020 11:46	1		IC06-AS14 4 (mm)
CCB 410-21962/14		07/14/2020 12:04	1		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 12:21	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 12:38	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 12:55	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 13:12	50		IC06-AS14 4 (mm)
410-3144-1		07/14/2020 13:29	50	2019513A_19.d	IC06-AS14 4 (mm)
410-3144-3		07/14/2020 13:46	20	2019513A_20.d	IC06-AS14 4 (mm)
410-3144-3 DU		07/14/2020 14:03	20	2019513A_21.d	IC06-AS14 4 (mm)
410-3144-3 MS		07/14/2020 14:20	20	2019513A_22.d	IC06-AS14 4 (mm)
410-3144-4		07/14/2020 14:37	20	2019513A_23.d	IC06-AS14 4 (mm)
CCV 410-21962/24		07/14/2020 14:54	1		IC06-AS14 4 (mm)
CCB 410-21962/25		07/14/2020 15:11	1		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 15:28	1		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 15:45	1		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 16:02	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 16:19	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 16:36	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 16:53	500		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 17:10	500		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 17:27	500		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 17:44	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 18:01	500		IC06-AS14 4 (mm)
CCV 410-21962/36		07/14/2020 18:18	1		IC06-AS14 4 (mm)
CCB 410-21962/37		07/14/2020 18:35	1		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 18:53	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 19:10	500		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 19:27	5		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 19:44	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 20:01	50		IC06-AS14 4 (mm)
ZZZZZ		07/14/2020 20:18	500		IC06-AS14 4 (mm)
CCV 410-21962/44		07/14/2020 20:35	1		IC06-AS14 4 (mm)
CCB 410-21962/45		07/14/2020 20:52	1		IC06-AS14 4 (mm)

300.0

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 12842 Batch Start Date: 06/13/20 18:40 Batch Analyst: Litwa, Kevin L

Batch Method: 300.0 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WC_IC_QC2 00036			
CCV 410-12842/1		300.0		0	7.5 mL			
CCB 410-12842/2		300.0		1 mL				
LCS 410-12842/3		300.0		0	7.5 mL			
MB 410-12842/4		300.0		1 mL				
CCV 410-12842/13		300.0		0	7.5 mL			
CCB 410-12842/14		300.0		1 mL				
CCV 410-12842/25		300.0		0	7.5 mL			
CCB 410-12842/26		300.0		1 mL				
410-3144-B-1	GWVA2-2023	300.0	T	1 mL				
410-3144-B-1	GWVA2-2023	300.0	T	1 mL				
CCV 410-12842/37		300.0		0	7.5 mL			
CCB 410-12842/38		300.0		1 mL				
410-3144-B-2	GWVA2-6023	300.0	T	1 mL				
410-3144-B-2	GWVA2-6023	300.0	T	1 mL				
410-3144-B-3	GWK015-2023	300.0	T	1 mL				
410-3144-B-3	GWK015-2023	300.0	T	1 mL				
410-3144-B-4	GWK016-2023	300.0	T	1 mL				
410-3144-B-4	GWK016-2023	300.0	T	1 mL				
410-3144-B-5	GWK003-2023	300.0	T	1 mL				
410-3144-B-5	GWK003-2023	300.0	T	1 mL				
CCV 410-12842/47		300.0		0	7.5 mL			
CCB 410-12842/48		300.0		1 mL				

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

300.0

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 12842 Batch Start Date: 06/13/20 18:40 Batch Analyst: Litwa, Kevin LBatch Method: 300.0 Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

300.0

Page 2 of 2

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 21417 Batch Start Date: 07/10/20 23:09 Batch Analyst: Wilson, Clinton M

Batch Method: 300.0 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC_IC_QC2 00082			
CCVRT 410-21417/1		300.0		1 mL		7.5 mL			
CCV 410-21417/13		300.0		1 mL		7.5 mL			
CCB 410-21417/14		300.0		1 mL					
410-3144-B-1	GWVA2-2023	300.0	T	1 mL					
410-3144-B-1	GWVA2-2023	300.0	T	1 mL					
410-3144-B-2	GWVA2-6023	300.0	T	1 mL					
410-3144-B-2	GWVA2-6023	300.0	T	1 mL					
LCS 410-21417/19		300.0		1 mL		7.5 mL			
MB 410-21417/20		300.0		1 mL					
CCV 410-21417/21		300.0		1 mL		7.5 mL			
CCB 410-21417/22		300.0		1 mL	1.0 mL				
LCS 410-21417/23		300.0		1 mL		7.5 mL			
MB 410-21417/24		300.0		1 mL					
410-3144-B-3	GWK015-2023	300.0	T	1 mL					
410-3144-B-3 DU	GWK015-2023	300.0	T	1 mL					
410-3144-B-3 MS	GWK015-2023	300.0	T	1 mL		0.5 mL			
410-3144-B-3	GWK015-2023	300.0	T	1 mL					
410-3144-B-3 DU	GWK015-2023	300.0	T	1 mL					
410-3144-B-3 MS	GWK015-2023	300.0	T	1 mL		2.5 mL			
410-3144-B-4	GWK016-2023	300.0	T	1 mL					
410-3144-B-4	GWK016-2023	300.0	T	1 mL					
CCV 410-21417/33		300.0		1 mL		7.5 mL			
CCB 410-21417/34		300.0		1 mL					
410-3144-B-5	GWK003-2023	300.0	T	1 mL					
410-3144-B-5	GWK003-2023	300.0	T	1 mL					
CCV 410-21417/39		300.0		1 mL		7.5 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

300.0

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 21417 Batch Start Date: 07/10/20 23:09 Batch Analyst: Wilson, Clinton M

Batch Method: 300.0 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC_IC_QC2 00082			
CCB 410-21417/40		300.0		1 mL					

Batch Notes	
Eluent 1 ID	174913

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

300.0

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 21962 Batch Start Date: 07/14/20 08:22 Batch Analyst: Desai, NiyatiBatch Method: 300.0 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC_IC_QC2 00086			
LCS 410-21962/3		300.0		1 mL		7.5 mL			
MB 410-21962/4		300.0		1 mL					
410-3144-B-1	GWVA2-2023	300.0	T	1 mL					
410-3144-B-3	GWK015-2023	300.0	T	1 mL					
410-3144-B-3 DU	GWK015-2023	300.0	T	1 mL					
410-3144-B-3 MS	GWK015-2023	300.0		1 mL	1.0 mL	1 mL			
410-3144-B-4	GWK016-2023	300.0	T	1 mL					

Batch Notes

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Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

300.0

Page 1 of 1

METALS

COVER PAGE
METALSLab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

Project: Kirtland AFB

Client Sample ID	Lab Sample ID
<u>GWVA2-2023</u>	<u>410-3144-1</u>
<u>GWVA2-6023</u>	<u>410-3144-2</u>
<u>GWK015-2023</u>	<u>410-3144-3</u>
<u>GWK016-2023</u>	<u>410-3144-4</u>
<u>GWK003-2023</u>	<u>410-3144-5</u>

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.0029	0.0020	0.0016	0.00068	mg/L			1	6020A
Lead	0.00027	0.00050	0.00025	0.000071	mg/L	J		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Calcium	40	0.20	0.15	0.096	mg/L			1	6010C
Magnesium	8.0	0.10	0.075	0.040	mg/L			1	6010C
Potassium	4.1	0.50	0.38	0.20	mg/L			1	6010C
Sodium	24	1.0	0.50	0.24	mg/L			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - DISSOLVED

Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	100	210	100	41	ug/L	U		1	6010C
Manganese	5.2	10	5.2	3.1	ug/L	U		1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: GWVA2-6023 Lab Sample ID: 410-3144-2
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.0028	0.0020	0.0016	0.00068	mg/L			1	6020A
Lead	0.00023	0.00050	0.00025	0.000071	mg/L	J		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GWVA2-6023 Lab Sample ID: 410-3144-2
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Calcium	40	0.20	0.15	0.096	mg/L			1	6010C
Magnesium	8.1	0.10	0.075	0.040	mg/L			1	6010C
Potassium	4.0	0.50	0.38	0.20	mg/L			1	6010C
Sodium	23	1.0	0.50	0.24	mg/L			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - DISSOLVED

Client Sample ID: GWVA2-6023 Lab Sample ID: 410-3144-2
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	100	210	100	41	ug/L	U		1	6010C
Manganese	5.2	10	5.2	3.1	ug/L	U		1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:00
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.017	0.0020	0.0016	0.00068	mg/L			1	6020A
Lead	0.00011	0.00050	0.00025	0.000071	mg/L	J		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:00
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Calcium	32	0.20	0.15	0.096	mg/L			1	6010C
Magnesium	8.3	0.10	0.075	0.040	mg/L			1	6010C
Potassium	7.2	0.50	0.38	0.20	mg/L			1	6010C
Sodium	40	1.0	0.50	0.24	mg/L			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - DISSOLVED

Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:00
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	100	210	100	41	ug/L	U		1	6010C
Manganese	25	10	5.2	3.1	ug/L			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: GWK016-2023 Lab Sample ID: 410-3144-4
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 09:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.024	0.0020	0.0016	0.00068	mg/L			1	6020A
Lead	0.0037	0.00050	0.00025	0.000071	mg/L			1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GWK016-2023 Lab Sample ID: 410-3144-4
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 09:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Calcium	50	0.20	0.15	0.096	mg/L			1	6010C
Magnesium	5.9	0.10	0.075	0.040	mg/L			1	6010C
Potassium	4.0	0.50	0.38	0.20	mg/L			1	6010C
Sodium	31	1.0	0.50	0.24	mg/L			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - DISSOLVED

Client Sample ID: GWK016-2023 Lab Sample ID: 410-3144-4
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 09:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	100	210	100	41	ug/L	U		1	6010C
Manganese	6.4	10	5.2	3.1	ug/L	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: GWK003-2023 Lab Sample ID: 410-3144-5
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:40
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Arsenic	0.00095	0.0020	0.0016	0.00068	mg/L	J		1	6020A
Lead	0.00025	0.00050	0.00025	0.000071	mg/L	U		1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GWK003-2023 Lab Sample ID: 410-3144-5
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:40
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Calcium	43	0.20	0.15	0.096	mg/L			1	6010C
Magnesium	5.9	0.10	0.075	0.040	mg/L			1	6010C
Potassium	2.4	0.50	0.38	0.20	mg/L			1	6010C
Sodium	23	1.0	0.50	0.24	mg/L			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS - DISSOLVED

Client Sample ID: GWK003-2023 Lab Sample ID: 410-3144-5
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:40
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Iron	100	210	100	41	ug/L	U		1	6010C
Manganese	5.2	10	5.2	3.1	ug/L	U		1	6010C

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00024 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00042

Analyte	ICV 410-11232/6 06/07/2020 16:54				CCV 410-11232/11 06/07/2020 17:11				CCV 410-11232/17 06/07/2020 17:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	29200		30000	97	24500		25000	98	25200		25000	101
Magnesium	29500		30000	98	24900		25000	100	25700		25000	103
Potassium	29600		30000	99	24800		25000	99	25600		25000	102
Sodium	29000		30000	97	24700		25000	99	25400		25000	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00024 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00042

Analyte	CCV 410-11232/29 06/07/2020 18:10				CCV 410-11232/41 06/07/2020 18:49				CCV 410-11232/50 06/07/2020 19:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	25200		25000	101	25500		25000	102	25400		25000	102
Magnesium	25900		25000	104	26300		25000	105	26300		25000	105
Potassium	25400		25000	102	25700		25000	103	25500		25000	102
Sodium	25700		25000	103	26100		25000	104	25600		25000	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L
 CCV Source: MT_IA_CCV_00043

Analyte	ICV 410-12396/6 06/11/2020 15:45				CCV 410-12396/11 06/11/2020 16:02				CCV 410-12396/17 06/11/2020 16:22			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	30200		30000	101	26000		25000	104	25800		25000	103
Magnesium	30500		30000	102	26300		25000	105	26300		25000	105
Potassium	30500		30000	102	26500		25000	106	26700		25000	107
Sodium	30100		30000	100	26700		25000	107	26700		25000	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L
 CCV Source: MT_IA_CCV_00043

Analyte	CCV 410-12396/29 06/11/2020 17:03				CCV 410-12396/34 06/11/2020 17:19							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	25800		25000	103	25300		25000	101				
Magnesium	26400		25000	105	25900		25000	103				
Potassium	26600		25000	107	26300		25000	105				
Sodium	26900		25000	108	26400		25000	105				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00043

Analyte	ICV 410-12678/6 06/12/2020 09:02				ICV 410-12678/7 06/12/2020 09:05				CCV 410-12678/12 06/12/2020 09:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	29000		30000	97	28900		30000	96	24600		25000	98
Manganese	581		600	97	580		600	97	491		500	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00043

Analyte	CCV 410-12678/18 06/12/2020 09:41				CCV 410-12678/30 06/12/2020 10:23				CCV 410-12678/42 06/12/2020 11:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	24700		25000	99	24200		25000	97	24200		25000	97
Manganese	499		500	100	492		500	98	497		500	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L
 CCV Source: MT_IA_CCV_00043

Analyte	CCV 410-12678/51 06/12/2020 11:30											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	24000		25000	96								
Manganese	484		500	97								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00042

Analyte	ICV 410-11592/6 06/09/2020 14:19				CCV 410-11592/11 06/09/2020 14:36				CCV 410-11592/18 06/09/2020 15:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	29000		30000	97	24400		25000	97	24600		25000	98
Manganese	575		600	96	498		500	100	504		500	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00042

Analyte	CCV 410-11592/30 06/09/2020 15:42				CCV 410-11592/42 06/09/2020 16:23				CCV 410-11592/51 06/09/2020 16:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	24500		25000	98	24200		25000	97	24100		25000	96
Manganese	501		500	100	502		500	100	494		500	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L
 CCV Source: MT_IA_CCV_00043

Analyte	ICV 410-12755/6 06/12/2020 10:15				ICV 410-12755/7 06/12/2020 10:18				CCV 410-12755/12 06/12/2020 10:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	29100		30000	97	28800		30000	96	24900		25000	99
Manganese	588		600	98	587		600	98	494		500	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_IA_ICV_00023 Concentration Units: ug/L

CCV Source: MT_IA_CCV_00043

Analyte	CCV 410-12755/18 06/12/2020 10:55				CCV 410-12755/30 06/12/2020 16:10				CCV 410-12755/42 06/12/2020 16:49			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	24900		25000	99	23400		25000	94	23400		25000	93
Manganese	486		500	97	468		500	94	470		500	94

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

ICV Source: MT_MD_ICV_00013 Concentration Units: ug/L

CCV Source: MT_MD_CCV_00022

Analyte	ICV 410-11423/5 06/08/2020 11:44				CCV 410-11423/13 06/08/2020 11:59				CCV 410-11423/25 06/08/2020 12:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	301		300	100	311		298	104	303		298	102
Lead	29.7		30.1	99	29.8		30.0	99	30.0		30.0	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 ICV Source: MT_MD_ICV_00013 Concentration Units: ug/L
 CCV Source: MT_MD_CCV_00022

Analyte	CCV 410-11423/33 06/08/2020 12:36											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	300		298	101								
Lead	30.0		30.0	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Method: 6010C Instrument ID: T72 - 16417

Lab Sample ID: CRI 410-11232/8 Concentration Units: ug/L

CRQL Check Standard Source: MT_IA_LLC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	200	196	J	98	80-120
Magnesium	100	106		106	80-120
Potassium	300	337		112	80-120
Sodium	1000	1040		104	80-120

Lab Sample ID: CRI 410-12396/8 Concentration Units: ug/L

CRQL Check Standard Source: MT_IA_LLC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	200	202		101	80-120
Magnesium	100	110		110	80-120
Potassium	300	291	J	97	80-120
Sodium	1000	1090		109	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Method: 6010C Instrument ID: T74 - 23745
 Lab Sample ID: CRI 410-12678/9 Concentration Units: ug/L
 CRQL Check Standard Source: MT_IA_LLC_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	210		105	80-120
Manganese	10.0	10.4		104	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Method: 6010C Instrument ID: T75 - 27278

Lab Sample ID: CRI 410-11592/8 Concentration Units: ug/L

CRQL Check Standard Source: MT_IA_LLC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	197	J	99	80-120
Manganese	10.0	10.5		105	80-120

Lab Sample ID: CRI 410-12755/9 Concentration Units: ug/L

CRQL Check Standard Source: MT_IA_LLC_00015

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	203		102	80-120
Manganese	10.0	10.3		103	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Method: 6020A Instrument ID: E07 - 27813
 Lab Sample ID: CRI 410-11423/7 Concentration Units: ug/L
 CRQL Check Standard Source: MT_MD_LLC_00012

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	2.00	2.09		105	80-120
Lead	0.500	0.469	J	94	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 410-11232/7 06/07/2020 16:57		CCB 410-11232/12 06/07/2020 17:14		CCB 410-11232/18 06/07/2020 17:35		CCB 410-11232/30 06/07/2020 18:13	
		Found	C	Found	C	Found	C	Found	C
Calcium	200	150	U	150	U	150	U	150	U
Magnesium	100	75	U	75	U	75	U	75	U
Potassium	300	240	U	240	U	240	U	240	U
Sodium	1000	500	U	500	U	500	U	500	U

Italicized analytes were not requested for this sequence.

3-IN
 INSTRUMENT BLANKS
 METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 410-11232/42 06/07/2020 18:52		CCB 410-11232/51 06/07/2020 19:22		Found	C	Found	C
		Found	C	Found	C				
Calcium	200	150	U	150	U				
Magnesium	100	75	U	75	U				
Potassium	300	240	U	240	U				
Sodium	1000	500	U	500	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 410-12396/7 06/11/2020 15:48		CCB 410-12396/12 06/11/2020 16:05		CCB 410-12396/18 06/11/2020 16:25		CCB 410-12396/30 06/11/2020 17:06	
		Found	C	Found	C	Found	C	Found	C
Calcium	200	150	U	150	U	150	U	150	U
Magnesium	100	75	U	75	U	75	U	75	U
Potassium	300	240	U	240	U	240	U	240	U
Sodium	1000	500	U	500	U	500	U	500	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 410-12396/35 06/11/2020 17:22							
		Found	C	Found	C	Found	C	Found	C
Calcium	200	150	U						
Magnesium	100	75	U						
Potassium	300	240	U						
Sodium	1000	500	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 410-12678/8 06/12/2020 09:08		CCB 410-12678/13 06/12/2020 09:24		CCB 410-12678/19 06/12/2020 09:44		CCB 410-12678/31 06/12/2020 10:26	
		Found	C	Found	C	Found	C	Found	C
Iron	200	100	U	100	U	100	U	100	U
Manganese	10	5.0	U	5.0	U	5.0	U	5.0	U

Italicized analytes were not requested for this sequence.

3-IN
 INSTRUMENT BLANKS
 METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 410-12678/43 06/12/2020 11:05		CCB 410-12678/52 06/12/2020 11:33		Found	C	Found	C
		Found	C	Found	C				
Iron	200	100	U	100	U				
Manganese	10	5.0	U	5.0	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 410-11592/7 06/09/2020 14:22		CCB 410-11592/12 06/09/2020 14:39		CCB 410-11592/19 06/09/2020 15:05		CCB 410-11592/31 06/09/2020 15:46	
		Found	C	Found	C	Found	C	Found	C
Iron	200	100	U	100	U	100	U	100	U
Manganese	10	5.0	U	5.0	U	5.0	U	5.0	U

Italicized analytes were not requested for this sequence.

3-IN
 INSTRUMENT BLANKS
 METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 410-11592/43 06/09/2020 16:26		CCB 410-11592/52 06/09/2020 16:56		Found	C	Found	C
		Found	C	Found	C				
Iron	200	100	U	100	U				
Manganese	10	5.0	U	5.0	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 410-12755/8 06/12/2020 10:21		CCB 410-12755/13 06/12/2020 10:37		CCB 410-12755/19 06/12/2020 10:58		CCB 410-12755/31 06/12/2020 16:13	
		Found	C	Found	C	Found	C	Found	C
Iron	200	100	U	100	U	100	U	100	U
Manganese	10	5.0	U	5.0	U	5.0	U	5.0	U

Italicized analytes were not requested for this sequence.

3-IN
 INSTRUMENT BLANKS
 METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 410-12755/43 06/12/2020 16:52							
		Found	C	Found	C	Found	C	Found	C
Iron	200	100	U						
Manganese	10	5.0	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 410-11423/6 06/08/2020 11:46		CCB 410-11423/14 06/08/2020 12:01		CCB 410-11423/26 06/08/2020 12:23		CCB 410-11423/34 06/08/2020 12:38	
		Found	C	Found	C	Found	C	Found	C
Arsenic	2.0	1.6	U	1.6	U	1.6	U	1.6	U
Lead	0.50	0.25	U	0.25	U	0.25	U	0.25	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Concentration Units: mg/L Lab Sample ID: MB 410-10573/1-A
 Instrument Code: T72 - 16417 Batch No.: 11232

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	0.15	U		6010C_DOD5
7439-95-4	Magnesium	0.075	U		6010C_DOD5
7440-09-7	Potassium	0.38	U		6010C_DOD5
7440-23-5	Sodium	0.50	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Concentration Units: ug/L Lab Sample ID: MB 410-11479/1-A
 Instrument Code: T75 - 27278 Batch No.: 11592

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	100	U		6010C_DOD5
7439-96-5	Manganese	5.2	U		6010C_DOD5

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Concentration Units: mg/L Lab Sample ID: MB 410-10582/1-A
 Instrument Code: T72 - 16417 Batch No.: 12396

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	0.15	U		6010C_DOD5
7439-95-4	Magnesium	0.075	U		6010C_DOD5
7440-09-7	Potassium	0.38	U		6010C_DOD5
7440-23-5	Sodium	0.50	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Concentration Units: ug/L Lab Sample ID: MB 410-11456/1-A
 Instrument Code: T74 - 23745 Batch No.: 12678

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	100	U		6010C_DOD5
7439-96-5	Manganese	5.2	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Concentration Units: ug/L Lab Sample ID: MB 410-11136/1-A
 Instrument Code: T75 - 27278 Batch No.: 12755

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	100	U		6010C_DOD5
7439-96-5	Manganese	5.2	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1
 SDG No.: _____
 Concentration Units: mg/L Lab Sample ID: MB 410-10576/1-A
 Instrument Code: E07 - 27813 Batch No.: 11423

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.0016	U		6020A_DOD5
7439-92-1	Lead	0.00025	U		6020A_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSA 410-11232/9Instrument ID: T72 - 16417Lab File ID: T2015901T72.ascICS Source: MT_IA_ICSA_00015Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Calcium	505000	511500	101
Magnesium	501000	497900	99
Potassium		155	
Sodium		50.4	
Aluminum	501000	493700	99
Antimony		5.40	
Arsenic		12.4	
Barium		2.00	
Beryllium		-0.0100	
Boron		-4.40	
Cadmium		0.400	
Chromium		1.60	
Cobalt		0.800	
Copper		8.50	
Iron	201000	201400	100
Lead		2.20	
Lithium		-5.70	
Manganese		-0.190	
Molybdenum		-9.80	
Nickel		12.5	
Phosphorus		-32.5	
Selenium		7.80	
Silicon		22.8	
Silver		-9.70	
Strontium		0.800	
Sulfur		-94.3	
Thallium		-12.5	
Thorium		-94.9	
Tin		12.8	
Titanium		-0.500	
Vanadium		-2.90	
W		9.20	
Zinc		20.0	
Zirconium		6.30	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSAB 410-11232/10Instrument ID: T72 - 16417Lab File ID: T2015901T72.ascICS Source: MT_IA_ICSAB_00016Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Calcium	505000	499400	99
Magnesium	501000	489400	98
Potassium		134	
Sodium		53.5	
Aluminum	501000	487100	97
Antimony	599	604	101
Arsenic	100	94.2	94
Barium	500	505	101
Beryllium	500	491	98
Boron		-5.10	
Cadmium	1000	886	89
Chromium	500	480	96
Cobalt	500	446	89
Copper	500	539	108
Iron	201000	198400	99
Lead	550	483	88
Lithium		-10.2	
Manganese	500	480	96
Molybdenum		-7.70	
Nickel	1000	882	88
Phosphorus		-27.7	
Selenium	549	485	88
Silicon		5.18	
Silver	200	204	102
Strontium		0.800	
Sulfur		-80.3	
Thorium		-90.6	
Tin		4.80	
Titanium		-0.100	
Vanadium	500	506	101
W		11.2	
Zinc	1000	958	96
Zirconium		6.40	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSA 410-12396/9Instrument ID: T72 - 16417Lab File ID: T2016301T72.ascICS Source: MT_IA_ICSA_00017Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Calcium	505000	511800	101
Magnesium	501000	503400	100
Potassium		155	
Sodium		56.5	
<i>Aluminum</i>	<i>501000</i>	<i>486300</i>	<i>97</i>
<i>Antimony</i>		<i>-0.300</i>	
<i>Arsenic</i>		<i>15.8</i>	
<i>Barium</i>		<i>1.90</i>	
<i>Beryllium</i>		<i>0.0000</i>	
<i>Boron</i>		<i>-6.50</i>	
<i>Cadmium</i>		<i>0.900</i>	
<i>Chromium</i>		<i>1.60</i>	
<i>Cobalt</i>		<i>-0.800</i>	
<i>Copper</i>		<i>6.00</i>	
<i>Iron</i>	<i>201000</i>	<i>200900</i>	<i>100</i>
<i>Lead</i>		<i>1.30</i>	
<i>Lithium</i>		<i>-5.60</i>	
<i>Manganese</i>		<i>-0.520</i>	
<i>Molybdenum</i>		<i>-7.80</i>	
<i>Nickel</i>		<i>12.6</i>	
<i>Phosphorus</i>		<i>-28.6</i>	
<i>Selenium</i>		<i>2.70</i>	
<i>Silicon</i>		<i>17.5</i>	
<i>Silver</i>		<i>-5.80</i>	
<i>Strontium</i>		<i>0.600</i>	
<i>Sulfur</i>		<i>-63.3</i>	
<i>Thallium</i>		<i>-24.2</i>	
<i>Thorium</i>		<i>-95.1</i>	
<i>Tin</i>		<i>17.0</i>	
<i>Titanium</i>		<i>-0.200</i>	
<i>Vanadium</i>		<i>-2.40</i>	
<i>W</i>		<i>8.70</i>	
<i>Zinc</i>		<i>18.3</i>	
<i>Zirconium</i>		<i>10.6</i>	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSAB 410-12396/10Instrument ID: T72 - 16417Lab File ID: T2016301T72.ascICS Source: MT_IA_ICSAB_00016Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Calcium	505000	529100	105
Magnesium	501000	514900	103
Potassium		96.3	
Sodium		63.1	
Aluminum	501000	500100	100
Antimony	599	613	102
Arsenic	100	109	109
Barium	500	522	104
Beryllium	500	513	103
Boron		-6.70	
Cadmium	1000	913	91
Chromium	500	494	99
Cobalt	500	460	92
Copper	500	556	111
Iron	201000	207000	103
Lead	550	495	90
Lithium		-2.00	
Manganese	500	492	99
Molybdenum		-7.90	
Nickel	1000	900	90
Phosphorus		-28.3	
Selenium	549	534	97
Silicon		11.5	
Silver	200	211	106
Strontium		0.600	
Sulfur		-69.6	
Thorium		-132	
Tin		16.5	
Titanium		0.100	
Vanadium	500	528	106
W		9.90	
Zinc	1000	983	98
Zirconium		11.0	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSA 410-12678/10Instrument ID: T74 - 23745Lab File ID: T2016401T74.ascICS Source: MT_IA_ICSA_00017Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Iron	201000	201800	100
Manganese		0.290	
<i>Aluminum</i>	<i>501000</i>	<i>504100</i>	<i>101</i>
<i>Antimony</i>		<i>2.30</i>	
<i>Arsenic</i>		<i>19.5</i>	
<i>Barium</i>		<i>2.00</i>	
<i>Beryllium</i>		<i>-0.250</i>	
<i>Boron</i>		<i>-3.60</i>	
<i>Cadmium</i>		<i>2.30</i>	
<i>Calcium</i>	<i>505000</i>	<i>503600</i>	<i>100</i>
<i>Chromium</i>		<i>-2.50</i>	
<i>Cobalt</i>		<i>3.20</i>	
<i>Copper</i>		<i>-1.40</i>	
<i>Lead</i>		<i>-2.60</i>	
<i>Lithium</i>		<i>9.50</i>	
<i>Magnesium</i>	<i>501000</i>	<i>530900</i>	<i>106</i>
<i>Molybdenum</i>		<i>-1.00</i>	
<i>Nickel</i>		<i>-0.500</i>	
<i>Phosphorus</i>		<i>1.40</i>	
<i>Potassium</i>		<i>-104</i>	
<i>Selenium</i>		<i>3.90</i>	
<i>Silicon</i>		<i>36.5</i>	
<i>Silver</i>		<i>0.200</i>	
<i>Sodium</i>		<i>73.6</i>	
<i>Strontium</i>		<i>-8.80</i>	
<i>Sulfur</i>		<i>-99.8</i>	
<i>Thallium</i>		<i>18.9</i>	
<i>Thorium</i>		<i>122</i>	
<i>Tin</i>		<i>-10.0</i>	
<i>Titanium</i>		<i>-3.20</i>	
<i>Vanadium</i>		<i>-1.60</i>	
<i>W</i>		<i>2.10</i>	
<i>Zinc</i>		<i>12.7</i>	
<i>Zirconium</i>		<i>6.20</i>	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSAB 410-12678/11Instrument ID: T74 - 23745Lab File ID: T2016401T74.ascICS Source: MT_IA_ICSAB_00016Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Iron	201000	206100	102
Manganese	500	475	95
Aluminum	501000	522000	104
Antimony	599	633	106
Arsenic	100	98.8	99
Barium	500	507	102
Beryllium	500	494	99
Boron		-4.30	
Cadmium	1000	923	92
Calcium	505000	514700	102
Chromium	500	487	97
Cobalt	500	465	93
Copper	500	543	109
Lead	550	499	91
Lithium		10.3	
Magnesium	501000	535700	107
Molybdenum		-2.00	
Nickel	1000	900	90
Phosphorus		-14.1	
Potassium		-184	
Selenium	549	526	96
Silicon		-0.750	
Silver	200	212	106
Sodium		94.2	
Strontium		-9.00	
Sulfur		-151	
Thallium	100	100	100
Thorium		103	
Tin		1.20	
Titanium		-2.40	
Vanadium	500	510	102
W		-0.900	
Zinc	1000	1004	100
Zirconium		5.60	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSA 410-11592/9Instrument ID: T75 - 27278Lab File ID: T2016101T75.ascICS Source: MT_IA_ICSA_00015Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Iron	201000	193600	96
Manganese		1.15	
Aluminum	501000	493100	98
Antimony		4.10	
Arsenic		9.20	
Barium		2.20	
Beryllium		-0.250	
Boron		-47.6	
Cadmium		-1.20	
Calcium	505000	507500	100
Chromium		2.10	
Cobalt		0.400	
Copper		-4.40	
Lead		-5.90	
Lithium		10.0	
Magnesium	501000	464600	93
Molybdenum		0.900	
Nickel		1.50	
Phosphorus		7.20	
Potassium		-38.4	
Selenium		3.60	
Silicon		17.5	
Silver		1.30	
Sodium		64.7	
Strontium		4.80	
Sulfur		-13.8	
Thallium		6.10	
Thorium		152	
Tin		6.90	
Titanium		-7.80	
Vanadium		-4.00	
W		1.50	
Zinc		-17.1	
Zirconium		-6.80	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSAB 410-11592/10Instrument ID: T75 - 27278Lab File ID: T2016101T75.ascICS Source: MT_IA_ICSAB_00016Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Iron	201000	191900	95
Manganese	500	485	97
<i>Aluminum</i>	<i>501000</i>	<i>489800</i>	<i>98</i>
<i>Antimony</i>	<i>599</i>	<i>629</i>	<i>105</i>
<i>Arsenic</i>	<i>100</i>	<i>108</i>	<i>108</i>
<i>Barium</i>	<i>500</i>	<i>515</i>	<i>103</i>
<i>Beryllium</i>	<i>500</i>	<i>496</i>	<i>99</i>
<i>Boron</i>		<i>-50.6</i>	
<i>Cadmium</i>	<i>1000</i>	<i>920</i>	<i>92</i>
<i>Calcium</i>	<i>505000</i>	<i>507300</i>	<i>100</i>
<i>Chromium</i>	<i>500</i>	<i>482</i>	<i>97</i>
<i>Cobalt</i>	<i>500</i>	<i>458</i>	<i>92</i>
<i>Copper</i>	<i>500</i>	<i>534</i>	<i>107</i>
<i>Lead</i>	<i>550</i>	<i>495</i>	<i>90</i>
<i>Lithium</i>		<i>9.00</i>	
<i>Magnesium</i>	<i>501000</i>	<i>462700</i>	<i>92</i>
<i>Molybdenum</i>		<i>1.60</i>	
<i>Nickel</i>	<i>1000</i>	<i>908</i>	<i>91</i>
<i>Phosphorus</i>		<i>5.40</i>	
<i>Potassium</i>		<i>11.5</i>	
<i>Selenium</i>	<i>549</i>	<i>510</i>	<i>93</i>
<i>Silicon</i>		<i>13.0</i>	
<i>Silver</i>	<i>200</i>	<i>218</i>	<i>109</i>
<i>Sodium</i>		<i>61.3</i>	
<i>Strontium</i>		<i>4.70</i>	
<i>Sulfur</i>		<i>-17.6</i>	
<i>Thallium</i>	<i>100</i>	<i>87.6</i>	<i>88</i>
<i>Thorium</i>		<i>128</i>	
<i>Tin</i>		<i>9.80</i>	
<i>Titanium</i>		<i>-7.40</i>	
<i>Vanadium</i>	<i>500</i>	<i>506</i>	<i>101</i>
<i>W</i>		<i>0.400</i>	
<i>Zinc</i>	<i>1000</i>	<i>959</i>	<i>96</i>
<i>Zirconium</i>		<i>-5.00</i>	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSA 410-12755/10Instrument ID: T75 - 27278Lab File ID: T2016404T75.ascICS Source: MT_IA_ICSA_00017Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Iron	201000	187000	93
Manganese		0.890	
Aluminum	501000	476100	95
Antimony		-3.50	
Arsenic		9.90	
Barium		2.00	
Beryllium		-0.300	
Boron		-29.9	
Cadmium		-0.200	
Calcium	505000	482900	96
Chromium		1.80	
Cobalt		1.20	
Copper		-5.10	
Lead		-4.10	
Lithium		11.7	
Magnesium	501000	442500	88
Molybdenum		1.70	
Nickel		2.80	
Phosphorus		5.40	
Potassium		9.80	
Selenium		9.40	
Silicon		19.8	
Silver		1.10	
Sodium		57.2	
Strontium		4.40	
Sulfur		-7.00	
Thallium		10.7	
Thorium		125	
Tin		6.10	
Titanium		-7.60	
Vanadium		-4.20	
W		0.800	
Zinc		-17.3	
Zirconium		-4.60	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSAB 410-12755/11Instrument ID: T75 - 27278Lab File ID: T2016404T75.ascICS Source: MT_IA_ICSAB_00016Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Iron	201000	193300	96
Manganese	500	483	97
Aluminum	501000	490700	98
Antimony	599	622	104
Arsenic	100	107	107
Barium	500	506	101
Beryllium	500	490	98
Boron		-34.3	
Cadmium	1000	904	90
Calcium	505000	500400	99
Chromium	500	477	95
Cobalt	500	456	91
Copper	500	528	106
Lead	550	501	91
Lithium		10.8	
Magnesium	501000	459600	92
Molybdenum		1.80	
Nickel	1000	904	90
Phosphorus		10.0	
Potassium		6.90	
Selenium	549	506	92
Silicon		15.4	
Silver	200	213	107
Sodium		69.2	
Strontium		4.50	
Sulfur		-13.1	
Thallium	100	90.2	90
Thorium		139	
Tin		8.00	
Titanium		-7.60	
Vanadium	500	501	100
W		-1.00	
Zinc	1000	938	94
Zirconium		-6.80	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSA 410-11423/8Instrument ID: E07 - 27813Lab File ID: 014ICSA.dICS Source: MT_MD_ICSA_00009Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Arsenic	0.300	0.425	
Lead	0.400	0.0840	
<i>Aluminum</i>	<i>100000</i>	<i>98145</i>	<i>98</i>
<i>Antimony</i>	<i>0.400</i>	<i>0.636</i>	
<i>Barium</i>	<i>0.800</i>	<i>1.10</i>	
<i>Beryllium</i>		<i>0.0270</i>	
<i>Cadmium</i>		<i>0.567</i>	
<i>Calcium</i>	<i>300000</i>	<i>296167</i>	<i>99</i>
<i>Chromium</i>	<i>0.700</i>	<i>0.876</i>	
<i>Cobalt</i>	<i>1.00</i>	<i>1.21</i>	
<i>Copper</i>	<i>0.600</i>	<i>0.641</i>	
<i>Iron</i>	<i>250000</i>	<i>239880</i>	<i>96</i>
<i>Magnesium</i>	<i>100000</i>	<i>91842</i>	<i>92</i>
<i>Manganese</i>	<i>2.80</i>	<i>3.65</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2164</i>	<i>108</i>
<i>Nickel</i>	<i>0.900</i>	<i>-0.249</i>	
<i>Potassium</i>	<i>100000</i>	<i>92868</i>	<i>93</i>
<i>Selenium</i>		<i>0.0510</i>	
<i>Silver</i>		<i>0.0900</i>	
<i>Sodium</i>	<i>250000</i>	<i>225904</i>	<i>90</i>
<i>Thallium</i>		<i>-0.0030</i>	
<i>Tin</i>		<i>-0.136</i>	
<i>Titanium</i>	<i>2000</i>	<i>1932</i>	<i>97</i>
<i>Uranium</i>		<i>0.0360</i>	
<i>Vanadium</i>	<i>0.100</i>	<i>0.0920</i>	
<i>Zinc</i>	<i>1.10</i>	<i>1.57</i>	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Lancaster LaboratoriesJob No.: 410-3144-1

SDG No.: _____

Lab Sample ID: ICSAB 410-11423/9Instrument ID: E07 - 27813Lab File ID: 015ICSB.dICS Source: MT_MD_ICSAB_00012Concentration Units: ug/L

Analyte	True	Found	
	Solution AB	Solution AB	Percent Recovery
Arsenic	100	105	105
Lead	0.400	0.0790	
<i>Aluminum</i>	<i>100000</i>	<i>101684</i>	<i>102</i>
<i>Antimony</i>	<i>0.400</i>	<i>0.609</i>	
<i>Barium</i>	<i>0.800</i>	<i>1.25</i>	
<i>Beryllium</i>		<i>0.0180</i>	
<i>Cadmium</i>	<i>100</i>	<i>101</i>	<i>101</i>
<i>Calcium</i>	<i>300000</i>	<i>313408</i>	<i>104</i>
<i>Chromium</i>	<i>201</i>	<i>188</i>	<i>94</i>
<i>Cobalt</i>	<i>201</i>	<i>190</i>	<i>95</i>
<i>Copper</i>	<i>201</i>	<i>192</i>	<i>96</i>
<i>Iron</i>	<i>250000</i>	<i>248514</i>	<i>99</i>
<i>Magnesium</i>	<i>100000</i>	<i>94316</i>	<i>94</i>
<i>Manganese</i>	<i>203</i>	<i>204</i>	<i>101</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2206</i>	<i>110</i>
<i>Nickel</i>	<i>201</i>	<i>198</i>	<i>99</i>
<i>Potassium</i>	<i>100000</i>	<i>97540</i>	<i>98</i>
<i>Selenium</i>	<i>100</i>	<i>105</i>	<i>105</i>
<i>Silver</i>	<i>50.0</i>	<i>48.9</i>	<i>98</i>
<i>Sodium</i>	<i>250000</i>	<i>235032</i>	<i>94</i>
<i>Strontium</i>	<i>5.80</i>	<i>9.13</i>	<i>157</i>
<i>Thallium</i>		<i>-0.0020</i>	
<i>Tin</i>		<i>0.0720</i>	
<i>Titanium</i>	<i>2000</i>	<i>2064</i>	<i>103</i>
<i>Uranium</i>		<i>0.0260</i>	
<i>Vanadium</i>	<i>200</i>	<i>189</i>	<i>95</i>
<i>Zinc</i>	<i>101</i>	<i>102</i>	<i>101</i>

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11232/13Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Calcium		150	U				6010C
Magnesium		75	U				6010C
Potassium		240	U				6010C
Sodium		500	U				6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11232/14Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS4_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	500000	509000		102	90	110		6010C
Magnesium	500000	502000		100	90	110		6010C
Potassium	500000	511000		102	90	110		6010C
Sodium	500000	496000		99	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11232/15Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Calcium		6680					6010C
Magnesium		6930					6010C
Potassium		7070					6010C
Sodium		6840					6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11232/16Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS5_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	250000	251000		100	90	110		6010C
Magnesium	250000	249000		100	90	110		6010C
Potassium	250000	251000		100	90	110		6010C
Sodium	250000	245000		98	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 410-10573/2-ALab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_S_LLC_HP_00003

Analyte	Water (mg/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	0.400	0.415		104	87	113		6010C
Magnesium	0.200	0.212		106	85	113		6010C
Potassium	5.60	5.93		106	86	114		6010C
Sodium	2.00	2.05		103	87	115		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11592/13

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron		100	U					6010C
Manganese	20000	19300		96	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11592/14

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: MT_IA_LRS4_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	300000	295000		98	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11592/15

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron		100	U					6010C
Manganese	10000	10200		102	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11592/16

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: MT_IA_LRS5_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	150000	149000		99	90	110		6010C
Manganese		5.0	U					6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 METALS

Lab ID: LCS 410-11479/2-A

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: MT_S_LLC_HP_00003

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	400	408		102	87	115		6010C
Manganese	20.0	21.4		107	90	114		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12396/13Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Calcium		150	U				6010C
Magnesium		75	U				6010C
Potassium		240	U				6010C
Sodium		500	U				6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12396/14Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS4_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	500000	516000		103	90	110		6010C
Magnesium	500000	509000		102	90	110		6010C
Potassium	500000	525000		105	90	110		6010C
Sodium	500000	511000		102	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12396/15Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Calcium		150	U				6010C
Magnesium		48.0	J				6010C
Potassium		205	J				6010C
Sodium		500	U				6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12396/16Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS5_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	250000	258000		103	90	110		6010C
Magnesium	250000	257000		103	90	110		6010C
Potassium	250000	262000		105	90	110		6010C
Sodium	250000	259000		104	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 410-10582/2-ALab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_S_LLC_HP_00003

Analyte	Water (mg/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	0.400	0.424		106	87	113		6010C
Magnesium	0.200	0.216		108	85	113		6010C
Potassium	5.60	6.14		110	86	114		6010C
Sodium	2.00	2.17		109	87	115		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12678/14

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron		100	U					6010C
Manganese	20000	18300		92	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12678/15Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS4_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	300000	327000		109	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12678/16

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron		55.6	J					6010C
Manganese	10000	9800		98	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12678/17Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS5_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	150000	152000		101	90	110		6010C
Manganese		5.0	U					6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 METALS

Lab ID: LCS 410-11456/2-A

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: MT_S_LLC_HP_00003

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	400	424		106	87	115		6010C
Manganese	20.0	20.9		104	90	114		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12755/14

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Iron		100	U				6010C
Manganese	20000	18600		93	90	110	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12755/15Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS4_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	300000	300000		100	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12755/16Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: Water

LCS Source: _____

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron		100	U					6010C
Manganese	10000	9840		98	90	110		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-12755/17Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_IA_LRS5_00019

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	150000	149000		100	90	110		6010C
Manganese		5.0	U					6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 METALS

Lab ID: LCS 410-11136/2-A

Lab Name: Eurofins Lancaster Laboratories E

Job No.: 410-3144-1

Sample Matrix: Water

LCS Source: MT_S_LLC_HP_00003

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	400	395		99	87	115		6010C
Manganese	20.0	20.0		100	90	114		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 410-11423/10Lab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_MD_LRS3_00006

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	500	489		98	90	110		6020A
Lead	500	504		101	90	110		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 410-10576/2-ALab Name: Eurofins Lancaster Laboratories EJob No.: 410-3144-1Sample Matrix: WaterLCS Source: MT_MSSPK_SCP_00002

Analyte	Water (mg/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	0.00989	0.0104		105	84	116		6020A
Lead	0.00492	0.00513		104	88	115		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: T72 - 16417
 Method: 6010C DL Date: 09/13/2019 10:57
 Prep Method: 3005A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Calcium	317.93	200	96
Magnesium	285.21	100	40
Potassium	766.49	500	204
Sodium	589.59	1000	239

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: T72 - 16417
 Method: 6010C XMDL Date: 09/13/2019 10:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Calcium	317.93	200	96
Magnesium	285.21	100	40
Potassium	766.49	300	204
Sodium	589.59	1000	239

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: T74 - 23745
 Method: 6010C DL Date: 09/13/2019 10:57
 Prep Method: Non-Digest Prep

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Iron	261.19	200	40
Manganese	257.61	10	3

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 METALS - DISSOLVED

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: T74 - 23745
 Method: 6010C XMDL Date: 09/13/2019 10:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Iron	261.19	200	40
Manganese	257.61	10	3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins Lancaster LaboratoriesJob Number: 410-3144-1

SDG Number: _____

Matrix: WaterInstrument ID: T75 - 27278Method: 6010CDL Date: 09/13/2019 10:57Prep Method: Non-Digest Prep

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Iron	261.19	200	40
Manganese	257.61	10	3

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 METALS - DISSOLVED

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: T75 - 27278
 Method: 6010C XMDL Date: 09/13/2019 10:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Iron	261.19	200	40
Manganese	257.61	10	3

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: E07 - 27813
 Method: 6020A DL Date: 09/17/2019 10:59
 Prep Method: 3020A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Arsenic	75	2	0.68
Lead	208	0.5	0.071

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
SDG Number: _____
Matrix: Water Instrument ID: E07 - 27813
Method: 6020A XMDL Date: 11/27/2018 16:11

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Arsenic	75	2	0.68
Lead	208	0.5	0.071

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T72 - 16417 Date: 02/18/2020

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Aluminum	308.215														
Antimony	206.833		-0.000054									0.010488			
Arsenic	189.042											-0.000727			
Barium	455.403														
Beryllium	313.042														
Bismuth															
Boron	249.773													0.001771	
Cadmium	226.502													0.000069	
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616														
Copper	327.396								0.000022					-0.000043	
Iron	261.187														
Lead	220.353		-0.000351									-0.001016		0.000037	
Lithium	670.784								0.000053						
Magnesium	285.213														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604										-0.000352			-0.000066	
Phosphorus	177.495												0.002562		
Potassium	766.490													-0.000908	
Selenium	196.090														
Silicon	251.611														
Silver	328.068													-0.000043	
Sodium	589.592														
Strontium	421.552								0.000008						
Sulfur	182.034		-0.000253												
Thallium	190.856										0.005973				
Thorium	283.730													0.001154	
Tin	189.989														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T72 - 16417 Date: 02/18/2020

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Titanium	334.941											0.000291			
Tungsten	207.911														
Vanadium	292.402													0.000012	
Zinc	213.856												0.000636	0.000116	
Zirconium	339.198														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T72 - 16417 Date: 02/18/2020

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr
Aluminum	308.215				0.023606										
Antimony	206.833				-0.001596										
Arsenic	189.042				0.000698										
Barium	455.403														
Beryllium	313.042														
Bismuth															
Boron	249.773				-0.000804										
Cadmium	226.502														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616						0.000150						-0.000018		
Copper	327.396														
Iron	261.187														
Lead	220.353				-0.000459						-0.000315		0.000123		
Lithium	670.784														
Magnesium	285.213														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604				0.001047								-0.000028		
Phosphorus	177.495														
Potassium	766.490														0.034452
Selenium	196.090			0.001788											
Silicon	251.611				0.015180										
Silver	328.068														
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034				-0.008541										
Thallium	190.856			0.001877											
Thorium	283.730														
Tin	189.989														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T72 - 16417 Date: 02/18/2020

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402				-0.014921										
Zinc	213.856						0.006461								
Zirconium	339.198														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T72 - 16417 Date: 02/18/2020

Analyte	Wave Length	Th	Ti	Tl	V	W	Zn	Zr							
Aluminum	308.215	0.087193			0.086073			-0.006911							
Antimony	206.833							-0.001310							
Arsenic	189.042					0.000869									
Barium	455.403							0.000350							
Beryllium	313.042				0.000184										
Bismuth															
Boron	249.773					-0.006245									
Cadmium	226.502														
Calcium	317.933	-0.001363													
Chromium	267.716														
Cobalt	228.616		0.002253			0.000162									
Copper	327.396	0.021944	-0.003253												
Iron	261.187														
Lead	220.353					-0.016699									
Lithium	670.784														
Magnesium	285.213														
Manganese	257.610	-0.000329													
Molybdenum	202.030														
Nickel	231.604			0.000214											
Phosphorus	177.495	-0.002501													
Potassium	766.490														
Selenium	196.090						0.013173								
Silicon	251.611														
Silver	328.068	-0.006130			-0.000918			0.006498							
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034					-0.062409									
Thallium	190.856	-0.000633			-0.003453										
Thorium	283.730							0.013282							
Tin	189.989														

X-IN

10-IN
 ICP-AES INTERELEMENT CORRECTION FACTORS
 METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T72 - 16417 Date: 02/18/2020

Analyte	Wave Length	Th	Ti	Tl	V	W	Zn	Zr							
Titanium	334.941														
Tungsten	207.911						0.008946								
Vanadium	292.402	0.001248	0.000441												
Zinc	213.856		-0.0007												
Zirconium	339.198	0.044033													

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T74 - 23745 Date: 01/08/2020

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum	308.215				0.024099	0.016785									
Antimony	206.833										0.017637				
Arsenic	189.042										-0.004905			0.000040	0.000485
Barium	455.403														
Beryllium	313.042														
Boron	249.773										-0.00223		0.000728		
Cadmium	226.502									0.000117	0.000124		0.000095		
Calcium	317.933								0.005851						
Chromium	267.716														
Cobalt	228.616											0.000159			
Copper	327.396							0.000024							
Iron	261.187														
Lead	220.353		0.000197									0.000373	0.000027		
Lithium	670.784							0.000042							
Magnesium	285.213														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604										-0.000745				
Phosphorus	177.495											0.004347			
Potassium	766.49														
Selenium	196.090												-0.000094		
Silicon	251.611														
Silver	328.068														
Sodium	589.592														
Strontium	421.552							0.000027							
Sulfur	182.034														
Thallium	190.856										0.001473				
Thorium	283.730														
Tin	189.989														
Titanium	334.941														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T74 - 23745 Date: 01/08/2020

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Tungsten	207.911														
Vanadium	292.402												0.000019		
Zinc	213.856											0.001043	0.000121		
Zirconium	339.198														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T74 - 23745 Date: 01/08/2020

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Si	Sn	Sr
Aluminum	308.215			.026633											
Antimony	206.833			-0.001754											
Arsenic	189.042		0.000530	0.001055							0.000884			0.000478	0.002938
Barium	455.403														
Beryllium	313.042														
Boron	249.773												-0.000312		
Cadmium	226.502														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616					0.000134									
Copper	327.396														
Iron	261.187														
Lead	220.353			-0.001858									0.000063		
Lithium	670.784														
Magnesium	285.213		0.002687												
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604												-0.000048		
Phosphorus	177.495														
Potassium	766.49	0.000545													
Selenium	196.090														
Silicon	251.611			0.011875										0.014330	
Silver	328.068														
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034			-0.010119	-0.002016										
Thallium	190.856		0.001165												
Thorium	283.730														
Tin	189.989														
Titanium	334.941														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T74 - 23745 Date: 01/08/2020

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Si	Sn	Sr
Tungsten	207.911														
Vanadium	292.402			-0.016024											
Zinc	213.856					0.005186									
Zirconium	339.198														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T74 - 23745 Date: 01/08/2020

Analyte	Wave Length	Th	Ti	Tl	V	W	Zn	Zr							
Aluminum	308.215	.107534			.028727			-0.005677							
Antimony	206.833							-0.001366							
Arsenic	189.042			0.000848		0.000895	0.001588	0.000532							
Barium	455.403														
Beryllium	313.042	-0.000228			0.000107										
Boron	249.773					-0.022677									
Cadmium	226.502														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616		0.002357												
Copper	327.396	0.032572	-0.02243					-0.001641							
Iron	261.187														
Lead	220.353														
Lithium	670.784														
Magnesium	285.213														
Manganese	257.610														
Molybdenum	202.030					-0.000585									
Nickel	231.604														
Phosphorus	177.495														
Potassium	766.49														
Selenium	196.090					0.010913									
Silicon	251.611														
Silver	328.068	-0.0201650						.004126							
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034					-0.073834									
Thallium	190.856		-0.025391		-0.001320										
Thorium	283.730														
Tin	189.989														
Titanium	334.941														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T74 - 23745 Date: 01/08/2020

Analyte	Wave Length	Th	Ti	Tl	V	W	Zn	Zr						
Tungsten	207.911						0.012033							
Vanadium	292.402		0.000623											
Zinc	213.856													
Zirconium	339.198	0.060218												

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T75 - 27278 Date: 03/31/2020

Analyte	Wave Length	Ag	Al	As	Au	B	Ba	Be	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum	308.3215														
Antimony	206.833										0.016818				
Arsenic	189.042										-0.009233				
Barium	455.403														
Beryllium	313.042														
Boron	249.773												0.001921		
Cadmium	226.502												0.000125		
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616														
Copper	327.396												-0.000115		
Gold	242.795														
Iron	261.187														
Lead	220.353		0.000122							-0.000672					
Lithium	670.784														
Magnesium	285.213														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604												-0.000033		
Phosphorus	177.495														
Potassium	766.490														
Selenium	196.090												-0.000090		
Silicon	251.611														
Silver	328.068		0												
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034														
Thallium	190.856									0.001608					
Thorium	283.730														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T75 - 27278 Date: 03/31/2020

Analyte	Wave Length	Ag	Al	As	Au	B	Ba	Be	Cd	Co	Cr	Cu	Fe	K	Li
Tin	189.989														
Titanium	334.941														
Tungsten	207.911														
Uranium															
Vanadium	292.402														
Zinc	213.856											0.000959	0.000084		
Zirconium	339.198														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T75 - 27278 Date: 03/31/2020

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr	Th
Aluminum	308.321 ₅			0.010490											0.069460
Antimony	206.833			-0.003026											
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	249.773														
Cadmium	226.502														
Calcium	317.933														-0.033088
Chromium	267.716														
Cobalt	228.616														
Copper	327.396														0.012132
Gold	242.795														
Iron	261.187														
Lead	220.353			-0.002426								0.000196			
Lithium	670.784														
Magnesium	285.213														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604			0.000301											
Phosphorus	177.495														
Potassium	766.490														
Selenium	196.090														
Silicon	251.611			0.007245											
Silver	328.068														-0.006219
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034		0.004754												
Thallium	190.856		0.000955												
Thorium	283.730														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T75 - 27278 Date: 03/31/2020

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn	Sr	Th
Tin	189.989														
Titanium	334.941														
Tungsten	207.911														
Uranium															
Vanadium	292.402			-0.003599											0.000884
Zinc	213.856					0.005373									
Zirconium	339.198														0.067628

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T75 - 27278 Date: 03/31/2020

Analyte	Wave Length	Ti	Tl	U	V	W	Zn	Zr							
Aluminum	308.321 ₅				0.043905										
Antimony	206.833							-0.001471							
Arsenic	189.042					0.002008									
Barium	455.403														
Beryllium	313.042														
Boron	249.773														
Cadmium	226.502	0.000161				0.000124									
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616	0.002036													
Copper	327.396	-0.004094			-0.000480										
Gold	242.795														
Iron	261.187														
Lead	220.353														
Lithium	670.784														
Magnesium	285.213														
Manganese	257.610				-0.000268	0.000332									
Molybdenum	202.030				-0.000386	-0.000674									
Nickel	231.604														
Phosphorus	177.495					0.002527									
Potassium	766.490														
Selenium	196.090					0.009424									
Silicon	251.611					0.014497									
Silver	328.068							0.003769							
Sodium	589.592														
Strontium	421.552														
Sulfur	182.034						-0.028741								
Thallium	190.856	-0.004051				-0.028761									
Thorium	283.730														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

ICP-AES Instrument ID: T75 - 27278 Date: 03/31/2020

Analyte	Wave Length	Ti	Tl	U	V	W	Zn	Zr							
Tin	189.989														
Titanium	334.941														
Tungsten	207.911						0.007036								
Uranium															
Vanadium	292.402		0.000813												
Zinc	213.856														
Zirconium	339.198														

X-IN

11-IN
LINEAR RANGES
METALSLab Name: Eurofins Lancaster LaboratorieJob No: 410-3144-1

SDG No.: _____

Instrument ID: T72 - 16417Date: 12/18/2018 10:10

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Calcium		450	6010C
Magnesium		450	6010C
Potassium		450	6010C
Sodium		450	6010C

11-IN
LINEAR RANGES
METALSLab Name: Eurofins Lancaster LaboratorieJob No: 410-3144-1

SDG No.: _____

Instrument ID: T74 - 23745Date: 12/18/2018 10:11

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Iron		270	6010C
Manganese		18	6010C

11-IN
LINEAR RANGES
METALSLab Name: Eurofins Lancaster LaboratorieJob No: 410-3144-1

SDG No.: _____

Instrument ID: T75 - 27278Date: 12/18/2018 10:10

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Iron		270	6010C
Manganese		18	6010C

11-IN
LINEAR RANGES
METALSLab Name: Eurofins Lancaster LaboratorieJob No: 410-3144-1

SDG No.: _____

Instrument ID: E07 - 27813Date: 12/18/2018 10:12

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic		10000	6020A
Lead		10000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-10573/1-A	06/04/2020 17:08	10573		50	50
LCS 410-10573/2-A	06/04/2020 17:08	10573		50	50
410-3144-2	06/04/2020 17:08	10573		50	50
410-3144-5	06/04/2020 17:08	10573		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-10582/1-A	06/04/2020 17:38	10582		50	50
LCS 410-10582/2-A	06/04/2020 17:38	10582		50	50
410-3144-4	06/04/2020 17:38	10582		50	50
410-3144-3	06/04/2020 17:38	10582		50	50
410-3144-1	06/04/2020 17:38	10582		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: Non-Digest Prep

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-11136/1-A	06/08/2020 09:35	11136		50	51.5
LCS 410-11136/2-A	06/08/2020 09:35	11136		50	50
410-3144-2	06/08/2020 09:35	11136		50	51.5
410-3144-1	06/08/2020 09:35	11136		50	51.5

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: Non-Digest Prep

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-11456/1-A	06/09/2020 09:25	11456		50	51.5
LCS 410-11456/2-A	06/09/2020 09:25	11456		50	50
410-3144-5	06/09/2020 09:25	11456		50	51.5
410-3144-4	06/09/2020 09:25	11456		50	51.5

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: Non-Digest Prep

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-11479/1-A	06/09/2020 10:30	11479		50	51.5
LCS 410-11479/2-A	06/09/2020 10:30	11479		50	50
410-3144-3	06/09/2020 10:30	11479		50	51.5

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: 3020A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-10576/1-A	06/04/2020 17:18	10576		50	50
LCS 410-10576/2-A	06/04/2020 17:18	10576		50	50
410-3144-2	06/04/2020 17:18	10576		50	50
410-3144-5	06/04/2020 17:18	10576		50	50
410-3144-4	06/04/2020 17:18	10576		50	50
410-3144-3	06/04/2020 17:18	10576		50	50
410-3144-1	06/04/2020 17:18	10576		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: T72 - 16417 Analysis Method: 6010C
 Start Date: 06/07/2020 16:38 End Date: 06/07/2020 19:22

Lab Sample Id	D/F	Type	Time	Analytes																			
				C	K	M	N	a															
ZZZZZZ			16:38																				
ICIS 410-11232/2	1		16:41	X	X	X	X																
STD1 410-11232/3 IC			16:44	X	X	X	X																
STD2 410-11232/4 IC			16:47	X	X	X	X																
STD3 410-11232/5 IC			16:51	X	X	X	X																
ICV 410-11232/6	1		16:54	X	X	X	X																
ICB 410-11232/7	1		16:57	X	X	X	X																
CRI 410-11232/8	1		17:00	X	X	X	X																
ICSA 410-11232/9	1		17:04	X	X	X	X																
ICSAB 410-11232/10	1		17:07	X	X	X	X																
CCV 410-11232/11	1		17:11	X	X	X	X																
CCB 410-11232/12	1		17:14	X	X	X	X																
LRC 410-11232/13	1		17:17	X	X	X	X																
LRC 410-11232/14	1		17:21	X	X	X	X																
LRC 410-11232/15	1		17:24	X	X	X	X																
LRC 410-11232/16	1		17:28	X	X	X	X																
CCV 410-11232/17	1		17:31	X	X	X	X																
CCB 410-11232/18	1		17:35	X	X	X	X																
MB 410-10573/1-A	1	R	17:38	X	X	X	X																
LCS 410-10573/2-A	1	R	17:41	X	X	X	X																
ZZZZZZ			17:44																				
ZZZZZZ			17:47																				
ZZZZZZ			17:50																				
ZZZZZZ			17:54																				
ZZZZZZ			17:57																				
ZZZZZZ			18:00																				
ZZZZZZ			18:03																				
ZZZZZZ			18:06																				
CCV 410-11232/29	1		18:10	X	X	X	X																
CCB 410-11232/30	1		18:13	X	X	X	X																
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
ZZZZZZ			18:23																				
ZZZZZZ			18:26																				
ZZZZZZ			18:29																				
ZZZZZZ			18:32																				
ZZZZZZ			18:35																				
ZZZZZZ			18:39																				
ZZZZZZ			18:42																				
ZZZZZZ			18:45																				
CCV 410-11232/41	1		18:49	X	X	X	X																
CCB 410-11232/42	1		18:52	X	X	X	X																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: T72 - 16417 Analysis Method: 6010C
 Start Date: 06/07/2020 16:38 End Date: 06/07/2020 19:22

Lab Sample Id	D/F	T y p e	Time	Analytes															
				C a	K	M g	N a												
ZZZZZZ			18:55																
ZZZZZZ			18:58																
ZZZZZZ			19:02																
ZZZZZZ			19:05																
ZZZZZZ			19:09																
410-3144-2	1	R	19:12	X	X	X	X												
410-3144-5	1	R	19:15	X	X	X	X												
CCV 410-11232/50	1		19:18	X	X	X	X												
CCB 410-11232/51	1		19:22	X	X	X	X												

Prep Types: _____
 R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: T72 - 16417 Analysis Method: 6010C

Start Date: 06/11/2020 15:29 End Date: 06/11/2020 17:22

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				C a	K	M g	N a																						
ZZZZZZ			15:29																										
ICIS 410-12396/2	1		15:32	X	X	X	X																						
STD1 410-12396/3 IC			15:35	X	X	X	X																						
STD2 410-12396/4 IC			15:38	X	X	X	X																						
STD3 410-12396/5 IC			15:42	X	X	X	X																						
ICV 410-12396/6	1		15:45	X	X	X	X																						
ICB 410-12396/7	1		15:48	X	X	X	X																						
CRI 410-12396/8	1		15:51	X	X	X	X																						
ICSA 410-12396/9	1		15:54	X	X	X	X																						
ICSAB 410-12396/10	1		15:58	X	X	X	X																						
CCV 410-12396/11	1		16:02	X	X	X	X																						
CCB 410-12396/12	1		16:05	X	X	X	X																						
LRC 410-12396/13	1		16:08	X	X	X	X																						
LRC 410-12396/14	1		16:12	X	X	X	X																						
LRC 410-12396/15	1		16:15	X	X	X	X																						
LRC 410-12396/16	1		16:19	X	X	X	X																						
CCV 410-12396/17	1		16:22	X	X	X	X																						
CCB 410-12396/18	1		16:25	X	X	X	X																						
MB 410-10582/1-A	1	R	16:29	X	X	X	X																						
LCS 410-10582/2-A	1	R	16:32	X	X	X	X																						
ZZZZZZ			16:35																										
ZZZZZZ			16:39																										
ZZZZZZ			16:42																										
ZZZZZZ			16:46																										
ZZZZZZ			16:49																										
ZZZZZZ			16:53																										
410-3144-4	1	R	16:56	X	X	X	X																						
410-3144-3	1	R	16:59	X	X	X	X																						
CCV 410-12396/29	1		17:03	X	X	X	X																						
CCB 410-12396/30	1		17:06	X	X	X	X																						
410-3144-1	1	R	17:09	X	X	X	X																						
ZZZZZZ			17:12																										
ZZZZZZ			17:16																										
CCV 410-12396/34	1		17:19	X	X	X	X																						
CCB 410-12396/35	1		17:22	X	X	X	X																						

Prep Types: _____
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: T74 - 23745 Analysis Method: 6010C
 Start Date: 06/12/2020 08:46 End Date: 06/12/2020 11:33

Lab Sample Id	D/F	T y p e	Time	Analytes															
				F	M														
ZZZZZZ			08:46																
ICIS 410-12678/2	1		08:49	X	X														
STD1 410-12678/3 IC			08:52	X	X														
STD2 410-12678/4 IC			08:55	X	X														
STD3 410-12678/5 IC			08:59	X	X														
ICV 410-12678/6	1		09:02	X	X														
ICV 410-12678/7	1		09:05	X	X														
ICB 410-12678/8	1		09:08	X	X														
CRI 410-12678/9	1		09:11	X	X														
ICSA 410-12678/10	1		09:14	X	X														
ICSAB 410-12678/11	1		09:18	X	X														
CCV 410-12678/12	1		09:21	X	X														
CCB 410-12678/13	1		09:24	X	X														
LRC 410-12678/14	1		09:27	X	X														
LRC 410-12678/15	1		09:31	X															
LRC 410-12678/16	1		09:34	X	X														
LRC 410-12678/17	1		09:38	X	X														
CCV 410-12678/18	1		09:41	X	X														
CCB 410-12678/19	1		09:44	X	X														
MB 410-11456/1-A	1	T	09:50	X	X														
LCS 410-11456/2-A	1	T	09:53	X	X														
ZZZZZZ			09:56																
ZZZZZZ			10:00																
ZZZZZZ			10:03																
ZZZZZZ			10:06																
ZZZZZZ			10:10																
ZZZZZZ			10:13																
ZZZZZZ			10:16																
ZZZZZZ			10:20																
CCV 410-12678/30	1		10:23	X	X														
CCB 410-12678/31	1		10:26	X	X														
ZZZZZZ			10:29																
ZZZZZZ			10:32																
ZZZZZZ			10:36																
ZZZZZZ			10:39																
ZZZZZZ			10:42																
ZZZZZZ			10:45																
ZZZZZZ			10:48																
ZZZZZZ			10:52																
ZZZZZZ			10:55																
ZZZZZZ			10:59																
CCV 410-12678/42	1		11:02	X	X														

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: T74 - 23745 Analysis Method: 6010C
 Start Date: 06/12/2020 08:46 End Date: 06/12/2020 11:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				F	M																						
CCB 410-12678/43	1		11:05	X	X																						
ZZZZZZ			11:08																								
ZZZZZZ			11:11																								
ZZZZZZ			11:14																								
ZZZZZZ			11:17																								
ZZZZZZ			11:21																								
410-3144-5	1	D	11:24	X	X																						
410-3144-4	1	D	11:27	X	X																						
CCV 410-12678/51	1		11:30	X	X																						
CCB 410-12678/52	1		11:33	X	X																						

Prep Types: _____
 D = Dissolved
 T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
SDG No.: _____
Instrument ID: T75 - 27278 Analysis Method: 6010C
Start Date: 06/09/2020 14:03 End Date: 06/09/2020 17:34

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				F	M																
ZZZZZZ			14:03																		
ICIS 410-11592/2	1		14:06	X	X																
STD1 410-11592/3 IC			14:09	X	X																
STD2 410-11592/4 IC			14:12	X	X																
STD3 410-11592/5 IC			14:16	X	X																
ICV 410-11592/6	1		14:19	X	X																
ICB 410-11592/7	1		14:22	X	X																
CRI 410-11592/8	1		14:25	X	X																
ICSA 410-11592/9	1		14:29	X	X																
ICSAB 410-11592/10	1		14:32	X	X																
CCV 410-11592/11	1		14:36	X	X																
CCB 410-11592/12	1		14:39	X	X																
LRC 410-11592/13	1		14:42	X	X																
LRC 410-11592/14	1		14:46	X																	
LRC 410-11592/15	1		14:49	X	X																
LRC 410-11592/16	1		14:53	X	X																
ZZZZZZ			14:59																		
CCV 410-11592/18	1		15:02	X	X																
CCB 410-11592/19	1		15:05	X	X																
MB 410-11479/1-A	1	T	15:09	X	X																
LCS 410-11479/2-A	1	T	15:12	X	X																
ZZZZZZ			15:15																		
ZZZZZZ			15:19																		
ZZZZZZ			15:22																		
ZZZZZZ			15:25																		
ZZZZZZ			15:29																		
ZZZZZZ			15:32																		
ZZZZZZ			15:35																		
ZZZZZZ			15:39																		
CCV 410-11592/30	1		15:42	X	X																
CCB 410-11592/31	1		15:46	X	X																
ZZZZZZ			15:49																		
ZZZZZZ			15:52																		
ZZZZZZ			15:55																		
ZZZZZZ			15:59																		
ZZZZZZ			16:03																		
ZZZZZZ			16:06																		
ZZZZZZ			16:09																		
ZZZZZZ			16:13																		
ZZZZZZ			16:16																		
ZZZZZZ			16:20																		
CCV 410-11592/42	1		16:23	X	X																

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: T75 - 27278 Analysis Method: 6010C

Start Date: 06/09/2020 14:03 End Date: 06/09/2020 17:34

Lab Sample Id	D/F	T Y P E	Time	Analytes																			
				F	M																		
CCB 410-11592/43	1		16:26	X	X																		
ZZZZZZ			16:29																				
410-3144-3	1	D	16:33	X	X																		
ZZZZZZ			16:36																				
ZZZZZZ			16:40																				
ZZZZZZ			16:43																				
ZZZZZZ			16:46																				
ZZZZZZ			16:50																				
CCV 410-11592/51	1		16:53	X	X																		
CCB 410-11592/52	1		16:56	X	X																		
ZZZZZZ			17:07																				
ZZZZZZ			17:11																				
ZZZZZZ			17:14																				
ZZZZZZ			17:18																				
ZZZZZZ			17:21																				
ZZZZZZ			17:25																				
ZZZZZZ			17:28																				
CCV 410-11592/60			17:31																				
CCB 410-11592/61			17:34																				

Prep Types: _____
D = Dissolved
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.:

Instrument ID: T75 - 27278 Analysis Method: 6010C

Start Date: 06/12/2020 09:59 End Date: 06/12/2020 17:24

Lab Sample Id	D/F	T y p e	Time	Analytes																					
				F	M																				
ZZZZZZ			09:59																						
ICIS 410-12755/2	1		10:02	X	X																				
STD1 410-12755/3 IC			10:05	X	X																				
STD2 410-12755/4 IC			10:08	X	X																				
STD3 410-12755/5 IC			10:12	X	X																				
ICV 410-12755/6	1		10:15	X	X																				
ICV 410-12755/7	1		10:18	X	X																				
ICB 410-12755/8	1		10:21	X	X																				
CRI 410-12755/9	1		10:24	X	X																				
ICSA 410-12755/10	1		10:27	X	X																				
ICSAB 410-12755/11	1		10:31	X	X																				
CCV 410-12755/12	1		10:34	X	X																				
CCB 410-12755/13	1		10:37	X	X																				
LRC 410-12755/14	1		10:41	X	X																				
LRC 410-12755/15	1		10:44	X																					
LRC 410-12755/16	1		10:48	X	X																				
LRC 410-12755/17	1		10:51	X	X																				
CCV 410-12755/18	1		10:55	X	X																				
CCB 410-12755/19	1		10:58	X	X																				
MB 410-11136/1-A	1	T	15:38	X	X																				
LCS 410-11136/2-A	1	T	15:41	X	X																				
ZZZZZZ			15:44																						
ZZZZZZ			15:48																						
ZZZZZZ			15:51																						
ZZZZZZ			15:54																						
ZZZZZZ			15:57																						
ZZZZZZ			16:01																						
ZZZZZZ			16:04																						
ZZZZZZ			16:07																						
CCV 410-12755/30	1		16:10	X	X																				
CCB 410-12755/31	1		16:13	X	X																				
ZZZZZZ			16:17																						
410-3144-2	1	D	16:20	X	X																				
410-3144-1	1	D	16:23	X	X																				
ZZZZZZ			16:26																						
ZZZZZZ			16:30																						
ZZZZZZ			16:33																						
ZZZZZZ			16:36																						
ZZZZZZ			16:39																						
ZZZZZZ			16:43																						
ZZZZZZ			16:46																						
CCV 410-12755/42	1		16:49	X	X																				

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
SDG No.: _____
Instrument ID: T75 - 27278 Analysis Method: 6010C
Start Date: 06/12/2020 09:59 End Date: 06/12/2020 17:24

Lab Sample Id	D/F	T y p e	Time	Analytes															
				F	M														
CCB 410-12755/43	1		16:52	X	X														
ZZZZZZ			16:55																
ZZZZZZ			16:58																
ZZZZZZ			17:02																
ZZZZZZ			17:05																
ZZZZZZ			17:08																
ZZZZZZ			17:11																
ZZZZZZ			17:15																
ZZZZZZ			17:18																
CCV 410-12755/52			17:21																
CCB 410-12755/53			17:24																

Prep Types: _____
D = Dissolved
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: E07 - 27813 Analysis Method: 6020A
 Start Date: 06/08/2020 11:36 End Date: 06/08/2020 12:38

Lab Sample Id	D/F	T y p e	Time	Analytes															
				A	P														
ICIS 410-11423/1			11:36	X	X														
STD1 410-11423/2 IC	1		11:38	X	X														
STD2 410-11423/3 IC	1		11:40	X	X														
STD3 410-11423/4 IC	1		11:42	X	X														
ICV 410-11423/5	1		11:44	X	X														
ICB 410-11423/6	1		11:46	X	X														
CRI 410-11423/7	1		11:48	X	X														
ICSA 410-11423/8	1		11:50	X	X														
ICSAB 410-11423/9	1		11:51	X	X														
LRC 410-11423/10	1		11:53	X	X														
ZZZZZZ			11:55																
ZZZZZZ			11:57																
CCV 410-11423/13	1		11:59	X	X														
CCB 410-11423/14	1		12:01	X	X														
MB 410-10576/1-A	1	T	12:03	X	X														
LCS 410-10576/2-A	1	T	12:04	X	X														
ZZZZZZ			12:06																
ZZZZZZ			12:08																
ZZZZZZ			12:10																
ZZZZZZ			12:12																
ZZZZZZ			12:14																
ZZZZZZ			12:16																
ZZZZZZ			12:17																
ZZZZZZ			12:19																
CCV 410-11423/25	1		12:21	X	X														
CCB 410-11423/26	1		12:23	X	X														
ZZZZZZ			12:25																
410-3144-2	1	T	12:27	X	X														
410-3144-5	1	T	12:29	X	X														
410-3144-4	1	T	12:30	X	X														
410-3144-3	1	T	12:32	X	X														
410-3144-1	1	T	12:34	X	X														
CCV 410-11423/33	1		12:36	X	X														
CCB 410-11423/34	1		12:38	X	X														

Prep Types: _____
 T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP Instrument ID: T72 - 16417 Start Date: 06/07/2020 End Date: 06/07/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y/0 224.306	Q	Element Y/0 371.030	Q	Element Y/1 371.030	Q	Element	Q	Element	Q
ICIS 410-11232/2	16:41										
ICV 410-11232/6	16:54	96		95		100					
ICB 410-11232/7	16:57	99		98		99					
CRI 410-11232/8	17:00	100		99		99					
ICSA 410-11232/9	17:04	89		85		96					
ICSAB 410-11232/10	17:07	90		86		98					
CCV 410-11232/11	17:11	99		97		102					
CCB 410-11232/12	17:14	100		100		102					
LRC 410-11232/13	17:17	92		96		101					
LRC 410-11232/14	17:21	84		80		93					
LRC 410-11232/15	17:24	95		97		101					
LRC 410-11232/16	17:28	91		86		97					
CCV 410-11232/17	17:31	98		95		99					
CCB 410-11232/18	17:35	99		97		98					
MB 410-10573/1-A	17:38	101		99		99					
LCS 410-10573/2-A	17:41	101		99		99					
CCV 410-11232/29	18:10	100		95		101					
CCB 410-11232/30	18:13	102		98		100					
CCV 410-11232/41	18:49	100		95		100					
CCB 410-11232/42	18:52	102		98		101					
410-3144-2	19:12	101		96		100					
410-3144-5	19:15	100		96		101					
CCV 410-11232/50	19:18	100		96		101					
CCB 410-11232/51	19:22	102		98		101					

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP Instrument ID: T72 - 16417 Start Date: 06/11/2020 End Date: 06/11/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y/0 224.306	Q	Element Y/0 371.030	Q	Element Y/1 371.030	Q	Element	Q	Element	Q
ICIS 410-12396/2	15:32										
ICV 410-12396/6	15:45	96		94		98					
ICB 410-12396/7	15:48	97		99		100					
CRI 410-12396/8	15:51	99		98		99					
ICSA 410-12396/9	15:54	88		84		95					
ICSAB 410-12396/10	15:58	88		83		95					
CCV 410-12396/11	16:02	98		95		98					
CCB 410-12396/12	16:05	99		97		98					
LRC 410-12396/13	16:08	92		94		98					
LRC 410-12396/14	16:12	85		81		93					
LRC 410-12396/15	16:15	94		96		97					
LRC 410-12396/16	16:19	90		85		94					
CCV 410-12396/17	16:22	98		94		97					
CCB 410-12396/18	16:25	100		96		97					
MB 410-10582/1-A	16:29	101		98		99					
LCS 410-10582/2-A	16:32	102		97		98					
410-3144-4	16:56	99		95		98					
410-3144-3	16:59	100		94		97					
CCV 410-12396/29	17:03	98		94		97					
CCB 410-12396/30	17:06	101		96		96					
410-3144-1	17:09	101		96		99					
CCV 410-12396/34	17:19	100		94		98					
CCB 410-12396/35	17:22	101		98		99					

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP Instrument ID: T74 - 23745 Start Date: 06/12/2020 End Date: 06/12/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y/0 224.306	Q	Element Y/0 371.030	Q	Element Y/1 371.030	Q	Element	Q	Element	Q
ICIS 410-12678/2	08:49										
ICV 410-12678/6	09:02	96		96		99					
ICV 410-12678/7	09:05	97		97		100					
ICB 410-12678/8	09:08	99		99		99					
CRI 410-12678/9	09:11	100		100		100					
ICSA 410-12678/10	09:14	88		88		94					
ICSAB 410-12678/11	09:18	88		88		97					
CCV 410-12678/12	09:21	97		98		101					
CCB 410-12678/13	09:24	98		99		99					
LRC 410-12678/14	09:27	93		100		102					
LRC 410-12678/15	09:31	82		83		93					
LRC 410-12678/16	09:34	94		99		101					
LRC 410-12678/17	09:38	89		88		96					
CCV 410-12678/18	09:41	97		98		101					
CCB 410-12678/19	09:44	99		101		103					
MB 410-11456/1-A	09:50	101		102		103					
LCS 410-11456/2-A	09:53	101		102		103					
CCV 410-12678/30	10:23	96		97		100					
CCB 410-12678/31	10:26	99		100		100					
CCV 410-12678/42	11:02	96		98		100					
CCB 410-12678/43	11:05	99		101		101					
410-3144-5	11:24	98		101		102					
410-3144-4	11:27	98		102		103					
CCV 410-12678/51	11:30	97		100		99					
CCB 410-12678/52	11:33	99		101		100					

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP Instrument ID: T75 - 27278Start Date: 06/09/2020 End Date: 06/09/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y/0 224.306	Q	Element Y/0 371.030	Q	Element Y/1 371.030	Q	Element	Q	Element	Q
ICIS 410-11592/2	14:06										
ICV 410-11592/6	14:19	98		98		102					
ICB 410-11592/7	14:22	100		100		102					
CRI 410-11592/8	14:25	100		99		102					
ICSA 410-11592/9	14:29	89		87		98					
ICSAB 410-11592/10	14:32	89		88		98					
CCV 410-11592/11	14:36	98		97		102					
CCB 410-11592/12	14:39	100		99		102					
LRC 410-11592/13	14:42	96		97		101					
LRC 410-11592/14	14:46	86		84		96					
LRC 410-11592/15	14:49	96		97		101					
LRC 410-11592/16	14:53	91		88		97					
CCV 410-11592/18	15:02	99		96		101					
CCB 410-11592/19	15:05	100		99		101					
MB 410-11479/1-A	15:09	102		101		102					
LCS 410-11479/2-A	15:12	101		100		102					
CCV 410-11592/30	15:42	97		95		98					
CCB 410-11592/31	15:46	99		98		100					
CCV 410-11592/42	16:23	98		96		100					
CCB 410-11592/43	16:26	100		99		101					
410-3144-3	16:33	99		98		100					
CCV 410-11592/51	16:53	98		97		102					
CCB 410-11592/52	16:56	99		99		103					

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP Instrument ID: T75 - 27278 Start Date: 06/12/2020 End Date: 06/12/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y/0 224.306	Q	Element Y/0 371.030	Q	Element Y/1 371.030	Q	Element	Q	Element	Q
ICIS 410-12755/2	10:02										
ICV 410-12755/6	10:15	97		98		100					
ICV 410-12755/7	10:18	98		98		101					
ICB 410-12755/8	10:21	101		102		100					
CRI 410-12755/9	10:24	101		102		101					
ICSA 410-12755/10	10:27	90		89		97					
ICSAB 410-12755/11	10:31	90		88		96					
CCV 410-12755/12	10:34	100		98		100					
CCB 410-12755/13	10:37	101		101		100					
LRC 410-12755/14	10:41	98		99		101					
LRC 410-12755/15	10:44	87		86		96					
LRC 410-12755/16	10:48	97		99		101					
LRC 410-12755/17	10:51	92		90		97					
CCV 410-12755/18	10:55	99		99		101					
CCB 410-12755/19	10:58	101		102		101					
MB 410-11136/1-A	15:38	104		105		104					
LCS 410-11136/2-A	15:41	104		105		104					
CCV 410-12755/30	16:10	100		100		102					
CCB 410-12755/31	16:13	102		104		103					
410-3144-2	16:20	102		103		104					
410-3144-1	16:23	102		103		104					
CCV 410-12755/42	16:49	99		100		102					
CCB 410-12755/43	16:52	101		103		102					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP-MS Instrument ID: E07 - 27813 Start Date: 06/08/2020 End Date: 06/08/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc/1	Q	Element Sc/2	Q	Element Sc/3	Q	Element Ge/1	Q	Element Ge/2	Q
STD1 410-11423/2 IC	11:38	101		101		100		100		101	
STD2 410-11423/3 IC	11:40	101		102		100		100		100	
STD3 410-11423/4 IC	11:42	100		101		100		100		100	
ICV 410-11423/5	11:44	100		98		99		100		97	
ICB 410-11423/6	11:46	101		98		98		101		99	
CRI 410-11423/7	11:48	102		99		101		101		99	
ICSA 410-11423/8	11:50	99		97		96		99		96	
ICSAB 410-11423/9	11:51	100		97		97		100		96	
LRC 410-11423/10	11:53	103		99		101		101		99	
CCV 410-11423/13	11:59	103		99		101		101		98	
CCB 410-11423/14	12:01	102		98		100		101		99	
MB 410-10576/1-A	12:03	102		99		101		101		99	
LCS 410-10576/2-A	12:04	103		100		101		103		101	
CCV 410-11423/25	12:21	103		99		102		102		99	
CCB 410-11423/26	12:23	103		97		100		102		98	
410-3144-2	12:27	105		98		101		104		99	
410-3144-5	12:29	104		97		100		104		100	
410-3144-4	12:30	104		98		100		104		100	
410-3144-3	12:32	104		98		100		104		99	
410-3144-1	12:34	106		99		100		104		99	
CCV 410-11423/33	12:36	103		98		101		101		99	
CCB 410-11423/34	12:38	103		98		101		102		99	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-3144-1

SDG No.: _____

ICP-MS Instrument ID: E07 - 27813 Start Date: 06/08/2020 End Date: 06/08/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Ge/3	Q	Element In/2	Q	Element In/3	Q	Element Tb	Q	Element Bi	Q
STD1 410-11423/2 IC	11:38	99		102		101		100		100	
STD2 410-11423/3 IC	11:40	99		101		102		99		100	
STD3 410-11423/4 IC	11:42	97		101		101		99		99	
ICV 410-11423/5	11:44	98		99		101		99		99	
ICB 410-11423/6	11:46	98		100		100		98		98	
CRI 410-11423/7	11:48	99		101		100		98		99	
ICSA 410-11423/8	11:50	95		94		93		95		91	
ICSAB 410-11423/9	11:51	99		94		95		96		90	
LRC 410-11423/10	11:53	99		105		105		97		94	
CCV 410-11423/13	11:59	100		101		100		99		98	
CCB 410-11423/14	12:01	100		100		100		97		98	
MB 410-10576/1-A	12:03	100		101		102		98		99	
LCS 410-10576/2-A	12:04	101		103		102		98		98	
CCV 410-11423/25	12:21	100		103		102		100		99	
CCB 410-11423/26	12:23	100		101		100		98		98	
410-3144-2	12:27	101		102		102		99		100	
410-3144-5	12:29	102		102		102		99		100	
410-3144-4	12:30	101		103		103		99		99	
410-3144-3	12:32	101		103		102		99		101	
410-3144-1	12:34	101		103		101		98		100	
CCV 410-11423/33	12:36	100		103		103		99		98	
CCB 410-11423/34	12:38	101		103		101		98		98	

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 10573 Batch Start Date: 06/07/20 04:30 Batch Analyst: Kuhns, Annamaria M

Batch Method: 3005A Batch End Date: 06/07/20 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00003	MP_1:1HNO3 00003	MT_KNiZn_IV 00008	MT_S_LLC_HP 00003
MB 410-10573/1		3005A, 6010C		50 mL	50 mL	5 mL	2 mL		
LCS 410-10573/2		3005A, 6010C		50 mL	50 mL	5 mL	2 mL	0.5 mL	0.2 mL
410-3144-H-2	GWVA2-6023	3005A, 6010C	R	50 mL	50 mL	5 mL	2 mL		
410-3144-H-5	GWK003-2023	3005A, 6010C	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Unit ID	#15
Pipette/Syringe/Dispenser ID	0111/200, S/500
Analyst ID - Spike Analyst	0862
Thermometer ID	DT791/DP792
Digestion Tube/Cup ID	2001329
Temperature - Uncorrected - End	91.4 Degrees C
Temperature - Uncorrected - Start	91.4 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6010C

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 10582 Batch Start Date: 06/07/20 04:30 Batch Analyst: Kuhns, Annamaria M

Batch Method: 3005A Batch End Date: 06/07/20 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00003	MP_1:1HNO3 00003	MT_KNiZn_IV 00008	MT_S_LLC_HP 00003
MB 410-10582/1		3005A, 6010C		50 mL	50 mL	5 mL	2 mL		
LCS 410-10582/2		3005A, 6010C		50 mL	50 mL	5 mL	2 mL	0.5 mL	0.2 mL
410-3144-H-4	GWK016-2023	3005A, 6010C	R	50 mL	50 mL	5 mL	2 mL		
410-3144-H-3	GWK015-2023	3005A, 6010C	R	50 mL	50 mL	5 mL	2 mL		
410-3144-H-1	GWVA2-2023	3005A, 6010C	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Unit ID	#15
Pipette/Syringe/Dispenser ID	0111/200, S/500
Analyst ID - Spike Analyst	0862
Thermometer ID	DT791/DP792
Digestion Tube/Cup ID	2001329
Temperature - Uncorrected - End	91.3 Degrees C
Temperature - Uncorrected - Start	91.3 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11136 Batch Start Date: 06/08/20 09:35 Batch Analyst: Kuhns, Annamaria M

Batch Method: Non-Digest Prep Batch End Date: 06/08/20 09:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00004	MP_1:1HNO3 00003	MT_KNiZn_IV 00008	MT_S_LLC_HP 00003
MB 410-11136/1		Non-Digest Prep, 6010C		50 mL	51.5 mL	0.5 mL	1 mL		
LCS 410-11136/2		Non-Digest Prep, 6010C		50 mL	50 mL	0.5 mL	1 mL	0.5 mL	0.2 mL
410-3144-L-2	GWVA2-6023	Non-Digest Prep, 6010C	D	50 mL	51.5 mL	0.5 mL	1 mL		
410-3144-L-1	GWVA2-2023	Non-Digest Prep, 6010C	D	50 mL	51.5 mL	0.5 mL	1 mL		

Batch Notes	
Digestion Tubes ID	2001329
Pipette/Syringe/Dispenser ID	0111/200, S/500

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11456 Batch Start Date: 06/09/20 09:30 Batch Analyst: Kuhns, Annamaria M

Batch Method: Non-Digest Prep Batch End Date: 06/09/20 09:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00004	MP_1:1HNO3 00003	MT_KNiZn_IV 00008	MT_S_LLC_HP 00003
MB 410-11456/1		Non-Digest Prep, 6010C		50 mL	51.5 mL	0.5 mL	1 mL		
LCS 410-11456/2		Non-Digest Prep, 6010C		50 mL	50 mL	0.5 mL	1 mL	0.5 mL	0.2 mL
410-3144-L-5	GWK003-2023	Non-Digest Prep, 6010C	D	50 mL	51.5 mL	0.5 mL	1 mL		
410-3144-L-4	GWK016-2023	Non-Digest Prep, 6010C	D	50 mL	51.5 mL	0.5 mL	1 mL		

Batch Notes	
Digestion Tubes ID	2001329
Pipette/Syringe/Dispenser ID	0111/200, S/500

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11479 Batch Start Date: 06/09/20 10:35 Batch Analyst: Kuhns, Annamaria M

Batch Method: Non-Digest Prep Batch End Date: 06/09/20 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00004	MP_1:1HNO3 00003	MT_KNiZn_IV 00008	MT_S_LLC_HP 00003
MB 410-11479/1		Non-Digest Prep, 6010C		50 mL	51.5 mL	0.5 mL	1 mL		
LCS 410-11479/2		Non-Digest Prep, 6010C		50 mL	50 mL	0.5 mL	1 mL	0.5 mL	0.2 mL
410-3144-L-3	GWK015-2023	Non-Digest Prep, 6010C	D	50 mL	51.5 mL	0.5 mL	1 mL		

Batch Notes	
Digestion Tubes ID	2001329
Pipette/Syringe/Dispenser ID	0111/200, S/500

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6010C

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 10576 Batch Start Date: 06/07/20 04:00 Batch Analyst: Kuhns, Annamaria M

Batch Method: 3020A Batch End Date: 06/07/20 08:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MT_HNO3_JT 00003	MT_MSSPK_SCP 00002		
MB 410-10576/1		3020A, 6020A		50 mL	50 mL	3 mL			
LCS 410-10576/2		3020A, 6020A		50 mL	50 mL	3 mL	0.5 mL		
410-3144-I-2	GWVA2-6023	3020A, 6020A	T	50 mL	50 mL	3 mL			
410-3144-I-5	GWK003-2023	3020A, 6020A	T	50 mL	50 mL	3 mL			
410-3144-I-4	GWK016-2023	3020A, 6020A	T	50 mL	50 mL	3 mL			
410-3144-I-3	GWK015-2023	3020A, 6020A	T	50 mL	50 mL	3 mL			
410-3144-I-1	GWVA2-2023	3020A, 6020A	T	50 mL	50 mL	3 mL			

Batch Notes	
Temperature - Corrected - End	93.8 Degrees C
Temperature - Corrected - Start	93.8 Degrees C
Digestion Unit ID	#14
Pipette/Syringe/Dispenser ID	S/500
Analyst ID - Spike Analyst	0862
Thermometer ID	DT791/DP792
Digestion Tube/Cup ID	2001329

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6020A

11232

[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=Matrix_Rinse
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 16:38:32
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	-.0010	.0004	36.76	-.0009	-.0006	-.0013	None,,		
Al	308.215	{109}	Y2R, ppm	.0719	.0092	12.82	.0754	.0789	.0615	None,,		
Alum ax	308.215	{109}2	Y2A, ppm	-.0049	.0017	34.48	-.0057	-.0060	-.0029	None,,		
As	189.042	{478}	Y1, ppm	.0046	.0026	55.69	.0066	.0017	.0056	None,,		
B	249.773	{135}	Y2A, ppm	-.0007	.0003	39.34	-.0010	-.0005	-.0005	None,,		
Ba	455.403	{ 74}	Y2A, ppm	-.0000	.0000	45.96	-.0000	-.0000	-.0000	None,,		
Be	313.042	{108}	Y2A, ppm	-.00000	.00001	1197.3	.00001	-.00001	-.00000	None,,		
Ca	317.933	{106}	Y2R, ppm	-.0074	.0015	20.69	-.0089	-.0076	-.0058	None,,		
Cd	226.502	{449}	Y1, ppm	-.0001	.0002	308.8	-.0002	.0001	-.0000	None,,		
Co	228.616	{447}	Y1, ppm	-.0000	.0004	3174.	-.0002	.0004	-.0002	None,,		
Cr	267.716	{126}	Y2A, ppm	.0005	.0010	182.5	.0014	-.0005	.0007	None,,		
Cu	327.396	{103}	Y2A, ppm	.0005	.0006	143.6	.0010	-.0003	.0006	None,,		
Fe	261.187	{129}	Y2R, ppm	.0035	.0066	187.9	.0087	.0057	-.0039	None,,		
K	766.490	{ 44}	Y2R, ppm	.0150	.0291	193.6	.0062	.0475	-.0086	None,,		
Li	670.784	{ 50}	Y2R, ppm	.0035	.0011	31.05	.0033	.0026	.0047	None,,		
Mg	285.213	{118}	Y2R, ppm	-.0004	.0016	426.5	-.0020	.0012	-.0004	None,,		
Mn	257.610	{131}	Y2A, ppm	.00001	.00004	331.11	.00003	-.00004	.00005	None,,		
Mo	202.030	{467}	Y1, ppm	.0001	.0003	434.9	-.0003	.0003	.0002	None,,		
Na	589.592	{ 57}	Y2R, ppm	-.0073	.0135	185.0	.0022	-.0227	-.0013	None,,		
Ni	231.604	{445}	Y1, ppm	.0066	.0004	5.379	.0067	.0063	.0070	None,,		
P	177.495	{490}	Y1, ppm	.0019	.0038	195.7	.0029	.0052	-.0022	None,,		
Pb	220.353	{453}	Y1, ppm	.0027	.0046	169.2	-.0023	.0067	.0037	None,,		
S	182.034	{485}	Y1, ppm	-.0193	.0191	98.83	-.0299	-.0308	.0027	None,,		
Sb	206.833	{463}	Y1, ppm	-.0013	.0044	330.7	-.0061	.0027	-.0006	None,,		
Se	196.090	{472}	Y1, ppm	.0030	.0036	118.9	.0033	-.0007	.0065	None,,		
Si	251.611	{134}	Y2R, ppm	-.00402	.00846	210.16	-.01348	-.00139	.00280	None,,		
Sn	189.989	{477}	Y1, ppm	-.0030	.0014	47.20	-.0041	-.0035	-.0014	None,,		
Sr	421.552	{ 80}	Y2A, ppm	.0000	.0000	414.2	-.0000	-.0000	.0000	None,,		
Th	283.730	{119}	Y2R, ppm	-.0087	.0189	217.6	-.0116	.0115	-.0259	None,,		
Ti	334.941	{101}	Y2A, ppm	-.0001	.0002	201.0	.0001	-.0002	-.0001	None,,		
Tl	190.856	{477}	Y1, ppm	.0010	.0069	662.9	.0018	-.0063	.0075	None,,		
V	292.402	{115}	Y2A, ppm	-.0002	.0004	193.1	-.0001	-.0007	.0001	None,,		
W	207.911	{462}	Y1, ppm	-.0019	.0044	233.0	-.0037	.0031	-.0051	None,,		
Zn	213.856	{458}	Y1, ppm	-.0008	.0004	46.25	-.0010	-.0011	-.0004	None,,		
Zr	339.198	{ 99}	Y2R, ppm	.0012	.0018	156.3	.0006	-.0003	.0032	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2980.8	6.5790	.22072	2986.7	2981.9	2973.7
Y2A	371.030	{ 91}2	Cts/S	259860.	568.36	.21871	260280.	260100.	259220.
Y2R	371.030	{ 91}3	Cts/S	16643.	10.226	.06145	16654.	16639.	16635.

[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=S0
 Username=dept 22

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Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 16:41:41
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Ag	328.068	{103}	Y2A,Cts/S	-.0344	.0004	1.060	-.0345	-.0340	-.0348
Al	308.215	{109}	Y2R,Cts/S	.0706	.0101	14.24	.0778	.0591	.0748
Alum ax	308.215	{109}2	Y2A,Cts/S	.0551	.0019	3.392	.0545	.0572	.0536
As	189.042	{478}	Y1,Cts/S	.0048	.0040	84.21	.0078	.0002	.0063
B	249.773	{135}	Y2A,Cts/S	.0000	.0000	190.9	.0000	.0000	-.0000
Ba	455.403	{74}	Y2A,Cts/S	.0002	.0001	31.85	.0001	.0002	.0003
Be	313.042	{108}	Y2A,Cts/S	.01874	.00111	5.9163	.01746	.01933	.01942
Cd	317.933	{106}	Y2R,Cts/S	.0030	.0002	6.647	.0029	.0028	.0032
Ca	226.502	{449}	Y1,Cts/S	-.0089	.0137	154.2	-.0215	.0057	-.0109
Co	228.616	{447}	Y1,Cts/S	-.0180	.0042	23.40	-.0158	-.0153	-.0228
Cr	267.716	{126}	Y2A,Cts/S	.0000	.0000	24.37	.0000	.0000	.0000
Cu	327.396	{103}	Y2A,Cts/S	-.0255	.0009	3.712	-.0249	-.0266	-.0250
Fe	261.187	{129}	Y2R,Cts/S	-.0003	.0001	21.09	-.0003	-.0002	-.0003
K	766.490	{44}	Y2R,Cts/S	-.1171	.0413	35.29	-.0707	-.1306	-.1500
Li	670.784	{50}	Y2R,Cts/S	.0031	.0005	16.26	.0031	.0026	.0036
Mg	285.213	{118}	Y2R,Cts/S	-.0006	.0002	27.52	-.0006	-.0004	-.0007
Mn	257.610	{131}	Y2A,Cts/S	-.00102	.00054	52.706	-.00161	-.00055	-.00090
Mo	202.030	{467}	Y1,Cts/S	.0015	.0168	1156.	-.0134	-.0018	.0196
Na	589.592	{57}	Y2R,Cts/S	-.0048	.0007	15.34	-.0053	-.0051	-.0040
Ni	231.604	{445}	Y1,Cts/S	-.0603	.0253	41.94	-.0493	-.0423	-.0892
P	177.495	{490}	Y1,Cts/S	.0007	.0002	34.10	.0009	.0009	.0004
Pb	220.353	{453}	Y1,Cts/S	.0795	.0096	12.08	.0895	.0703	.0788
S	182.034	{485}	Y1,Cts/S	.0008	.0003	39.65	.0010	.0010	.0004
Sb	206.833	{463}	Y1,Cts/S	-.0000	.0001	314.6	-.0001	-.0001	.0001
Se	196.090	{472}	Y1,Cts/S	-.0021	.0053	255.8	-.0074	.0032	-.0020
Si	251.611	{134}	Y2R,Cts/S	.00011	.00003	27.699	.00010	.00015	.00009
Sn	189.989	{477}	Y1,Cts/S	.0060	.0157	259.4	-.0049	-.0010	.0240
Sr	421.552	{80}	Y2A,Cts/S	-.0003	.0000	10.35	-.0003	-.0003	-.0004
Th	283.730	{119}	Y2R,Cts/S	-.0002	.0000	8.031	-.0002	-.0002	-.0002
Ti	334.941	{101}	Y2A,Cts/S	.0062	.0009	14.71	.0057	.0057	.0073
Tl	190.856	{477}	Y1,Cts/S	-.0045	.0091	200.1	-.0069	-.0122	.0055
V	292.402	{115}	Y2A,Cts/S	.0030	.0010	34.10	.0031	.0019	.0040
W	207.911	{462}	Y1,Cts/S	.0004	.0002	52.55	.0002	.0004	.0007
Zn	213.856	{458}	Y1,Cts/S	.0507	.0024	4.688	.0486	.0502	.0533
Zr	339.198	{99}	Y2R,Cts/S	.0008	.0001	11.81	.0007	.0008	.0009

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2979.7	3.1294	.10502	2980.9	2976.1	2982.0
Y2A	371.030	{91}2	Cts/S	257160.	732.58	.28487	256800.	258000.	256680.
Y2R	371.030	{91}3	Cts/S	16527.	7.8341	.04740	16533.	16530.	16518.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=S1
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 16:44:51

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Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Al,308.215 {109},Y2R,Cts/S, 18.32,.0562,.3069, 18.33, 18.38, 18.27
 Alum ax,308.215 {109}2,Y2A,Cts/S, 25.27,.0854,.3380, 25.18, 25.34, 25.30
 Ca,317.933 {106},Y2R,Cts/S, 3.171,.0062,.1950, 3.164, 3.176, 3.173
 Fe,261.187 {129},Y2R,Cts/S, .6354,.0022,.3396, .6333, .6376, .6355
 K,766.490 { 44},Y2R,Cts/S, 50.56,.0655,.1296, 50.58, 50.60, 50.48
 Mg,285.213 {118},Y2R,Cts/S, 4.875,.0039,.0809, 4.873, 4.879, 4.872
 Na,589.592 { 57},Y2R,Cts/S, 3.264,.0082,.2516, 3.259, 3.273, 3.259
 S,182.034 {485},Y1,Cts/S, .5806,.0001,.0174, .5806, .5805, .5807
 Si,251.611 {134},Y2R,Cts/S, .35853,.00045,.12435, .35896, .35856, .35807

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2896.9,2.2073,.07620,2895.0,2899.3,2896.4
 Y2A,371.030 { 91}2,Cts/S, 245280.,167.19,.06816,245250.,245140.,245460.
 Y2R,371.030 { 91}3,Cts/S, 16567.,12.569,.07586,16577.,16572.,16553.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=S2
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 16:47:56
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Ag,328.068 {103},Y2A,Cts/S, 2.543,.0063,.2489, 2.546, 2.547, 2.536
 As,189.042 {478},Y1,Cts/S, 1.313,.0168,1.278, 1.296, 1.314, 1.330
 B,249.773 {135},Y2A,Cts/S, .0218,.0000,.1426, .0217, .0218, .0217
 Ba,455.403 { 74},Y2A,Cts/S, 2.829,.0118,.4162, 2.830, 2.817, 2.840
 Be,313.042 {108},Y2A,Cts/S, 83.207,.35424,.42574, 83.616, 83.002, 83.003
 Cd,226.502 {449},Y1,Cts/S, 68.87,.6773,.9834, 68.21, 68.84, 69.56
 Co,228.616 {447},Y1,Cts/S, 37.42,.3848,1.028, 37.02, 37.44, 37.79
 Cu,327.396 {103},Y2A,Cts/S, 2.664,.0017,.0646, 2.662, 2.664, 2.665
 Li,670.784 { 50},Y2R,Cts/S, .3844,.0018,.4739, .3864, .3839, .3829
 Mn,257.610 {131},Y2A,Cts/S, 9.1780,.00599,.06529, 9.1736, 9.1848, 9.1754
 Ni,231.604 {445},Y1,Cts/S, 21.35,.2440,1.143, 21.07, 21.44, 21.53
 P,177.495 {490},Y1,Cts/S, .0253,.0004,1.629, .0248, .0254, .0256
 Pb,220.353 {453},Y1,Cts/S, 5.957,.0116,.1944, 5.944, 5.964, 5.963
 Se,196.090 {472},Y1,Cts/S, .8668,.0123,1.423, .8560, .8802, .8641
 Sr,421.552 { 80},Y2A,Cts/S, 3.560,.0085,.2374, 3.564, 3.551, 3.567
 Th,283.730 {119},Y2R,Cts/S, .0086,.0001,.7176, .0085, .0086, .0086
 Tl,190.856 {477},Y1,Cts/S, 1.159,.0142,1.221, 1.174, 1.145, 1.158
 W,207.911 {462},Y1,Cts/S, .0992,.0012,1.219, .0985, .0985, .1006
 Zn,213.856 {458},Y1,Cts/S, 41.91,.3741,.8925, 41.55, 41.88, 42.30

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2894.9,23.562,.81393,2917.0,2897.5,2870.1
 Y2A,371.030 { 91}2,Cts/S, 249240.,102.37,.04107,249230.,249350.,249140.

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Y2R,371.030 { 91}3,Cts/S, 16602.,25.986,.15652,16605.,16575.,16627.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=S3
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 16:51:21
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Cr,267.716 {126},Y2A,Cts/S, .0321,.0001,.2750, .0320, .0321, .0321
 Mo,202.030 {467},Y1,Cts/S, 9.787,.0411,.4198, 9.755, 9.833, 9.772
 Sb,206.833 {463},Y1,Cts/S, .0435,.0004,.8116, .0437, .0438, .0431
 Sn,189.989 {477},Y1,Cts/S, 2.792,.0232,.8322, 2.774, 2.818, 2.783
 Ti,334.941 {101},Y2A,Cts/S, 12.28,.0319,.2598, 12.24, 12.29, 12.31
 V,292.402 {115},Y2A,Cts/S, 2.110,.0093,.4389, 2.110, 2.101, 2.119
 Zr,339.198 { 99},Y2R,Cts/S, .1559,.0007,.4776, .1568, .1554, .1556

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2947.6,14.892,.50520,2956.0,2930.5,2956.5
 Y2A,371.030 { 91}2,Cts/S, 257210.,862.99,.33552,258200.,256680.,256750.
 Y2R,371.030 { 91}3,Cts/S, 16622.,52.529,.31601,16664.,16563.,16640.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=ICV 068497
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 16:54:29
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .6152,.0044,.7208, .6101, .6170, .6184,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 30.05,.1272,.4232, 30.13, 29.90, 30.10,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 30.33,.2673,.8811, 30.03, 30.43, 30.54,Chk Pass,,
 As,189.042 {478},Y1,ppm, .6044,.0070,1.150, .6067, .6100, .5966,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6133,.0053,.8649, .6073, .6153, .6174,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .6245,.0065,1.046, .6176, .6254, .6306,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .59893,.00416,.69527, .59413, .60114, .60153,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 29.24,.0288,.0984, 29.21, 29.27, 29.25,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .6068,.0020,.3377, .6065, .6050, .6091,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .6066,.0015,.2394, .6077, .6049, .6071,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .6109,.0066,1.073, .6034, .6139, .6154,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .6259,.0064,1.021, .6187, .6284, .6307,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 29.64,.0575,.1939, 29.62, 29.70, 29.59,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 29.56,.0467,.1581, 29.57, 29.61, 29.51,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .6179,.0028,.4561, .6207, .6151, .6180,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 29.54,.0516,.1747, 29.50, 29.60, 29.51,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .61480,.00462,.75220, .60949, .61697, .61794,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .6056,.0024,.3924, .6083, .6041, .6043,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 28.97,.0530,.1831, 28.92, 29.03, 28.95,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .6132,.0007,.1210, .6125, .6133, .6139,Chk Pass,,
P,177.495 {490},Y1,ppm, .5985,.0120,2.005, .6103, .5864, .5987,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .6033,.0054,.9002, .5996, .6095, .6007,Chk Pass,,
S,182.034 {485},Y1,ppm, 30.50,.0154,.0505, 30.52, 30.49, 30.50,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .6154,.0081,1.313, .6243, .6136, .6084,Chk Pass,,
Se,196.090 {472},Y1,ppm, .5894,.0103,1.754, .5865, .6009, .5809,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 31.052,.07769,.25020, 31.121, 30.968, 31.066, None,,
Sn,189.989 {477},Y1,ppm, .5911,.0025,.4305, .5887, .5937, .5908,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .6242,.0065,1.048, .6171, .6257, .6299,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .5951,.0344,5.775, .6096, .5559, .6198,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .6268,.0064,1.026, .6194, .6297, .6313,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .5911,.0039,.6584, .5878, .5901, .5954,Chk Pass,,
V,292.402 {115},Y2A,ppm, .6189,.0050,.8020, .6131, .6216, .6218,Chk Pass,,
W,207.911 {462},Y1,ppm, .6100,.0059,.9686, .6072, .6168, .6061,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5976,.0014,.2409, .5987, .5960, .5982,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm,F .6707,.0030,.4476, .6672, .6728, .6721,Chk
Fail,.6000,10.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 2867.9,5.4130,.18874,2867.9,2873.3,2862.5
Y2A,371.030 { 91}2,Cts/S, 243940.,1862.0,.76329,246030.,243330.,242460.
Y2R,371.030 { 91}3,Cts/S, 16504.,5.0989,.03090,16510.,16501.,16500.

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=ICB 078331
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 16:57:41
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.0015,.0003,23.11, -.0015, -.0012, -.0019,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .0185,.0541,292.6, .0312, -.0408, .0651,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .0073,.0050,67.69, .0130, .0036, .0054,Chk Pass,,
As,189.042 {478},Y1,ppm, -.0033,.0045,137.0, -.0039, -.0075, .0015,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0018,.0009,51.41, .0018, .0028, .0009,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0000,.0000,126.9, .0001, .0000, .0000,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .00004,.00002,60.626, .00007, .00003, .00003,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, .0019,.0030,158.7, .0036, .0036, -.0016,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0001,.0002,376.9, -.0002, .0001, .0003,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0002,.0002,74.13, .0003, .0001, .0004,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0002,.0002,124.4, -.0000, .0002, .0004,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0008,.0005,62.00, .0011, .0002, .0012,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0060,.0030,50.81, .0040, .0044, .0094,Chk Pass,,
K,766.490 { 44},Y2R,ppm, -.0348,.0941,270.0, -.0689, .0715, -.1071,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.0005,.0025,546.0, .0017, .0001, -.0032,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, .0033,.0022,67.07, .0057, .0027, .0014,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00004,.00005,126.89, .00009, -.00002, .00006,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0005,.0010,191.3, -.0004, .0003, .0016,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, -.0023,.0235,1022., .0225, -.0050, -.0244,Chk Pass,,

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Ni,231.604 {445},Y1,ppm,F .0062,.0008,13.01, .0071, .0062, .0055,Chk
 Fail,.0050,-.0050
 P,177.495 {490},Y1,ppm, -.0013,.0097,738.6, .0098, -.0056, -.0082,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0021,.0036,174.6, .0006, .0062, -.0006,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0120,.0037,30.98, -.0077, -.0140, -.0142,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0030,.0049,163.7, -.0039, -.0074, .0023,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0163,.0127,78.04, .0276, .0026, .0185,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .00228,.01281,560.66, -.01237, .01130, .00793,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0018,.0030,165.9, -.0048, -.0018, .0012,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000,.0000,123.7, .0001, -.0000, .0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0366,.0086,23.52, -.0408, -.0267, -.0424,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0000,.0001,526.9, .0001, -.0000, -.0001,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0107,.0127,118.6, .0243, .0087, -.0008,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0000,.0007,2277., -.0008, .0005, .0002,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0019,.0037,199.7, -.0034, .0024, -.0046,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0008,.0002,19.51, -.0009, -.0008, -.0006,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0002,.0024,1006., -.0022, -.0010, .0025,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2944.7,.65064,.02210,2945.4,2944.1,2944.6
 Y2A,371.030 { 91}2,Cts/S, 252010.,124.47,.04939,251900.,251990.,252150.
 Y2R,371.030 { 91}3,Cts/S, 16292.,4.8321,.02966,16296.,16295.,16287.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CRI 58707
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:00:52
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0114,.0004,3.159, .0118, .0112, .0112,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .2242,.0132,5.889, .2100, .2361, .2265,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .2169,.0028,1.289, .2197, .2170, .2141,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0314,.0053,17.00, .0254, .0357, .0331,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0320,.0001,.2570, .0319, .0321, .0320,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0054,.0000,.6110, .0054, .0053, .0054,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00508,.00001,.26399, .00508, .00508, .00510,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .1963,.0046,2.333, .1980, .1911, .1997,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0055,.0002,3.333, .0056, .0053, .0057,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0057,.0006,10.48, .0050, .0061, .0058,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0152,.0006,4.157, .0158, .0154, .0145,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0217,.0011,5.210, .0211, .0230, .0209,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .2208,.0151,6.844, .2258, .2038, .2328,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .3366,.0463,13.74, .2840, .3710, .3548,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0520,.0001,.2357, .0518, .0520, .0521,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .1060,.0008,.7267, .1055, .1069, .1056,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .01069,.00003,.25759, .01069, .01066, .01071,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0099,.0012,12.36, .0103, .0086, .0109,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 1.038,.0190,1.829, 1.058, 1.020, 1.035,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0169,.0008,4.478, .0175, .0160, .0171,Chk
 Fail,.0100,50.00%
 P,177.495 {490},Y1,ppm, .0873,.0071,8.097, .0810, .0859, .0949,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0163,.0036,22.18, .0203, .0152, .0133,Chk Pass,,

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S,182.034 {485},Y1,ppm, .5225,.0127,2.433, .5089, .5341, .5247,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0573,.0078,13.65, .0663, .0518, .0540,Chk Pass,,
 Se,196.090 {472},Y1,ppm,w .0602,.0210,34.82, .0806, .0387, .0614,Chk
 warn,.0500,20.00%
 Si,251.611 {134},Y2R,ppm, .54232,.00572,1.0539, .54841, .54148, .53707,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0509,.0039,7.710, .0525, .0537, .0464,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0054,.0000,.4907, .0054, .0054, .0053,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5050,.0192,3.796, .5171, .4829, .5149,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0104,.0001,.5681, .0104, .0104, .0103,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0352,.0055,15.57, .0381, .0288, .0385,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0105,.0005,4.487, .0108, .0099, .0108,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0301,.0026,8.711, .0271, .0318, .0315,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0211,.0001,.5571, .0210, .0209, .0212,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0552,.0006,1.008, .0556, .0554, .0546,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2983.2,6.0981,.20441,2983.0,2977.2,2989.4
 Y2A,371.030 { 91}2,Cts/S, 255440.,510.17,.19972,255570.,254880.,255870.
 Y2R,371.030 { 91}3,Cts/S, 16313.,145.32,.89081,16146.,16389.,16405.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=ICSA 052462
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:04:00
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.0097,.0003,3.207, -.0099, -.0097, -.0093,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 493.7,.9667,.1958, 492.8, 493.6, 494.7,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 472.6,1.550,.3278, 473.9, 470.9, 473.2,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0124,.0058,47.09, .0183, .0124, .0066,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0044,.0003,6.484, -.0042, -.0047, -.0042,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0020,.0000,1.461, .0020, .0020, .0020,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00001,.00000,79.383, -.00000, -.00000, -.00001,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, 511.5,1.429,.2793, 512.1, 512.6, 509.9,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004,.0005,115.8, .0006, -.0001, .0008,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0008,.0012,149.3, .0022, .0003, -.0001,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0016,.0016,102.5, -.0003, .0024, .0027,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0085,.0006,6.767, .0087, .0090, .0079,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 201.4,.5339,.2650, 201.1, 201.2, 202.1,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .1546,.0210,13.57, .1741, .1574, .1324,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0057,.0043,76.22, -.0090, -.0074, -.0008,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 497.9,1.565,.3144, 497.0, 496.9, 499.7,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, -.00019,.00023,120.71, .00007, -.00036, -.00027,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0098,.0017,17.47, -.0116, -.0095, -.0082,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0504,.0079,15.67, .0582, .0424, .0507,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,w .0125,.0001,.7741, .0126, .0125, .0124,Chk
 warn,.0100,-.0100
 P,177.495 {490},Y1,ppm, -.0325,.0224,68.91, -.0189, -.0202, -.0584,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0022,.0056,260.1, .0066, -.0041, .0039,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0943,.0303,32.17, -.0898, -.1267, -.0665,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0054,.0070,128.6, .0134, .0003, .0025,Chk Pass,,

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Se,196.090 {472},Y1,ppm, .0078,.0176,224.3, .0212, -.0121, .0144,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .02279,.01134,49.775, .01862, .03563, .01412,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0128,.0077,60.04, .0204, .0128, .0051,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0008,.0000,3.555, .0008, .0008, .0008,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0949, .0169,17.81, -.0796, -.1131, -.0921,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0005,.0001,19.06, -.0004, -.0006, -.0005,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.0125, .0148,117.8, .0041, -.0243, -.0174,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0029, .0010,33.06, -.0033, -.0036, -.0018,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0092, .0031,33.88, .0111, .0108, .0056,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0200, .0012,5.829, .0186, .0208, .0205,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0063, .0024,37.23, .0036, .0075, .0079,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2644.4,3.1520, .11920,2640.9,2645.1,2647.1
 Y2A,371.030 { 91}2,Cts/S, 219330.,246.43, .11236,219510.,219430.,219050.
 Y2R,371.030 { 91}3,Cts/S, 15906.,25.602, .16096,15935.,15888.,15894.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=ICSAB 070731
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:07:34
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .2039,.0008, .3863, .2047, .2039, .2031,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 487.1,1.128, .2316, 488.1, 485.9, 487.4,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 467.7,2.217, .4741, 465.1, 468.6, 469.2,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0942, .0092,9.763, .0919, .1044, .0865,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0051, .0007,14.69, -.0054, -.0056, -.0042,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5049, .0014, .2724, .5064, .5037, .5046,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .49132, .00143, .29166, .49296, .49027, .49075,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 499.4,1.007, .2017, 500.5, 498.7, 498.9,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .8864, .0018, .2064, .8873, .8876, .8843,Chk Pass,,
 Co,228.616 {447},Y1,ppm,W .4457, .0006, .1379, .4450, .4461, .4460,Chk
 Warn, .5500, .4500
 Cr,267.716 {126},Y2A,ppm, .4803, .0036, .7596, .4836, .4764, .4810,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5391, .0024, .4426, .5416, .5387, .5369,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 198.4, .4867, .2453, 198.8, 197.9, 198.6,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .1337, .0170,12.70, .1198, .1287, .1526,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0102, .0053,51.66, -.0158, -.0095, -.0053,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 489.4,3.409, .6966, 493.3, 487.0, 488.0,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .47960, .00102, .21250, .48076, .47886, .47917,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0077, .0033,42.72, -.0040, -.0104, -.0086,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0535, .0074,13.84, .0516, .0473, .0617,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,W .8823, .0005, .0581, .8828, .8818, .8821,Chk
 Warn,1.100, .9000
 P,177.495 {490},Y1,ppm, -.0277, .0026,9.319, -.0257, -.0306, -.0269,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4828, .0070,1.458, .4862, .4875, .4747,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0803, .0145,18.05, -.0875, -.0898, -.0636,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6042, .0003, .0547, .6039, .6042, .6046,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4849, .0114,2.352, .4755, .4976, .4817,Chk Pass,,
 Si,251.611 {134},Y2R,ppm,F .00518, .01103,213.05, -.00022, .01786, -.00211,Chk
 Fail,1.0000,1.0000

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Sn,189.989 {477},Y1,ppm, .0048,.0051,104.6, -.0003, .0097, .0051,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0008,.0000,2.373, .0008, .0008, .0007,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0906,.0180,19.89, -.1099, -.0880, -.0741,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0001,.0001,84.03, -.0002, -.0002, -.0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm,F .0507,.0025,4.949, .0487, .0500, .0535,Chk
 Fail, .1200, .0800
 V,292.402 {115},Y2A,ppm, .5055,.0025,.4875, .5076, .5028, .5060,Chk Pass,,
 W,207.911 {462},Y1,ppm,F .0112,.0023,20.35, .0088, .0133, .0115,Chk
 Fail, -.0600, -.0600
 Zn,213.856 {458},Y1,ppm, .9581,.0023,.2417, .9588, .9601, .9556,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0064,.0023,36.44, .0041, .0063, .0087,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2668.0,1.4675,.05501,2667.9,2666.5,2669.4
 Y2A,371.030 { 91}2,Cts/S, 221970.,474.68,.21385,221450.,222390.,222070.
 Y2R,371.030 { 91}3,Cts/S, 16187.,26.762,.16533,16160.,16214.,16188.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:11:08
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4881,.0028,.5810, .4851, .4884, .4908,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 24.69,.0377,.1526, 24.71, 24.71, 24.65,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 24.58,.1140,.4640, 24.45, 24.62, 24.67,Chk Pass,,
 As,189.042 {478},Y1,ppm, .4899,.0111,2.273, .5001, .4780, .4915,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4816,.0016,.3413, .4815, .4800, .4833,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5060,.0026,.5226, .5038, .5052, .5089,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .48978,.00201,.41027, .48775, .48984, .49177,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 24.53,.0177,.0723, 24.55, 24.52, 24.52,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .4816,.0048,.9873, .4871, .4785, .4793,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4876,.0058,1.189, .4941, .4854, .4832,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4873,.0015,.3114, .4859, .4871, .4889,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5046,.0024,.4741, .5020, .5051, .5067,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 25.18,.0744,.2956, 25.11, 25.16, 25.26,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 24.82,.0708,.2854, 24.76, 24.90, 24.80,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .4975,.0021,.4224, .4957, .4972, .4998,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 24.89,.0202,.0811, 24.91, 24.87, 24.89,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49216,.00176,.35801, .49108, .49121, .49420,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .4748,.0062,1.305, .4818, .4701, .4726,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 24.72,.0454,.1837, 24.71, 24.68, 24.77,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .4865,.0043,.8900, .4914, .4852, .4830,Chk Pass,,
 P,177.495 {490},Y1,ppm, .4883,.0227,4.644, .5137, .4700, .4813,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4859,.0075,1.537, .4909, .4895, .4773,Chk Pass,,
 S,182.034 {485},Y1,ppm, 24.25,.2191,.9035, 24.50, 24.16, 24.09,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .4682,.0115,2.448, .4814, .4613, .4618,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4927,.0134,2.721, .5075, .4812, .4895,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 25.342,.10642,.41993, 25.339, 25.238, 25.450,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .4765,.0047,.9855, .4816, .4723, .4757,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .4986,.0037,.7508, .4980, .4953, .5027,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .4763,.0446,9.374, .5018, .4247, .5023,Chk Pass,,

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Ti,334.941 {101},Y2A,ppm, .5036,.0025,.4892, .5008, .5049, .5052,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .4848,.0086,1.779, .4930, .4857, .4758,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5053,.0031,.6140, .5019, .5059, .5081,Chk Pass,,
 W,207.911 {462},Y1,ppm, .4937,.0086,1.751, .5034, .4867, .4911,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .4815,.0064,1.333, .4888, .4787, .4769,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .5311,.0039,.7326, .5275, .5352, .5305,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2954.0,22.082,.74754,2928.5,2966.9,2966.5
 Y2A,371.030 { 91}2,Cts/S, 249010.,1054.9, .42362,250090.,248970.,247980.
 Y2R,371.030 { 91}3,Cts/S, 16835.,23.588,.14011,16842.,16855.,16809.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:14:21
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.0014,.0006,38.76, -.0008, -.0019, -.0016,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0187,.0411,219.9, .0653, .0030, -.0123,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0111,.0032,28.39, .0144, .0082, .0107,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0004,.0068,1601., .0046, .0041, -.0074,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0022,.0002,8.620, .0024, .0021, .0021,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0001,.0000,54.67, .0001, .0001, .0000,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00001,.00003,264.37, .00004, -.00001, -.00000,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0118,.0022,18.28, .0120, .0139, .0096,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002,.0000,19.01, .0003, .0002, .0002,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004,.0002,63.00, .0006, .0004, .0001,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.0003,.0001,49.03, -.0001, -.0003, -.0004,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0016,.0005,28.37, .0015, .0021, .0012,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0262,.0165,62.75, .0231, .0440, .0116,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .0102,.1010,990.2, .1053, -.0958, .0211,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0027,.0024,90.41, -.0051, -.0027, -.0002,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0166,.0039,23.66, .0203, .0125, .0170,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00004,.00002,41.142, .00006, .00003, .00003,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0003,.0014,481.0, -.0010, -.0012, .0014,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0197,.0073,36.86, .0143, .0280, .0169,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0068,.0005,7.156, .0068, .0073, .0064,Chk
 Fail, .0050,
 P,177.495 {490},Y1,ppm, -.0056,.0082,146.6, -.0030, -.0147, .0010,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0010,.0032,324.4, -.0026, .0022, .0034,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0128,.0161,126.1, -.0002, .0077, .0308,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0040,.0024,59.77, .0036, .0019, .0066,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0073,.0025,34.08, .0047, .0075, .0097,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, -.00955,.01454,152.22, .00645, -.02197, -.01314,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0044,.0017,37.80, .0039, .0063, .0031,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000,.0000,97.23, .0000, .0000, -.0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0256,.0166,64.98, -.0426, -.0094, -.0247,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0000,.0003,1397., .0002, -.0003, .0002,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0095,.0131,137.6, .0211, -.0046, .0120,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0000,.0004,3738., -.0001, -.0004, .0005,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0001,.0009,1782., .0002, -.0011, .0007,Chk Pass,,

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Zn,213.856 {458},Y1,ppm, -.0008,.0004,57.13, -.0003, -.0012, -.0007,Chk Pass,,
 Zr,339.198 {99},Y2R,ppm, -.0009,.0024,273.2, -.0008, -.0033, .0015,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2991.8,32.000,1.0696,3020.6,2997.4,2957.3
 Y2A,371.030 {91}2,Cts/S, 258190.956,18.37034,258500.,258950.,257120.
 Y2R,371.030 {91}3,Cts/S, 16883.,39.053,.23132,16928.,16865.,16856.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=LRC 083291
 Username=dept 22
 Comment=LRS2
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:17:40
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm,F 2.605,.0383,1.471, 2.574, 2.648, 2.593,Chk
 Fail,5.000,-10.00%
 Al,308.215 {109},Y2R,ppm, -.7806,.0100,1.285, -.7865, -.7864, -.7690,None,,
 Alum ax,308.215 {109}2,Y2A,ppm, -.5430,.0054,.9958, -.5491, -.5388, -.5412,None,,
 As,189.042 {478},Y1,ppm, 19.87,.1018,.5122, 19.98, 19.79, 19.83,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 4.665,.0102,.2177, 4.653, 4.673, 4.669,Chk Pass,,
 Ba,455.403 {74},Y2A,ppm, 4.828,.0217,.4492, 4.810, 4.852, 4.822,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, 4.7183,.01532,.32475, 4.7048, 4.7152, 4.7349,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, -.1230,.0016,1.329, -.1213, -.1231, -.1246,None,,
 Cd,226.502 {449},Y1,ppm, 19.88,.1404,.7064, 20.04, 19.80, 19.80,Chk Pass,,
 Co,228.616 {447},Y1,ppm, 20.92,.1409,.6732, 21.09, 20.84, 20.85,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 19.34,.0408,.2108, 19.30, 19.38, 19.33,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, 20.15,.0852,.4229, 20.07, 20.24, 20.15,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0811,.0048,5.893, -.0768, -.0862, -.0802,None,,
 K,766.490 {44},Y2R,ppm, -.1372,.0149,10.85, -.1207, -.1496, -.1414,None,,
 Li,670.784 {50},Y2R,ppm, 20.10,.0526,2619, 20.06, 20.16, 20.08,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0112,.0031,27.92, .0100, .0089, .0148,None,,
 Mn,257.610 {131},Y2A,ppm, 18.450,.03255,.17643, 18.431, 18.432, 18.488,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, 20.28,.1483,.7312, 20.45, 20.19, 20.19,Chk Pass,,
 Na,589.592 {57},Y2R,ppm, .1080,.0148,13.68, .0915, .1124, .1200,None,,
 Ni,231.604 {445},Y1,ppm, 20.41,.1284,.6289, 20.56, 20.34, 20.34,Chk Pass,,
 P,177.495 {490},Y1,ppm, 20.38,.1368,.6713, 20.52, 20.26, 20.35,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, 20.50,.1373,.6696, 20.66, 20.40, 20.45,Chk Pass,,
 S,182.034 {485},Y1,ppm, .3867,.0204,5.282, .4098, .3792, .3711,None,,
 Sb,206.833 {463},Y1,ppm, 20.94,.1158,.5528, 21.07, 20.84, 20.92,Chk Pass,,
 Se,196.090 {472},Y1,ppm, 19.52,.1674,.8579, 19.71, 19.44, 19.41,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.6455,.13952,8.4786, 1.4912, 1.6826, 1.7627,None,,
 Sn,189.989 {477},Y1,ppm, 20.35,.1521,.7475, 20.53, 20.26, 20.27,Chk Pass,,
 Sr,421.552 {80},Y2A,ppm, 4.641,.0178,.3845, 4.630, 4.631, 4.661,Chk Pass,,
 Th,283.730 {119},Y2R,ppm,F 9.315,.0603,.6469, 9.316, 9.375, 9.254,Chk
 Fail,20.00,-10.00%
 Ti,334.941 {101},Y2A,ppm, 19.34,.0822,.4251, 19.25, 19.37, 19.41,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 20.23,.1014,.5012, 20.35, 20.18, 20.16,Chk Pass,,
 V,292.402 {115},Y2A,ppm, 20.78,.0698,.3358, 20.71, 20.85, 20.78,Chk Pass,,
 W,207.911 {462},Y1,ppm, 21.21,.1560,.7355, 21.39, 21.10, 21.13,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, 9.665,.0785,.8126, 9.756, 9.618, 9.622,Chk Pass,,
 Zr,339.198 {99},Y2R,ppm, 20.78,.1116,.5372, 20.71, 20.90, 20.71,Chk Pass,,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2739.7,15.818,.57737,2721.5,2750.6,2746.9
 Y2A,371.030 { 91}2,Cts/S, 247850.,568.44,.22935,248500.,247470.,247580.
 Y2R,371.030 { 91}3,Cts/S, 16663.,38.376,.23030,16682.,16619.,16688.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=LRC 083294
 Username=dept 22
 Comment=LRS4
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:21:11
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .1177,.0042,3.577, .1224, .1166, .1142,None,,
 Al,308.215 {109},Y2R,ppm, 493.9,.8171,.1654, 493.0, 494.6, 494.1,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 476.6,1.825,.3829, 478.0, 474.6, 477.4,Chk Pass,,
 As,189.042 {478},Y1,ppm, .1109,.0041,3.698, .1061, .1133, .1131,None,,
 B,249.773 {135},Y2A,ppm, -.0699,.0020,2.846, -.0682, -.0721, -.0693,None,,
 Ba,455.403 { 74},Y2A,ppm, .0268,.0001,.5354, .0269, .0266, .0269,None,,
 Be,313.042 {108},Y2A,ppm, .02415,.00009,.36501, .02424, .02407, .02415,None,,
 Ca,317.933 {106},Y2R,ppm, 509.2,1.501,.2948, 509.9, 507.5, 510.2,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0895,.0002,.2337, .0896, .0895, .0892,None,,
 Co,228.616 {447},Y1,ppm, .0940,.0008,.8289, .0949, .0936, .0935,None,,
 Cr,267.716 {126},Y2A,ppm, .0949,.0012,1.261, .0959, .0952, .0936,None,,
 Cu,327.396 {103},Y2A,ppm, .1251,.0014,1.152, .1248, .1267, .1239,None,,
 Fe,261.187 {129},Y2R,ppm, 317.0,.3431,.1082, 316.8, 317.3, 316.7,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 511.0,1.942,.3801, 513.1, 510.7, 509.2,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0983,.0011,1.089, .0996, .0979, .0975,None,,
 Mg,285.213 {118},Y2R,ppm, 502.3,1.866,.3714, 500.3, 503.9, 502.7,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .08224,.00034,.40932, .08256, .08189, .08228,None,,
 Mo,202.030 {467},Y1,ppm, .1020,.0031,3.058, .0984, .1038, .1038,None,,
 Na,589.592 { 57},Y2R,ppm, 496.4,3.560,.7171, 492.8, 496.6, 499.9,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .1114,.0006,.5003, .1114, .1108, .1119,None,,
 P,177.495 {490},Y1,ppm, .0478,.0062,12.86, .0439, .0446, .0549,None,,
 Pb,220.353 {453},Y1,ppm, .0878,.0061,6.949, .0949, .0850, .0837,None,,
 S,182.034 {485},Y1,ppm, 203.8,.6137,.3011, 204.3, 204.1, 203.1,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0976,.0153,15.68, .1150, .0910, .0866,None,,
 Se,196.090 {472},Y1,ppm, .1214,.0202,16.67, .1026, .1428, .1189,None,,
 Si,251.611 {134},Y2R,ppm, 206.87,.82323,.39795, 205.99, 207.62, 206.99,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .1104,.0060,5.478, .1117, .1157, .1038,None,,
 Sr,421.552 { 80},Y2A,ppm, .0346,.0002,.4460, .0347, .0345, .0345,None,,
 Th,283.730 {119},Y2R,ppm, .1811,.0361,19.91, .2099, .1407, .1928,None,,
 Ti,334.941 {101},Y2A,ppm, .1299,.0005,.3550, .1304, .1296, .1296,None,,
 Tl,190.856 {477},Y1,ppm, .0607,.0117,19.21, .0548, .0531, .0741,None,,
 V,292.402 {115},Y2A,ppm, .1039,.0004,.3377, .1037, .1036, .1043,None,,
 W,207.911 {462},Y1,ppm, .1028,.0030,2.894, .1062, .1013, .1008,None,,
 Zn,213.856 {458},Y1,ppm, .0469,.0021,4.529, .0484, .0445, .0479,None,,
 Zr,339.198 { 99},Y2R,ppm, .1461,.0014,.9300, .1455, .1476, .1451,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2488.2,5.7251,.23009,2483.1,2487.1,2494.4
 Y2A,371.030 { 91}2,Cts/S, 204960.,711.39,.34708,204280.,205700.,204900.
 Y2R,371.030 { 91}3,Cts/S, 15375.,26.658,.17339,15402.,15349.,15373.

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[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=LRC 083293
 Username=dept 22
 Comment=LRS3
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:24:47
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	2.417	.0051	.2124	2.423	2.414	2.414	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	6.158	.0186	.3021	6.179	6.145	6.148	None,,		
Alum ax	308.215	{109}2	Y2A,ppm	6.290	.0248	.3948	6.269	6.317	6.285	None,,		
As	189.042	{478}	Y1,ppm	9.657	.0131	.1354	9.644	9.670	9.655	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	2.349	.0076	.3247	2.344	2.357	2.344	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	2.517	.0130	.5170	2.532	2.514	2.506	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	2.4376	.01295	.53128	2.4526	2.4297	2.4306	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	6.683	.0082	.1228	6.692	6.682	6.675	None,,		
Cd	226.502	{449}	Y1,ppm	9.806	.0164	.1670	9.815	9.816	9.787	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	10.18	.0117	.1147	10.19	10.18	10.17	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	9.655	.0233	.2418	9.678	9.657	9.631	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	9.993	.0145	.1448	9.982	10.01	9.988	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	4.096	.0316	.7726	4.128	4.095	4.065	None,,		
K	766.490	{ 44}	Y2R,ppm	7.073	.0408	.5764	7.110	7.080	7.029	None,,		
Li	670.784	{ 50}	Y2R,ppm	10.09	.0021	.0209	10.09	10.09	10.10	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	6.925	.0116	.1681	6.936	6.913	6.927	None,,		
Mn	257.610	{131}	Y2A,ppm	9.4742	.05990	.63220	9.5429	9.4467	9.4330	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	9.743	.0189	.1936	9.753	9.754	9.721	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	6.842	.0327	.4775	6.868	6.853	6.805	None,,		
Ni	231.604	{445}	Y1,ppm	9.945	.0158	.1591	9.955	9.953	9.926	Chk Pass,,		
P	177.495	{490}	Y1,ppm	9.972	.0230	.2305	9.960	9.958	9.999	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	10.02	.0343	.3421	10.06	9.998	10.01	Chk Pass,,		
S	182.034	{485}	Y1,ppm	2.869	.0044	.1540	2.866	2.867	2.874	None,,		
Sb	206.833	{463}	Y1,ppm	10.12	.0361	.3572	10.11	10.16	10.09	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	9.610	.0130	.1350	9.625	9.602	9.604	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	4.0642	.02939	.72324	4.0498	4.0448	4.0981	None,,		
Sn	189.989	{477}	Y1,ppm	9.898	.0292	.2955	9.917	9.913	9.864	Chk Pass,,		
Sr	421.552	{ 80}	Y2A,ppm	2.372	.0068	.2879	2.372	2.379	2.365	Chk Pass,,		
Th	283.730	{119}	Y2R,ppm	9.597	.0139	.1445	9.584	9.612	9.595	Chk Pass,,		
Ti	334.941	{101}	Y2A,ppm	9.734	.0284	.2918	9.767	9.718	9.717	Chk Pass,,		
Tl	190.856	{477}	Y1,ppm	9.976	.0253	.2539	9.966	10.00	9.957	Chk Pass,,		
V	292.402	{115}	Y2A,ppm	10.39	.0179	.1727	10.41	10.38	10.37	Chk Pass,,		
W	207.911	{462}	Y1,ppm	10.28	.0180	.1753	10.30	10.29	10.26	Chk Pass,,		
Zn	213.856	{458}	Y1,ppm	4.799	.0082	.1714	4.795	4.808	4.794	Chk Pass,,		
Zr	339.198	{ 99}	Y2R,ppm	10.46	.0166	.1591	10.48	10.44	10.46	Chk Pass,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2833.2	1.5151	.05348	2833.4	2831.7	2834.7
Y2A	371.030	{ 91}2	Cts/S	248970.	.467.83	.18790	248440.	249150.	249320.
Y2R	371.030	{ 91}3	Cts/S	16621.	.35.374	.21282	16603.	16662.	16598.

[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=LRC 083311
 Username=dept 22

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Comment=LRS5
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:28:19
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0240	.0074	30.96	.0325	.0212	.0184	None,,		
Al	308.215	{109}	Y2R, ppm	243.9	.0870	.0357	243.8	243.9	243.9	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	241.7	2.325	.9621	239.8	240.9	244.3	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.0069	.0063	91.79	.0034	.0142	.0031	None,,		
B	249.773	{135}	Y2A, ppm	-.0312	.0009	2.734	-.0322	-.0306	-.0309	None,,		
Ba	455.403	{74}	Y2A, ppm	.0010	.0000	1.848	.0009	.0010	.0010	None,,		
Be	313.042	{108}	Y2A, ppm	.00009	.00001	8.0091	.00008	.00009	.00009	None,,		
Ca	317.933	{106}	Y2R, ppm	251.0	.2272	.0905	251.2	251.0	250.8	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.0001	.0001	118.8	.0002	.0000	.0000	None,,		
Co	228.616	{447}	Y1, ppm	.0014	.0002	12.70	.0013	.0013	.0016	None,,		
Cr	267.716	{126}	Y2A, ppm	.0004	.0002	56.75	.0002	.0005	.0006	None,,		
Cu	327.396	{103}	Y2A, ppm	.0078	.0002	2.849	.0078	.0075	.0080	None,,		
Fe	261.187	{129}	Y2R, ppm	151.8	.1493	.0983	152.0	151.8	151.7	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	250.6	.7528	.3004	251.4	250.3	250.0	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	-.0025	.0035	141.1	.0005	-.0063	-.0017	None,,		
Mg	285.213	{118}	Y2R, ppm	249.4	1.180	.4731	248.1	250.3	250.0	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	-.00691	.00013	1.8193	-.00696	-.00701	-.00677	None,,		
Mo	202.030	{467}	Y1, ppm	-.0011	.0007	62.33	-.0006	-.0008	-.0019	None,,		
Na	589.592	{57}	Y2R, ppm	245.2	.6051	.2468	245.4	244.6	245.7	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.0150	.0017	11.46	.0161	.0130	.0160	None,,		
P	177.495	{490}	Y1, ppm	-.0225	.0180	79.99	-.0124	-.0433	-.0119	None,,		
Pb	220.353	{453}	Y1, ppm	.0056	.0034	61.21	.0094	.0028	.0045	None,,		
S	182.034	{485}	Y1, ppm	99.27	.1978	.1993	99.24	99.09	99.48	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	-.0015	.0055	360.2	.0043	-.0023	-.0066	None,,		
Se	196.090	{472}	Y1, ppm	.0297	.0192	64.83	.0270	.0501	.0119	None,,		
Si	251.611	{134}	Y2R, ppm	102.52	2.6861	.26202	102.74	102.22	102.58	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0052	.0015	29.22	.0035	.0062	.0060	None,,		
Sr	421.552	{80}	Y2A, ppm	.0051	.0001	1.966	.0050	.0051	.0052	None,,		
Th	283.730	{119}	Y2R, ppm	-.0683	.0203	29.78	-.0604	-.0531	-.0913	None,,		
Ti	334.941	{101}	Y2A, ppm	.0116	.0002	1.365	.0115	.0118	.0115	None,,		
Tl	190.856	{477}	Y1, ppm	-.0089	.0039	44.30	-.0057	-.0133	-.0077	None,,		
V	292.402	{115}	Y2A, ppm	-.0021	.0004	20.11	-.0018	-.0025	-.0018	None,,		
W	207.911	{462}	Y1, ppm	.0119	.0007	5.903	.0111	.0125	.0120	None,,		
Zn	213.856	{458}	Y1, ppm	.0004	.0002	42.89	.0003	.0003	.0006	None,,		
Zr	339.198	{99}	Y2R, ppm	.0233	.0020	8.644	.0229	.0215	.0255	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/s	2710.4	3.6429	.13440	2714.3	2707.0
Y2A	371.030	{91}2	Cts/s	221900.	2437.7	1.0986	224250.	222080.
Y2R	371.030	{91}3	Cts/s	16014.	37.128	.23185	16051.	16012.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:31:50

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Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.5063	.0027	.5383	.5051	.5094	.5043	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	24.97	.1435	.5747	24.80	25.07	25.02	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	25.30	.1354	.5350	25.15	25.35	25.41	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.4917	.0089	1.810	.5019	.4879	.4853	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4975	.0041	.8323	.4927	.4998	.5000	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.5205	.0030	.5839	.5170	.5225	.5221	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.50255	.00207	.41199	.50036	.50448	.50281	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	25.19	.0908	.3603	25.11	25.29	25.17	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.4917	.0015	.3098	.4899	.4926	.4925	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.4973	.0014	.2750	.4958	.4985	.4977	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.4996	.0031	.6276	.4962	.5023	.5003	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5162	.0026	.4972	.5135	.5168	.5185	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	25.92	.0866	.3340	25.85	25.90	26.02	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	25.61	.0260	.1014	25.62	25.62	25.58	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.5074	.0012	.2372	.5076	.5061	.5085	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	25.66	.0625	.2437	25.60	25.72	25.65	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.49960	.00120	.23951	.49823	.50042	.50015	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.4811	.0013	.2785	.4819	.4819	.4796	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	25.39	.0434	.1709	25.35	25.43	25.37	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4949	.0022	.4386	.4924	.4966	.4956	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.4907	.0128	2.599	.4767	.4936	.5017	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.5018	.0016	.3228	.5008	.5010	.5037	Chk Pass,,		
S	182.034	{485}	Y1, ppm	24.57	.0353	.1438	24.53	24.58	24.59	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.4858	.0014	.2845	.4842	.4864	.4868	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4859	.0096	1.984	.4811	.4970	.4795	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	26.164	.21655	.82765	25.920	26.333	26.240	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4860	.0055	1.129	.4907	.4800	.4874	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.5065	.0031	.6056	.5029	.5080	.5085	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.4975	.0101	2.035	.5092	.4920	.4914	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5131	.0019	.3798	.5108	.5144	.5139	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4828	.0064	1.316	.4901	.4793	.4790	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5174	.0019	.3608	.5153	.5190	.5177	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5071	.0023	.4517	.5054	.5061	.5097	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.4895	.0016	.3323	.4877	.4909	.4898	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	.5385	.0020	.3631	.5363	.5394	.5399	Chk Pass,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2910.6	5.6564	.19434	2917.0	2906.3	2908.4
Y2A	371.030	{91}2	Cts/S	244050	.1410	1.57778	245630	243630	242900
Y2R	371.030	{91}3	Cts/S	16339	.10597	.64858	16449	16238	16329

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:35:03
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

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[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm,F .0093,.0046,50.05, .0071, .0146, .0061,chk
 Fail,.0050,-.0050
 Al,308.215 {109},Y2R,ppm, .0246,.0130,52.92, .0156, .0186, .0395,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0170,.0102,60.09, .0157, .0277, .0074,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0010,.0090,897.9, .0059, .0065, -.0094,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0053,.0006,10.47, .0057, .0046, .0054,Chk Pass,,
 Ba,455.403 {74},Y2A,ppm, .0001,.0001,43.25, .0001, .0002, .0001,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00008,.00009,111.14, .00006, .00019, .00000,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0077,.0023,30.66, .0049, .0090, .0090,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000,.0003,785.1, -.0002, .0003, .0000,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0006,.0004,67.78, .0008, .0007, .0001,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0002,.0003,117.1, .0003, -.0001, .0004,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0008,.0006,71.22, .0005, .0005, .0015,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0221,.0099,44.67, .0212, .0128, .0324,Chk Pass,,
 K,766.490 {44},Y2R,ppm,W .1947,.0084,4.322, .2044, .1891, .1906,Chk
 Warn,.1875,-.1875
 Li,670.784 {50},Y2R,ppm, .0004,.0049,1174., -.0047, .0051, .0008,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0082,.0032,38.47, .0092, .0047, .0108,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00037,.00030,83.223, .00033, .00069, .00008,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0004,.0015,370.8, .0015, -.0013, .0009,Chk Pass,,
 Na,589.592 {57},Y2R,ppm, .0312,.0045,14.32, .0261, .0331, .0345,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0067,.0010,14.62, .0078, .0060, .0062,chk
 Fail,.0050,-.0050
 P,177.495 {490},Y1,ppm, -.0011,.0019,171.0, -.0031, .0008, -.0011,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0010,.0020,203.2, -.0014, .0022, .0022,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0005,.0147,3003., .0092, .0088, -.0165,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0034,.0015,43.40, .0049, .0019, .0033,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.0055,.0134,242.1, -.0202, -.0027, .0062,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .03332,.00721,21.655, .03692, .02501, .03802,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0007,.0014,213.3, -.0002, -.0023, .0004,Chk Pass,,
 Sr,421.552 {80},Y2A,ppm, .0001,.0001,118.8, .0001, .0002, -.0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0110,.0219,198.3, -.0321, .0116, -.0126,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0003,.0003,95.26, .0003, .0007, .0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0004,.0037,880.9, .0007, -.0034, .0039,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0006,.0003,50.82, .0009, .0003, .0005,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0011,.0038,358.0, .0033, -.0036, -.0029,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0005,.0003,60.80, -.0008, -.0004, -.0002,Chk Pass,,
 Zr,339.198 {99},Y2R,ppm, -.0005,.0017,364.1, .0008, .0002, -.0023,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2961.0,5.9754, .20180,2954.3,2963.0,2965.7
 Y2A,371.030 {91}2,Cts/S, 250660.,563.10, .22464,251310.,250260.,250420.
 Y2R,371.030 {91}3,Cts/S, 16179.,44.926, .27768,16157.,16231.,16150.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=MB 410-10573/1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:38:16
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
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Ag,328.068 {103},Y2A,ppm, .0007908,.0002952,37.32938, .0005736, .0011270,
 .0006719,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0287009,.0223710,77.94533, .0390718, .0440042,
 .0030265,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0099407,.0037094,37.31489, .0140919, .0087790,
 .0069513,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0047155,.0054542,115.6649, .0015848, .0015483,
 .0110135,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0037054,.0004007,10.81291, .0034264, .0041645,
 .0035252,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0000240,.0000198,82.42167, .0000141, .0000468,
 .0000112,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000220,.0000087,39.60006, .0000318, .0000150,
 .0000193,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0027234,.0034894,128.1279, .0018706, .0065602,
 -.000261,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000092,.0001246,1354.841, .0001495, -.000089,
 -.000033,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0005854,.0002193,37.46204, .0004016, .0008281,
 .0005264,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.000050,.0004107,826.6003, .0002507, -.000518,
 .0001179,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0008270,.0006089,73.62588, .0014302, .0008383,
 .0002126,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0177962,.0069167,38.86598, .0182651, .0106570,
 .0244665,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .1273505,.0521525,40.95193, .0734487, .1310456,
 .1775571,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.001139,.0027520,241.6499, .0003835, .0005156,
 -.004316,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0052142,.0037144,71.23713, .0092610, .0044213,
 .0019602,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0000369,.0000597,161.7255, -.000031, .0000601,
 .0000817,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0004185,.0019362,462.6658, .0003928, -.001505,
 .0023673,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0066168,.0230130,347.7971, -.012823, .0006475,
 .0320262,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0070495,.0004516,6.406343, .0065990, .0075022,
 .0070471,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0005141,.0077063,1498.914, -.006791, .0085674, -.000234,chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.000770,.0043922,570.5284, -.000128, -.005448,
 .0032660,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.003388,.0097530,287.8396, -.012440, .0069406, -.004666,chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0026433,.0100311,379.4935, .0141367, -.004348,
 -.001859,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0016046,.0146481,912.8792, .0180588, -.010016,
 -.003229,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .0196316,.0150317,76.56901, .0136572, .0085057,
 .0367321,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0063185,.0047771,75.60473, .0018130, .0058152,
 .0113273,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000171,.0000049,28.72982, .0000222, .0000169,
 .0000123,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.020522,.0134565,65.56972, -.030984, -.025241,
 -.005342,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0001481,.0000216,14.59247, .0001532, .0001667,
 .0001244,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0035297,.0010434,29.56200, .0047177, .0031096,
 .0027617,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0002038,.0006400,314.0899, .0008527, .0001855,

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-.000427,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0013961,.0005595,40.07494, .0010968, .0020416, .0010500,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, -.000339,.0003561,105.1231, -.000462, .0000626,
 -.000617,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000890,.0010177,114.3679, -.000844, -.001930,
 .0001042,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 3013.899,7.892532,.2618712,3022.016,3013.428,3006.252,None,,
 Y2A,371.030 { 91}2,Cts/S,
 255197.1,793.3381,.3108727,254998.2,254522.2,256071.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16319.55,43.43658,.2661628,16325.10,16359.95,16273.61,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=LCS 410-10573/2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:41:29
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0198622,.0005761,2.900450, .0192161, .0200483,
 .0203222,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .4221536,.0105897,2.508488, .4114365, .4224132,
 .4326111,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .4362957,.0052478,1.202808, .4352327, .4316608,
 .4419937,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0586763,.0095692,16.30843, .0491969, .0584992,
 .0683327,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0623323,.0000447,.0717545, .0622831, .0623433,
 .0623704,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0109126,.0000292,.2680131, .0109117, .0109424,
 .0108839,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0101437,.0000046,.0449642, .0101490, .0101408,
 .0101414,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .4152927,.0033055,.7959466, .4182572, .4158925,
 .4117283,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0101107,.0001261,1.247182, .0101725, .0101940,
 .0099657,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0104823,.0003712,3.540930, .0101367, .0108746,
 .0104354,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0308262,.0008143,2.641477, .0314732, .0310935,
 .0299119,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0430474,.0011611,2.697224, .0439706, .0417438,
 .0434278,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .4378608,.0121210,2.768222, .4408505, .4245248,
 .4482072,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 5.932329,.0799304,1.347369, 6.024623, 5.886635,
 5.885729,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1040435,.0011181,1.074646, .1052634, .1037996,
 .1030674,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .2124461,.0010561,.4971337, .2132497, .2112499,

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.2128388,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .0211151,.0001633,.7735598, .0210475, .0213014,
.0209964,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0198248,.0020593,10.38731, .0204047, .0215320,
.0175378,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 2.052230,.0117410,.5721093, 2.049574, 2.065072,
2.042045,Chk Pass,,
Ni,231.604 {445},Y1,ppm, 2.102768,.0035219,.1674882, 2.098767, 2.105400,
2.104136,Chk Pass,,
P,177.495 {490},Y1,ppm, .2014272,.0078334,3.888961, .2095351, .2008460, .1939006,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0330724,.0035380,10.69766, .0324099, .0299125,
.0368947,Chk Pass,,
S,182.034 {485},Y1,ppm, .9986981,.0300940,3.013320, .9691429, 1.029303, .9976481,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .1042968,.0108682,10.42048, .0943368, .1158887,
.1026648,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0971268,.0056723,5.840060, .0994668, .1012548,
.0906589,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 1.117386,.0070350,.6295922, 1.120419, 1.109343,
1.122395,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .1040480,.0066554,6.396457, .1117033, .0996359,
.1008048,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0105792,.0000174,.1646396, .0105620, .0105968,
.0105788,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.014133,.0325041,229.9856, -.029137, .0231628,
-.036425,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0210412,.0002658,1.263375, .0212796, .0210894,
.0207546,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0715147,.0027462,3.840041, .0728422, .0733449,
.0683570,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0207386,.0006443,3.106987, .0200113, .0209661,
.0212383,Chk Pass,,
W,207.911 {462},Y1,ppm, .0581912,.0032013,5.501290, .0597665, .0545075, .0602995,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .4325065,.0007874,.1820531, .4318297, .4333707,
.4323192,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0974796,.0019937,2.045196, .0958913, .0968307,
.0997169,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 3021.349,5.973200,.1976998,3028.110,3016.788,3019.148,None,,
Y2A,371.030 { 91}2,Cts/S,
254783.2,671.6087,.2636000,255534.5,254241.1,254574.0,None,,
Y2R,371.030 { 91}3,Cts/S,
16413.42,49.25768,.3001061,16459.29,16361.36,16419.62,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3210-V-1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 17:44:36
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

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Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000751,.0000393,5.237258, -.000717, -.000743,
 -.000794,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0184717,.0344918,186.7273, .0453843, -.020410,
 .0304411,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0246642,.0034768,14.09651, .0260963, .0271962,
 .0207001,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.002318,.0050239,216.7299, -.005522, .0034720,
 -.004904,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0124006,.0003371,2.718094, .0121358, .0127800,
 .0122860,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0468290,.0001682,.3592604, .0466956, .0467734,
 .0470180,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000013,.0000033,26.41424, -.000013, -.000016,
 -.000009,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 35.16714,.1335850,.3798573, 35.01593, 35.26912,
 35.21639,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002772,.0002083,75.13693, .0003744, .0000381,
 .0004191,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0003492,.0002045,58.55293, .0004517, .0001138,
 .0004821,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0011004,.0003034,27.57520, .0013856, .0011341,
 .0007815,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0006263,.0001448,23.11330, .0006656, .0007474,
 .0004660,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0281456,.0070488,25.04411, .0220898, .0358832,
 .0264638,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 2.083298,.0357153,1.714362, 2.045755, 2.087289,
 2.116851,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0000658,.0025572,3884.194, -.002530, .0025830,
 .0001442,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 15.39486,.0703830,.4571846, 15.31387, 15.44118,
 15.42955,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0009747,.0001024,10.50807, .0010780, .0008731,
 .0009731,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.001692,.0011030,65.17990, -.000553, -.001769,
 -.002755,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 33.04378,.1453368,.4398311, 32.89849, 33.18916,
 33.04370,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0058494,.0003465,5.923419, .0061349, .0059493,
 .0054639,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0037838,.0146878,388.1771, -.000502, .0201379, -.008284,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0060530,.0017792,29.39368, .0080205, .0055812,
 .0045573,Chk Pass,,
 S,182.034 {485},Y1,ppm, 3.782195,.0138606,.3664704, 3.768809, 3.796486, 3.781290,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0041231,.0024295,58.92276, .0068435, .0033561,
 .0021698,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.003135,.0129970,414.5895, -.016279, .0097098,
 -.002836,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.466626,.0287335,.8288594, 3.433951, 3.477980,
 3.487948,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0000811,.0011895,1466.242, -.000992, -.000125,
 .0013601,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0544013,.0002996,.5507872, .0542298, .0542269,
 .0547473,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.017049,.0173395,101.7051, -.021254, -.031899,
 .0020066,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0020655,.0000655,3.173061, .0021370, .0020082,
 .0020515,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.002846,.0034147,120.0001, -.005784, .0009005,
 -.003653,Chk Pass,,

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V,292.402 {115},Y2A,ppm, -.000449,.0002542,56.56783, -.000701, -.000455,
 -.000193,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000922,.0023153,251.1539, -.000967, -.003214, .0014158,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0002482,.0003152,126.9738, .0005944, .0001724,
 -.000022,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.002673,.0029792,111.4682, .0002402, -.002544,
 -.005714,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2901.925,1.375870,.0474123,2903.514,2901.120,2901.142,None,,
 Y2A,371.030 { 91}2,Cts/S,
 243779.3,831.6422,.3411455,244668.5,243648.8,243020.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16169.89,76.90026,.4755770,16258.35,16132.35,16118.97,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3210-V-1-A PDS
 Username=dept 22
 Comment=UP
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:47:49
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0139032,.0005595,4.024480, .0132574, .0142086,
 .0142436,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 1.032861,.0694733,6.726298, 1.058286, .9542569,
 1.086040,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 1.057317,.0078265,.7402185, 1.050464, 1.065846,
 1.055640,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5049453,.0052272,1.035203, .5098955, .5054610,
 .4994793,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .2121662,.0020214,.9527469, .2136671, .2098677,
 .2129638,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0988456,.0001684,.1703533, .0988214, .0986906,
 .0990248,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0204474,.0000217,.1060117, .0204453, .0204268,
 .0204700,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 35.11725,.0873382,.2487044, 35.17769, 35.15696,
 35.01712,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0492367,.0004257,.8646480, .0490770, .0497192,
 .0489139,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .1011530,.0010301,1.018306, .1000107, .1014371,
 .1020111,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .2054577,.0011392,.5544676, .2047351, .2048671,
 .2067709,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5122145,.0019435,.3794228, .5120267, .5103717,
 .5142450,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .5581782,.0141273,2.530967, .5729468, .5567935,
 .5447942,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 4.025163,.0545935,1.356306, 3.985250, 4.087377,
 4.002863,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, 1.031688,.0081940,.7942291, 1.040144, 1.031135,
 1.023784,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 15.98470,.0308949,.1932779, 16.00704, 15.99762,
 15.94944,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0620004,.0002024,.3264488, .0619651, .0618180,
 .0622182,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .1983438,.0006052,.3051379, .1987444, .1976476,
 .1986393,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 34.14292,.0304413,.0891583, 34.17762, 34.12073,
 34.13042,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .1552664,.0012725,.8195912, .1538095, .1561605,
 .1558293,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.027226,.0103839,1.010865, 1.016066, 1.036603, 1.029008,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .5003009,.0029092,.5814820, .4970366, .5026194,
 .5012468,Chk Pass,,
 S,182.034 {485},Y1,ppm, 4.626645,.0675392,1.459787, 4.548925, 4.659919, 4.671091,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .4078836,.0128249,3.144259, .4014027, .4226557,
 .3995926,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .7645899,.0116586,1.524822, .7511508, .7706263,
 .7719926,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 4.430815,.0307900,.6949063, 4.456058, 4.396511,
 4.439877,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .5901273,.0034078,.5774754, .5885360, .5878063,
 .5940398,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0728068,.0001699,.2332847, .0728445, .0726212,
 .0729546,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.036451,.0325874,89.40065, -.046938, .0000889,
 -.062503,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1061822,.0004917,.4630613, .1060896, .1057434,
 .1067136,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 1.022762,.0137837,1.347697, 1.018300, 1.011762,
 1.038224,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .1033984,.0008643,.8358809, .1041982, .1024816,
 .1035155,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000158,.0007716,487.5795, -.001048, .0002502, .0003233,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .1198475,.0010040,.8376902, .1189354, .1196839,
 .1209232,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 1.054126,.0030022,.2848087, 1.055656, 1.056056,
 1.050667,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2939.733,13.59148,.4623373,2954.198,2937.772,2927.228,None,,
 Y2A,371.030 { 91}2,Cts/S,
 246787.6,575.8442,.2333360,246970.3,247249.9,246142.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16345.12,45.19944,.2765318,16375.90,16293.22,16366.22,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3210-I-1-A DU
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 17:50:55
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

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[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000956,.0003059,32.00767, -.000781, -.001309,
 -.000778,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0041737,.0184393,441.8020, .0010720, .0239671,
 -.012518,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0430664,.0022037,5.116984, .0440920, .0405369,
 .0445705,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0046402,.0106976,230.5418, .0105346, .0110942,
 -.007708,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0115020,.0002557,2.222885, .0117905, .0113034,
 .0114122,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0458773,.0002478,.5402326, .0460340, .0455916,
 .0460064,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000007,.0000289,434.5809, .0000148, .0000048,
 -.000040,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 34.39078,.1388602,.4037717, 34.23054, 34.46605,
 34.47576,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001780,.0000697,39.14696, .0001198, .0002552,
 .0001591,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0006487,.0006502,100.2332, -.000081, .0008600,
 .0011670,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0014705,.0006898,46.90907, .0015039, .0007646,
 .0021429,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0000320,.0002240,700.4792, .0001099, -.000221,
 .0002067,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0300590,.0059819,19.90049, .0368533, .0255846,
 .0277390,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.987737,.0831571,4.183507, 1.906869, 1.983334,
 2.073009,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.002119,.0010726,50.60566, -.003091, -.002298,
 -.000969,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 15.08734,.0593952,.3936754, 15.02924, 15.14795,
 15.08484,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0009275,.0000322,3.466594, .0009033, .0009154,
 .0009640,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.000685,.0003458,50.51745, -.000770, -.000980,
 -.000304,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 32.41391,.1091029,.3365926, 32.29579, 32.43504,
 32.51091,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0062645,.0008993,14.35501, .0063514, .0053250,
 .0071172,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0020611,.0133560,647.9983, .0142537, .0041434, -.012214,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0001798,.0042750,2378.220, -.003611, -.000663,
 .0048135,Chk Pass,,
 S,182.034 {485},Y1,ppm, 3.629458,.0218998,.6033901, 3.615245, 3.618451, 3.654678,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.002411,.0042859,177.7662, .0015252, -.006977,
 -.001781,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.001980,.0082409,416.1405, -.011409, .0016235,
 .0038448,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.361539,.0118798,.3534024, 3.354639, 3.375256,
 3.354721,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0018905,.0032227,170.4718, -.001742, .0030072,
 .0044064,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0526937,.0001621,.3075877, .0528011, .0525073,
 .0527728,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0078995,.0167410,211.9256, -.007197, .0259037,
 .0049921,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0019126,.0000932,4.874050, .0020005, .0018149,
 .0019225,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000915,.0039920,436.1869, -.005247, -.000113,

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.0026146,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.000463,.0002924,63.19059, -.000125, -.000620,
-.000642,Chk Pass,,
W,207.911 {462},Y1,ppm, -.000544,.0022767,418.8069, .0013164, .0001354, -.003083,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, -.000077,.0004318,563.2793, .0001659, .0001794,
-.000575,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.002078,.0027940,134.4279, .0005482, -.001769,
-.005014,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 2952.845,6.418164,.2173552,2960.254,2948.978,2949.304,None,,
Y2A,371.030 { 91}2,Cts/S,
247871.0,732.8694,.2956657,248512.8,248027.7,247072.4,None,,
Y2R,371.030 { 91}3,Cts/S,
16459.04,41.82677,.2541264,16506.68,16442.07,16428.37,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3210-Y-1-A MS
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 17:54:05
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0179218,.0002274,1.268851, .0176777, .0179601,
.0181276,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .4249508,.0413648,9.734027, .4182897, .3873208,
.4692420,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .4357937,.0056582,1.298372, .4423269, .4325809,
.4324732,Chk Pass,,
As,189.042 {478},Y1,ppm, .0589044,.0062238,10.56584, .0538825, .0569633,
.0658674,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0688024,.0010965,1.593699, .0691331, .0675786,
.0696954,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0557410,.0000889,.1594659, .0557852, .0557991,
.0556386,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .0101844,.0000486,.4770887, .0101290, .0102046,
.0102197,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 34.39448,.0867525,.2522281, 34.41323, 34.47033,
34.29989,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0093831,.0000628,.6696250, .0093111, .0094269,
.0094112,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0103545,.0000868,.8383078, .0104533, .0103192,
.0102908,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0312985,.0009203,2.940357, .0303548, .0313473,
.0321934,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0418583,.0017529,4.187718, .0429833, .0427531,
.0398386,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .4608318,.0108285,2.349778, .4553359, .4733061,
.4538532,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 7.692761,.0650006,.8449584, 7.627568, 7.757568,
7.693147,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .1014839,.0019786,1.949642, .0994291, .1033763,

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.1016464,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 15.12793,.0215418,.1423974, 15.11477, 15.15279,
15.11623,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .0213516,.0000920,.4307691, .0214562, .0212833,
.0213152,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0184667,.0011247,6.090367, .0187742, .0194057,
.0172203,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 34.16907,.0944174,.2763242, 34.15144, 34.27106,
34.08471,Chk Pass,,
Ni,231.604 {445},Y1,ppm, 1.951135,.0071525,.3665801, 1.958158, 1.951386,
1.943860,Chk Pass,,
P,177.495 {490},Y1,ppm, .2029040,.0088850,4.378940, .1929964, .2055502, .2101652,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0344338,.0011487,3.335822, .0354099, .0347236,
.0331680,Chk Pass,,
S,182.034 {485},Y1,ppm, 4.508975,.0650548,1.442784, 4.483093, 4.582987, 4.460845,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .1046832,.0076084,7.268010, .1132697, .0987801,
.1019998,Chk Pass,,
Se,196.090 {472},Y1,ppm, .1094994,.0093436,8.532984, .1195337, .1010490,
.1079154,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 4.374778,.0162732,.3719778, 4.360709, 4.371024,
4.392600,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0941725,.0029624,3.145687, .0955738, .0907695,
.0961743,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0618021,.0000701,.1134074, .0618815, .0617762,
.0617487,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.013378,.0273496,204.4359, -.027091, -.031158,
.0181151,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0229746,.0001209,.5263832, .0229102, .0228996,
.0231142,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0560614,.0073911,13.18395, .0486438, .0561147,
.0634257,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0208831,.0000901,.4316011, .0209340, .0207790,
.0209362,Chk Pass,,
W,207.911 {462},Y1,ppm, .0596735,.0023610,3.956525, .0622373, .0591944, .0575888,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .4082225,.0028829,.7062025, .4112552, .4078949,
.4055174,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .1060399,.0027824,2.623881, .1043336, .1092506,
.1045356,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 2974.109,10.38109,.3490489,2967.702,2968.538,2986.086,None,,
Y2A,371.030 { 91}2,Cts/S,
246968.4,437.6515,.1772095,247252.7,247188.1,246464.5,None,,
Y2R,371.030 { 91}3,Cts/S,
16361.21,34.62197,.2116101,16401.17,16342.44,16340.03,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3210-w-1-A MSD
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 17:57:11
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

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[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A	ppm	.0176344	.0002995	1.698403	.0173841	.0175528	.0179662	Chk Pass,,	
Al	308.215	{109}	Y2R	ppm	.4534368	.0137784	3.038665	.4466220	.4443938	.4692947	Chk Pass,,	
Alum ax	308.215	{109}2	Y2A	ppm	.4359646	.0016280	.3734126	.4375633	.4343089	.4360214	Chk Pass,,	
As	189.042	{478}	Y1	ppm	.0513270	.0059934	11.67686	.0445027	.0537431	.0557352	Chk Pass,,	
B	249.773	{135}	Y2A	ppm	.0703397	.0010301	1.464519	.0692136	.0705709	.0712346	Chk Pass,,	
Ba	455.403	{74}	Y2A	ppm	.0570711	.0002882	.5049300	.0568567	.0569580	.0573987	Chk Pass,,	
Be	313.042	{108}	Y2A	ppm	.0104322	.0000302	.2896977	.0103976	.0104536	.0104454	Chk Pass,,	
Ca	317.933	{106}	Y2R	ppm	35.38597	.0395183	.1116780	35.34277	35.39484	35.42030	Chk Pass,,	
Cd	226.502	{449}	Y1	ppm	.0096478	.0002674	2.771860	.0098110	.0097933	.0093392	Chk Pass,,	
Co	228.616	{447}	Y1	ppm	.0102435	.0003698	3.609643	.0101002	.0106635	.0099668	Chk Pass,,	
Cr	267.716	{126}	Y2A	ppm	.0315102	.0003506	1.112762	.0314619	.0311862	.0318824	Chk Pass,,	
Cu	327.396	{103}	Y2A	ppm	.0426333	.0003111	.7295918	.0426029	.0423385	.0429584	Chk Pass,,	
Fe	261.187	{129}	Y2R	ppm	.4454519	.0161733	3.630764	.4480174	.4281492	.4601892	Chk Pass,,	
K	766.490	{44}	Y2R	ppm	7.907738	.0604222	.7640899	7.871036	7.977475	7.874703	Chk Pass,,	
Li	670.784	{50}	Y2R	ppm	.1040095	.0006758	.6497447	.1046946	.1039905	.1033434	Chk Pass,,	
Mg	285.213	{118}	Y2R	ppm	15.55397	.0394089	.2533688	15.51193	15.55991	15.59007	Chk Pass,,	
Mn	257.610	{131}	Y2A	ppm	.0213149	.0000485	.2276976	.0212595	.0213500	.0213353	Chk Pass,,	
Mo	202.030	{467}	Y1	ppm	.0189821	.0006347	3.343608	.0191066	.0195454	.0182944	Chk Pass,,	
Na	589.592	{57}	Y2R	ppm	35.05039	.1185667	.3382750	35.02042	34.94968	35.18106	Chk Pass,,	
Ni	231.604	{445}	Y1	ppm	1.955979	.0050825	.2598465	1.958108	1.959651	1.950178	Chk Pass,,	
P	177.495	{490}	Y1	ppm	.2126982	.0145828	6.856108	.2191404	.1960037	.2229504	Chk Pass,,	
Pb	220.353	{453}	Y1	ppm	.0342945	.0058787	17.14174	.0284533	.0402100	.0342203	Chk Pass,,	
S	182.034	{485}	Y1	ppm	4.549703	.0064474	.1417104	4.542445	4.551899	4.554765	Chk Pass,,	
Sb	206.833	{463}	Y1	ppm	.1055020	.0059957	5.683026	.1018825	.1022007	.1124228	Chk Pass,,	
Se	196.090	{472}	Y1	ppm	.0865777	.0069221	7.995285	.0902083	.0785955	.0909292	Chk Pass,,	
Si	251.611	{134}	Y2R	ppm	4.434073	.0433595	.9778715	4.393655	4.428693	4.479872	Chk Pass,,	
Sn	189.989	{477}	Y1	ppm	.1053939	.0052505	4.981790	.1106042	.1054734	.1001041	Chk Pass,,	
Sr	421.552	{80}	Y2A	ppm	.0636950	.0003556	.5582621	.0633516	.0636717	.0640616	Chk Pass,,	
Th	283.730	{119}	Y2R	ppm	-.032672	.0148110	45.33272	-.045397	-.016414	-.036205	Chk Pass,,	
Ti	334.941	{101}	Y2A	ppm	.0230245	.0002634	1.143835	.0227563	.0230344	.0232828	Chk Pass,,	

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Tl,190.856 {477},Y1,ppm, .0600005,.0121411,20.23506, .0608971, .0716685,
 .0474359,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0212857,.0001240,.5823021, .0211618, .0212856,
 .0214097,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0588666,.0017323,2.942669, .0578463, .0608667, .0578868,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4102339,.0009963,.2428552, .4101875, .4112526,
 .4092617,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1087684,.0036915,3.393925, .1045270, .1112565,
 .1105218,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2976.487,7.470862,.2509960,2982.812,2968.244,2978.404,None,,
 Y2A,371.030 { 91}2,Cts/S,
 244929.5,887.1700,.3622144,245818.1,244926.7,244043.8,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16276.12,11.01171,.0676556,16273.08,16288.33,16266.95,None,,

[Sample Header]

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 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:00:18
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.001577,.0006172,39.12926, -.002116, -.001712,
 -.000904,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0098020,.0116400,118.7508, .0225314, .0071740,
 -.000299,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0805818,.1236782,153.4815, .0102267, .0081308,
 .2233880,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.000949,.0082355,867.5445, -.006268, -.005117,
 .0085370,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0044457,.0004979,11.19921, .0041305, .0041869,
 .0050196,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0098201,.0008193,8.343341, .0093587, .0093356,
 .0107661,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0004009,.0007294,181.9538, -.000005, -.000035,
 .0012430,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 6.874467,.0442409,.6435544, 6.922349, 6.865943,
 6.835108,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003466,.0002921,84.29817, .0005946, .0004205,
 .0000245,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0005948,.0004414,74.21159, .0008766, .0000861,
 .0008215,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0010116,.0014228,140.6447, .0000064, .0003889,
 .0026396,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0023329,.0014768,63.30537, .0013360, .0016331,
 .0040295,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0282982,.0078304,27.67104, .0343408, .0194519,
 .0311018,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .4625420,.0327350,7.077190, .4907081, .4702897,
 .4266282,Chk Pass,,

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Li,670.784 { 50},Y2R,ppm, -.001297,.0007814,60.22583, -.001712, -.000396,
 -.001784,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 3.050804,.0297446,.9749747, 3.083070, 3.044868,
 3.024476,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0015217,.0022407,147.2503, .0002926, .0001645,
 .0041080,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.000050,.0018597,3702.493, .0013753, .0006278,
 -.002154,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 6.548131,.0536291,.8189985, 6.608431, 6.530187,
 6.505775,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0058570,.0001816,3.100949, .0056496, .0059879,
 .0059334,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.003403,.0088436,259.9159, -.011965, .0056980, -.003941,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0025118,.0017178,68.38845, .0041946, .0007611,
 .0025797,Chk Pass,,
 S,182.034 {485},Y1,ppm, .7054978,.0141001,1.998607, .6921151, .7202198, .7041586,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0023952,.0093551,390.5818, .0128153, -.000349,
 -.005281,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0006346,.0082058,1293.176, .0072515, -.008547,
 .0031996,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .6577584,.0090175,1.370938, .6680345, .6511660,
 .6540746,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0027647,.0030289,109.5533, -.000343, .0029299,
 .0057076,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0109294,.0007472,6.836912, .0105084, .0104876,
 .0117921,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.013867,.0242525,174.8947, -.035647, -.018222,
 .0122679,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0019964,.0023085,115.6384, .0006511, .0006759,
 .0046620,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.002198,.0042238,192.1430, -.007008, .0009052,
 -.000492,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0014940,.0026254,175.7284, -.000264, .0002343,
 .0045118,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.002259,.0011789,52.19146, -.003542, -.002012, -.001223,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, -.000347,.0003873,111.7148, .0000984, -.000531,
 -.000607,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0012594,.0041956,333.1522, .0060365, -.001827,
 -.000432,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 3037.563,12.56373,.4136120,3051.974,3028.910,3031.806,None,,
 Y2A,371.030 { 91}2,Cts/S,
 248781.3,591.9191,.2379275,248771.7,248194.3,249378.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16295.98,106.4545,.6532564,16173.08,16359.60,16355.25,None,,

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 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:03:39
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000

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Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	-.002586	.0001615	6.244981	-.002541	-.002765	-.002452	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	.3800861	.0253954	6.681491	.3524683	.3853587	.4024314	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A,ppm	.3997290	.0033575	.8399509	.3961826	.4001457	.4028587	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0012696	.0068936	542.9865	.0032011	.0069913	-.006384	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0610280	.0010871	1.781236	.0597920	.0614565	.0618355	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0612362	.0003957	.6461830	.0608528	.0612128	.0616432	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0000203	.0000194	95.74168	.0000151	.0000417	.0000040	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	112.4354	.4641695	.4128322	112.9681	112.1181	112.2199	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002351	.0001770	75.26475	.0001014	.0004358	.0001683	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0001524	.0006406	420.3355	-.000055	-.000359	.0008710	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0043588	.0002332	5.350856	.0044327	.0045461	.0040976	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0015595	.0009543	61.19150	.0005268	.0024087	.0017431	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.3788853	.0024166	.6378265	.3792874	.3810756	.3762928	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	2.200006	.0662826	3.012839	2.256944	2.215832	2.127244	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0003900	.0015745	403.7306	.0006339	-.001292	.0018283	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	28.08715	.1290855	.4595893	28.23546	28.00009	28.02590	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0089253	.0000204	.2286015	.0089210	.0089475	.0089073	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	-.003559	.0008828	24.80801	-.003007	-.003092	-.004577	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	10.42707	.0762332	.7311082	10.49025	10.34240	10.44857	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0080887	.0011506	14.22449	.0094095	.0073045	.0075520	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0947673	.0001857	.1959834	.0946508	.0946697	.0949815	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0060983	.0032392	53.11686	.0036037	.0049321	.0097592	Chk Pass,,		
S	182.034	{485}	Y1,ppm	11.28013	.0527074	.4672582	11.33743	11.26927	11.23370	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0158875	.0103360	65.05746	.0082225	.0117973	.0276426	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	-.002073	.0104318	503.2883	-.014113	.0042718	.0036225	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	9.308182	.0839476	.9018687	9.404510	9.269392	9.250645	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	.0067135	.0017373	25.87719	.0066592	.0084773	.0050040	Chk Pass,,		
Sr	421.552	{80}	Y2A,ppm	.0914332	.0004631	.5064694	.0910299	.0913309	.0919389	Chk Pass,,		
Th	283.730	{119}	Y2R,ppm	-.026050	.0046111	17.70090	-.021000	-.030037	-.027113	Chk Pass,,		
Ti	334.941	{101}	Y2A,ppm	.0168393	.0011639	6.911936	.0157101	.0180351				

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.0167726,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000709,.0054729,772.3827, -.006844, .0036708,
 .0010474,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0004068,.0003266,80.29051, .0005256, .0006574,
 .0000374,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001024,.0033721,329.1822, -.004125, -.001514, .0025656,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0007114,.0006620,93.06581, .0005250, .0001625,
 .0014466,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0005456,.0013608,249.4173, .0018096, .0007220,
 -.000895,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2951.319,2.412625,.0817474,2948.986,2951.166,2953.804, None, ,
 Y2A,371.030 { 91}2,Cts/S,
 246186.6,1295.847,.5263677,247660.5,245673.3,245226.0, None, ,
 Y2R,371.030 { 91}3,Cts/S,
 16630.19,45.46353,.2733796,16584.30,16675.22,16631.04, None, ,

[Sample Header]

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 SampleName=410-2734-M-5-A
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:06:49
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002610,.0001286,4.924768, -.002512, -.002756,
 -.002564,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0337308,.0429231,127.2519, .0313367, .0778009,
 -.007945,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0271546,.0034116,12.56375, .0284230, .0232905,
 .0297504,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0034909,.0081416,233.2259, .0119299, .0028592,
 -.004317,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0093471,.0001479,1.582485, .0093230, .0095055,
 .0092127,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0393987,.0000059,.0149337, .0393921, .0394004,
 .0394035,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000108,.0000038,35.32623, .0000145, .0000110,
 .0000069,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 76.79654,.0160776,.0209354, 76.81227, 76.78014,
 76.79720,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001143,.0002518,220.2644, .0001475, -.000152,
 .0003479,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0003912,.0004284,109.5175, .0007647, .0004853,
 -.000076,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0032322,.0007202,22.28328, .0024259, .0038119,
 .0034587,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0010004,.0006987,69.83928, .0011363, .0002438,
 .0016212,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0454229,.0109756,24.16308, .0512937, .0522143,
 .0327605,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 2.142969,.0344412,1.607174, 2.180711, 2.134952,

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2.113243,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.004063,.0037843,93.13719, .0002752, -.005779,
 -.006685,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 10.94756,.0063110,.0576477, 10.94530, 10.94269,
 10.95469,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0025841,.0000771,2.984294, .0025753, .0026652,
 .0025118,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.003074,.0010138,32.98446, -.003887, -.001938,
 -.003396,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 5.168732,.0173333,.3353498, 5.149377, 5.182822,
 5.173999,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0064137,.0004631,7.220418, .0059991, .0063285,
 .0069135,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0335348,.0108577,32.37741, .0213050, .0420399, .0372596,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0043903,.0010509,23.93670, .0041201, .0035009,
 .0055499,Chk Pass,,
 S,182.034 {485},Y1,ppm, 2.815085,.0079921,.2839029, 2.809329, 2.824210, 2.811717,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0091776,.0104404,113.7592, .0144610, -.002848,
 .0159203,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0013672,.0093059,680.6707, .0025896, -.008490,
 .0100014,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 6.371427,.0027980,.0439148, 6.374652, 6.369658,
 6.369969,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0020130,.0025364,125.9972, .0011920, -.000011,
 .0048582,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0618097,.0001292,.2089768, .0616660, .0619162,
 .0618469,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0081335,.0144587,177.7678, .0105797, .0212130,
 -.007392,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0025539,.0001447,5.665927, .0025688, .0024023,
 .0026905,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.004240,.0083378,196.6268, .0022930, -.001383,
 -.013631,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0004411,.0002554,57.90659, .0001498, .0006268,
 .0005466,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0014662,.0014012,95.57243, .0018986, -.000100, .0026002,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0010488,.0002942,28.05424, .0009022, .0008567,
 .0013875,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000666,.0032230,484.0875, -.003771, .0026635,
 -.000890,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2993.473,4.224486,.1411232,2992.898,2997.956,2989.566,None,,
 Y2A,371.030 { 91}2,Cts/S,
 245686.5,604.3621,.2459892,246349.1,245165.7,245544.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16572.17,18.97195,.1144808,16552.12,16589.84,16574.54,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:10:07
 Sample Type=QC
 Mode=CONC

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CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.4827	.0046	.9470	.4776	.4842	.4864	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	24.32	.1005	.4131	24.43	24.29	24.24	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	24.62	.2332	.9475	24.35	24.78	24.72	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.4812	.0070	1.459	.4752	.4889	.4794	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4862	.0054	1.116	.4799	.4894	.4892	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.5315	.0048	.8939	.5262	.5330	.5353	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.51029	.00513	1.0058	.50474	.51124	.51488	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	25.15	.0886	.3521	25.24	25.17	25.06	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.4734	.0006	.1185	.4735	.4727	.4739	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.4882	.0017	.3410	.4887	.4895	.4863	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.4937	.0042	.8487	.4889	.4965	.4958	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5169	.0053	1.022	.5108	.5197	.5203	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	26.33	.0312	.1184	26.36	26.30	26.32	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	25.43	.0399	.1570	25.41	25.41	25.48	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.5134	.0020	.3810	.5153	.5114	.5134	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	25.93	.0742	.2861	26.01	25.88	25.89	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.48724	.00477	.97858	.48204	.48827	.49141	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.4645	.0013	.2816	.4646	.4658	.4632	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	25.71	.0372	.1445	25.75	25.70	25.68	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4746	.0015	.3175	.4763	.4736	.4738	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.4966	.0094	1.902	.4906	.4916	.5074	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.4735	.0053	1.129	.4682	.4788	.4735	Chk Pass,,		
S	182.034	{485}	Y1, ppm	23.53	.0537	.2282	23.47	23.57	23.56	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.4750	.0021	.4347	.4727	.4767	.4756	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4754	.0084	1.774	.4760	.4667	.4836	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	25.660	.12018	.46835	25.758	25.526	25.695	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4858	.0027	.5619	.4873	.4827	.4875	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.4953	.0036	.7210	.4912	.4969	.4978	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.4991	.0204	4.087	.5019	.4775	.5180	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5107	.0053	1.035	.5047	.5124	.5148	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4635	.0097	2.087	.4746	.4594	.4566	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5251	.0061	1.165	.5189	.5255	.5311	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5055	.0041	.8070	.5011	.5062	.5091	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.4685	.0023	.4932	.4659	.4694	.4703	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	F .5786	.0024	.4096	.5813	.5768	.5778	Chk		
Fail	.5000			10.00%								

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2991.6	2.0547	.06868	2993.8	2991.4	2989.7
Y2A	371.030	{91}2	Cts/S	244430	.22670	.92748	246950	243760	242570
Y2R	371.030	{91}3	Cts/S	16631	.65232	.39223	16556	16671	16666

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=CCB 078331
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 18:13:24
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

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Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.0021,.0003,12.76, -.0020, -.0018, -.0024,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .0041,.0458,1110., -.0219, -.0227, .0570,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .0036,.0022,61.54, .0027, .0020, .0061,Chk Pass,,
As,189.042 {478},Y1,ppm, .0000,.0017,3911., .0005, .0015, -.0019,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0025,.0008,32.90, .0017, .0024, .0034,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0000,.0000,44.26, .0001, .0000, .0001,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .00002,.00001,53.372, .00002, .00002, .00001,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, -.0041,.0005,12.66, -.0045, -.0035, -.0043,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0001,.0002,155.5, .0000, .0000, .0004,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0009,.0004,43.08, .0007, .0013, .0006,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0004,.0004,114.5, .0003, .0009, .0000,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0017,.0002,13.58, .0014, .0019, .0018,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0086,.0180,208.9, .0171, .0208, -.0121,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .0346,.0410,118.3, .0080, .0140, .0818,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.0024,.0018,77.00, -.0045, -.0010, -.0016,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, .0007,.0011,144.5, .0009, -.0004, .0017,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00008,.00005,53.872, .00003, .00012, .00009,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0002,.0001,64.46, .0002, .0001, .0004,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, -.0059,.0205,346.7, -.0279, -.0026, .0127,Chk Pass,,
Ni,231.604 {445},Y1,ppm,F .0072,.0012,16.82, .0086, .0069, .0062,Chk
Fail, .0050, -.0050
P,177.495 {490},Y1,ppm, -.0107,.0078,72.86, -.0023, -.0121, -.0177,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0009,.0035,381.8, .0016, .0040, -.0029,Chk Pass,,
S,182.034 {485},Y1,ppm, .0079,.0017,21.51, .0064, .0076, .0098,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0047,.0061,128.7, -.0021, .0093, .0069,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0050,.0147,294.1, -.0024, -.0046, .0219,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .01114,.01150,103.19, .01835, .01719, -.00212,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0008,.0036,483.2, .0048, -.0023, -.0002,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, -.0000,.0000,39490., -.0000, .0000, .0000,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.0128,.0067,52.36, -.0194, -.0129, -.0060,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0001,.0002,278.2, .0001, .0002, -.0001,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0059,.0061,103.4, .0039, .0010, .0127,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0003,.0004,158.9, .0006, -.0002, .0004,Chk Pass,,
W,207.911 {462},Y1,ppm, -.0009,.0016,174.9, -.0026, .0007, -.0009,Chk Pass,,
Zn,213.856 {458},Y1,ppm, -.0009,.0001,16.63, -.0007, -.0008, -.0010,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.0033,.0002,6.912, -.0035, -.0031, -.0032,Chk Pass,,

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[Internal Standards]

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Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 3027.7,8.2640,.27294,3034.4,3018.5,3030.3
Y2A,371.030 { 91}2,Cts/S, 251500.,109.03,.04335,251600.,251380.,251520.
Y2R,371.030 { 91}3,Cts/S, 16564.,30.102,.18173,16599.,16546.,16547.

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[Sample Header]

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Method=New TRACE Fast(v1398)
SampleName=410-2734-M-9-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 18:16:45
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

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[Results]

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Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.002446,.0003508,14.34278, -.002805, -.002429,
-.002104,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .0103628,.0368495,355.5952, -.000450, -.019871,

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.0514089,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0116894,.0010680,9.136757, .0126620, .0118600,
 .0105464,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0080686,.0025935,32.14290, .0079413, .0107234,
 .0055411,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0092650,.0002554,2.756881, .0090836, .0095571,
 .0091543,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0822817,.0002864,.3480782, .0824799, .0824119,
 .0819533,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000029,.0000148,50.76823, -.000044, -.000015,
 -.000028,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 64.38253,.1500547,.2330675, 64.25112, 64.54604,
 64.35043,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002033,.0002711,133.3020, -.000006, .0001068,
 .0005095,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.000027,.0001259,464.8072, .0000921, -.000015,
 -.000159,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0023070,.0005891,25.53389, .0016542, .0027988,
 .0024681,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0018120,.0003851,21.25475, .0021094, .0019495,
 .0013769,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0278182,.0098692,35.47736, .0215373, .0227238,
 .0391935,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .7120746,.0932272,13.09233, .7305291, .7946944,
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 Li,670.784 { 50},Y2R,ppm, .0054277,.0014878,27.41164, .0053063, .0069725,
 .0040043,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 9.596105,.0227285,.2368509, 9.611180, 9.607172,
 9.569963,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0007026,.0000693,9.865340, .0007825, .0006658,
 .0006594,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.003252,.0019159,58.91747, -.003752, -.001136,
 -.004868,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 7.204339,.0312700,.4340441, 7.173635, 7.236146,
 7.203235,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0073191,.0005145,7.029728, .0067581, .0074301,
 .0077690,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0389479,.0019146,4.915873, .0409015, .0388675, .0370747,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0026483,.0020303,76.66206, .0003088, .0039482,
 .0036880,Chk Pass,,
 S,182.034 {485},Y1,ppm, 5.857153,.0215314,.3676086, 5.855036, 5.836759, 5.879665,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0021204,.0030971,146.0661, -.001428, .0042813,
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 Se,196.090 {472},Y1,ppm, .0099233,.0121529,122.4682, .0121580, -.003192,
 .0208039,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 8.565819,.0059999,.0700447, 8.571091, 8.559290,
 8.567075,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0014001,.0026622,190.1421, .0012965, .0041126,
 -.001209,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0786938,.0002117,.2689911, .0788462, .0787831,
 .0784521,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.015064,.0144889,96.18327, -.028164, -.017526,
 .0004982,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0021498,.0001826,8.491831, .0023345, .0019695,
 .0021455,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.001414,.0107425,759.9440, -.009441, -.005590,
 .0107899,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0048272,.0003996,8.278827, .0051890, .0043982,
 .0048944,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.003391,.0019223,56.69199, -.002007, -.002579, -.005586,Chk
 Pass,,

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Zn,213.856 {458},Y1,ppm, .0000340,.0002625,772.3955, .0003222, -.000029,
 -.000192,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001717,.0009834,57.26997, -.001115, -.001185,
 -.002852,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 3002.130,3.850458,.1282575,3006.246,3001.528,2998.616,None,,
 Y2A,371.030 { 91}2,Cts/S,
 248186.0,719.9889,.2901005,247632.2,247925.9,248999.9,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16552.33,8.455494,.0510834,16562.06,16548.09,16546.82,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3196-B-1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:20:01
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002586,.0001902,7.356744, -.002731, -.002370,
 -.002655,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .6288579,.0403131,6.410531, .6453749, .6582895,
 .5829093,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .6292095,.0059448,.9447990, .6342662, .6307015,
 .6226609,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.000866,.0112935,1303.829, .0014922, -.013153,
 .0090620,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0279161,.0010592,3.794286, .0286926, .0267095,
 .0283463,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0992873,.0003380,.3404364, .0990115, .0996644,
 .0991859,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0001075,.0000055,5.097563, .0001125, .0001016,
 .0001084,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 66.40379,.1137463,.1712950, 66.34314, 66.53500,
 66.33321,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000479,.0000233,48.65501, .0000748, .0000353,
 .0000335,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004465,.0005489,122.9166, .0000719, .0010765,
 .0001911,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .1013710,.0008334,.8221692, .1004359, .1016414,
 .1020356,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0039681,.0010982,27.67556, .0047695, .0027163,
 .0044186,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 33.06419,.1441340,.4359217, 33.00464, 33.22856,
 32.95938,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 4.197089,.0290920,.6931477, 4.163671, 4.210831,
 4.216764,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0017709,.0018319,103.4443, .0005114, .0009289,
 .0038724,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 40.19082,.1052089,.2617735, 40.14810, 40.31067,
 40.11369,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 3.837737,.0082872,.2159388, 3.828296, 3.841105,
 3.843809,Chk Pass,,

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Mo, 202.030 {467}, Y1, ppm, -.003379, .0012841, 38.00651, -.004369, -.003839,
 -.001928, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, 137.5393, .2297936, .1670748, 137.4027, 137.8046,
 137.4106, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0089142, .0007025, 7.880420, .0081131, .0092049,
 .0094247, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .6218871, .0041530, .6678086, .6171123, .6238890, .6246599, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0049310, .0031171, 63.21428, .0013532, .0063802,
 .0070598, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 49.74383, .0576480, .1158898, 49.68058, 49.75751, 49.79342, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, -.001334, .0059606, 446.6736, -.002308, .0050531,
 -.006748, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, -.005808, .0059980, 103.2713, -.011518, .0004413,
 -.006347, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 16.40758, .1475086, .8990272, 16.23740, 16.48648,
 16.49886, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, -.000733, .0015718, 214.5096, .0010732, -.001793,
 -.001479, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .4042423, .0005944, .1470341, .4036022, .4047768,
 .4043478, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, -.027386, .0434169, 158.5364, -.071288, .0155288,
 -.026399, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0249656, .0053217, 21.31624, .0213304, .0310738,
 .0224925, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, -.000789, .0112735, 1428.540, -.011171, -.002399,
 .0112029, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0069298, .0002022, 2.918268, .0068365, .0067910,
 .0071618, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, -.000858, .0013542, 157.8726, -.002275, -.000720, .0004223, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0209230, .0003790, 1.811429, .0205094, .0212536,
 .0210060, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, -.000915, .0052069, 568.8116, .0045407, -.005831,
 -.001456, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 2877.284, 5.341944, .1856593, 2881.072, 2879.606, 2871.174, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 237454.4, 682.3764, .2873716, 238225.9, 237207.3, 236930.0, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 16362.48, 52.07712, .3182716, 16377.88, 16304.44, 16405.12, None, ,

[Sample Header]

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 Custom ID2=
 Custom ID3=
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 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, -.002311, .0001565, 6.770027, -.002219, -.002492,
 -.002223, Chk Pass,,

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Al,308.215 {109},Y2R,ppm, 1.198610,.0368994,3.078514, 1.241183, 1.175829,
 1.178818,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 1.180216,.0038743,.3282703, 1.180391, 1.176257,
 1.183999,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0015543,.0074841,481.5040, .0100423, -.004096,
 -.001283,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0322341,.0009067,2.812729, .0332660, .0315653,
 .0318709,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0538324,.0001485,.2758387, .0536892, .0538222,
 .0539857,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0011686,.0000199,1.704617, .0011546, .0011914,
 .0011599,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 25.53785,.0311862,.1221174, 25.53334, 25.50916,
 25.57104,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0007768,.0003186,41.01245, .0010249, .0004175,
 .0008881,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0893360,.0004280,.4790305, .0897931, .0892701,
 .0889449,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 1.471807,.0043120,.2929722, 1.467399, 1.472007,
 1.476015,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0056583,.0009313,16.45845, .0055220, .0066502,
 .0048027,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 13.74856,.0624669,.4543524, 13.81753, 13.73233,
 13.69581,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 2.427036,.0767214,3.161115, 2.351338, 2.425028,
 2.504742,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0062994,.0011865,18.83522, .0049329, .0070685,
 .0068967,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 13.66827,.0312789,.2288430, 13.67588, 13.63389,
 13.69505,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.408172,.0039418,.2799224, 1.403688, 1.411090,
 1.409739,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0023878,.0011571,48.45909, .0010959, .0027384,
 .0033290,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 162.4979,.3338158,.2054278, 162.4600, 162.1847,
 162.8490,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0748440,.0009815,1.311446, .0758651, .0747595,
 .0739075,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0136681,.0057550,42.10546, .0187089, .0073977, .0148977,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0007043,.0027715,393.4855, -.002464, .0026810,
 .0018956,Chk Pass,,
 S,182.034 {485},Y1,ppm, 27.43911,.0571509,.2082825, 27.46014, 27.48277, 27.37443,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0023893,.0032537,136.1775, .0056939, -.000811,
 .0022850,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0107095,.0095793,89.44610, .0127585, .0002716,
 .0190986,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 13.64828,.0451258,.3306338, 13.68107, 13.66696,
 13.59682,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.001383,.0052286,378.0452, .0037428, -.001183,
 -.006709,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0977200,.0001405,.1437716, .0975581, .0978103,
 .0977915,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.016171,.0061072,37.76563, -.010270, -.022466,
 -.015778,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0064328,.0009213,14.32138, .0062010, .0074478,
 .0056495,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0014886,.0089654,602.2805, -.008218, .0032240,
 .0094594,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0002115,.0005576,263.6145, -.000342, .0007728,
 .0002040,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000472,.0021504,455.5598, -.001253, .0019597, -.002123,Chk
 Pass,,

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Pass,,
 Zn,213.856 {458},Y1,ppm, .1484778,.0008022,.5402673, .1494025, .1480628,
 .1479682,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000346,.0015513,448.7828, -.001276, -.001206,
 .0014452,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2920.359,4.158385,.1423929,2916.010,2920.772,2924.296,None,,
 Y2A,371.030 { 91}2,Cts/S,
 239145.2,320.9048,.1341883,239515.6,238968.5,238951.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16356.35,10.88965,.0665775,16364.58,16344.00,16360.46,None,,

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 Custom ID3=
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 Sample Type=Unk
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 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002171,.0006495,29.92409, -.001461, -.002736,
 -.002314,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 1.849860,.0606463,3.278428, 1.878004, 1.891320,
 1.780255,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 1.867060,.0134288,.7192479, 1.877811, 1.852008,
 1.871363,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0073078,.0053965,73.84555, .0081104, .0122580,
 .0015550,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0413956,.0003713,.8969067, .0413272, .0417963,
 .0410632,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0113795,.0000425,.3737295, .0113974, .0113310,
 .0114102,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000004,.0000122,309.1552, -.000009, -.000013,
 .0000099,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 38.46010,.4289190,1.115231, 38.33950, 38.93641,
 38.10439,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001554,.0001494,96.09934, .0000700, .0003279,
 .0000684,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0001924,.0002094,108.8356, .0004228, .0001410,
 .0000135,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0015409,.0002416,15.68196, .0015529, .0012935,
 .0017763,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0067524,.0002568,3.803729, .0069772, .0068076,
 .0064725,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0758092,.0046243,6.099935, .0799072, .0707956,
 .0767249,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 8.157203,.0629377,.7715600, 8.144692, 8.225456,
 8.101460,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0011716,.0031215,266.4185, -.002295, .0037591,
 .0020510,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 1.052462,.0092440,.8783240, 1.046558, 1.063115,
 1.047712,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0016201,.0002203,13.59541, .0013917, .0016374,

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.0018312,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0001277,.0016629,1302.339, .0020243, -.001080,
 -.000561,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 80.67178,.8417248,1.043394, 80.33046, 81.63056,
 80.05432,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0136443,.0005757,4.219632, .0136724, .0130550,
 .0142054,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0298485,.0070774,23.71103, .0368244, .0226738, .0300473,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0030041,.0007167,23.85772, .0025526, .0038305,
 .0026293,Chk Pass,,
 S,182.034 {485},Y1,ppm, 6.178197,.0323842,.5241692, 6.144433, 6.181159, 6.208998,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0029990,.0019619,65.41697, .0007772, .0044928,
 .0037270,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0132544,.0201483,152.0116, .0365087, .0022453,
 .0010093,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 5.711095,.0600882,1.052131, 5.687182, 5.779458,
 5.666645,Chk Pass,,
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 .0015198,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2693893,.0019115,.7095534, .2710336, .2672920,
 .2698422,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.000791,.0222082,2807.248, -.026415, .0128947,
 .0111470,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0035265,.0003267,9.265476, .0033562, .0033201,
 .0039032,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0071169,.0050954,71.59622, .0096023, .0104928,
 .0012557,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0048771,.0003534,7.246346, .0047462, .0046077,
 .0052772,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0009593,.0021963,228.9348, .0012033, -.001349, .0030235,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0171288,.0003234,1.888100, .0170195, .0174926,
 .0168741,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0000521,.0021768,4178.263, -.002447, .0010685,
 .0015347,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2964.794,4.896355,.1651499,2963.450,2960.710,2970.222,None,,
 Y2A,371.030 { 91}2,Cts/S,
 243217.3,351.1301,.1443689,242928.6,243115.1,243608.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16296.47,133.2900,.8179073,16337.17,16147.57,16404.66,None,,

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 Custom ID2=
 Custom ID3=
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 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002215,.0005133,23.17333, -.001935, -.002807,

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-.001902,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 3.881761,.0156045,.4019953, 3.883998, 3.865158,
 3.896126,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 3.794872,.0383034,1.009345, 3.774016, 3.839078,
 3.771524,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.001347,.0069076,512.6435, .0016368, -.009245,
 .0035663,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0156805,.0007206,4.595270, .0164421, .0155896,
 .0150096,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0349259,.0002395,.6857106, .0347845, .0352025,
 .0347908,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0016126,.0000120,.7447051, .0016046, .0016264,
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 Ca,317.933 {106},Y2R,ppm, 18.81880,.0236392,.1256149, 18.83761, 18.79227,
 18.82653,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0005221,.0001733,33.18751, .0003887, .0004596,
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 Co,228.616 {447},Y1,ppm, .0234069,.0001471,.6284404, .0232540, .0235475,
 .0234191,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0884606,.0007466,.8439764, .0875988, .0889116,
 .0888715,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0525951,.0001690,.3212466, .0525936, .0527648,
 .0524268,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 10.99587,.0195150,.1774762, 10.98075, 10.98896,
 11.01790,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 4.998745,.0734663,1.469695, 5.083415, 4.960943,
 4.951876,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0099598,.0010741,10.78386, .0111714, .0095833,
 .0091246,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 14.38942,.0289103,.2009139, 14.39901, 14.35693,
 14.41232,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .3295673,.0013235,.4015772, .3288619, .3310940,
 .3287458,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0093853,.0010054,10.71241, .0092771, .0104404,
 .0084383,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 114.5015,.1513117,.1321482, 114.6310, 114.3352,
 114.5384,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0863971,.0006332,.7328534, .0869989, .0864558,
 .0857366,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0412355,.0060433,14.65561, .0481654, .0384806, .0370606,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0133694,.0033353,24.94718, .0137209, .0098723,
 .0165151,Chk Pass,,
 S,182.034 {485},Y1,ppm, 53.40695,.1562882,.2926365, 53.27371, 53.36817, 53.57898,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.003750,.0055177,147.1511, -.002635, -.009740,
 .0011254,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0054069,.0105713,195.5128, .0073946, -.006017,
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 Si,251.611 {134},Y2R,ppm, 12.96990,.0818615,.6311657, 13.02537, 12.87588,
 13.00843,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0009011,.0025292,280.6844, .0032026, .0013075,
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 Sr,421.552 { 80},Y2A,ppm, .1482684,.0006939,.4679860, .1479335, .1490662,
 .1478055,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.009365,.0141348,150.9310, -.025673, -.000646,
 -.001775,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0546436,.0021836,3.996009, .0521253, .0557945,
 .0560110,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0023010,.0140114,608.9257, -.013837, .0093764,
 .0113639,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0198922,.0005340,2.684270, .0193424, .0204087,
 .0199256,Chk Pass,,

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w,207.911 {462},Y1,ppm, -.000089,.0009742,1095.417, .0007592, -.001153, .0001270,chk
 Pass,,
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 .0805891,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0025768,.0042539,165.0866, .0070047, -.001479,
 .0022043,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2999.617,8.150707,.2717249,3008.812,2996.760,2993.280,None,,
 Y2A,371.030 { 91}2,Cts/S,
 247186.7,943.6829,.3817693,247497.0,246126.9,247936.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16845.47,86.27084,.5121309,16843.89,16932.51,16759.99,None,,

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 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:32:43
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002338,.0002306,9.862009, -.002460, -.002483,
 -.002073,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 4.080156,.0403911,.9899395, 4.061166, 4.052760,
 4.126543,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 3.984126,.0023010,.0577542, 3.985702, 3.985190,
 3.981485,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0063346,.0062145,98.10384, .0006545, .0053771,
 .0129723,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0162354,.0004126,2.541543, .0160470, .0167086,
 .0159506,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0361570,.0001264,.3495890, .0362628, .0360170,
 .0361910,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0016313,.0000223,1.369644, .0016555, .0016115,
 .0016270,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 19.04819,.0188820,.0991276, 19.06585, 19.05042,
 19.02829,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0006896,.0001151,16.69227, .0008012, .0006963,
 .0005712,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0238372,.0002633,1.104723, .0240600, .0239050,
 .0235466,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0896688,.0003442,.3839180, .0900279, .0896371,
 .0893416,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0533216,.0011296,2.118549, .0546253, .0526324,
 .0527072,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 10.19431,.0362981,.3560620, 10.18196, 10.16580,
 10.23517,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 5.022005,.0903582,1.799245, 5.012586, 4.936726,
 5.116704,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0122002,.0049712,40.74671, .0079811, .0109388,
 .0176805,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 14.63886,.0373612,.2552193, 14.68152, 14.61197,
 14.62309,Chk Pass,,

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Mn,257.610 {131},Y2A,ppm, .3344677,.0009545,.2853659, .3355684, .3338695,
 .3339652,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0085646,.0009685,11.30843, .0075236, .0087312,
 .0094391,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 116.4006,.1792903,.1540287, 116.5966, 116.2449,
 116.3603,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0889019,.0013291,1.495016, .0873740, .0895402,
 .0897914,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0335696,.0043769,13.03826, .0302343, .0319487, .0385257,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0082168,.0079451,96.69405, .0012466, .0065358,
 .0168679,Chk Pass,,
 S,182.034 {485},Y1,ppm, 54.07178,.1615762,.2988181, 53.98102, 53.97599, 54.25833,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.001043,.0043995,421.6532, -.001665, -.005099,
 .0036337,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0044972,.0104405,232.1549, -.002523, .0164951,
 -.000480,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 13.52892,.0630479,.4660233, 13.59254, 13.52774,
 13.46646,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.000005,.0062523,122328.0, .0067365, -.001139,
 -.005613,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .1508637,.0003953,.2620536, .1512905, .1505100,
 .1507906,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.020424,.0089934,44.03406, -.029040, -.011096,
 -.021135,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0674948,.0058882,8.723858, .0713813, .0607202,
 .0703828,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.004221,.0024671,58.44743, -.001375, -.005758,
 -.005529,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0189492,.0005488,2.896382, .0194996, .0189461,
 .0184020,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001146,.0049811,434.6971, .0004572, .0028363, -.006731,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0794285,.0001872,.2357284, .0796431, .0792985,
 .0793439,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0033111,.0009240,27.90779, .0027478, .0028079,
 .0043775,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2973.947,8.578899,.2884685,2983.844,2969.358,2968.638,None,,
 Y2A,371.030 { 91}2,Cts/S,
 243820.2,691.7363,.2837076,243319.8,244609.5,243531.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16702.04,25.65445,.1536007,16674.43,16725.14,16706.56,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3196-B-3-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:35:54
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
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Ag,328.068 {103},Y2A,ppm, -.002675,.0003787,14.15369, -.002940, -.002844,
 -.002242,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .4404063,.0292001,6.630268, .4617148, .4071222,
 .4523818,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .4453699,.0124857,2.803450, .4568174, .4320561,
 .4472362,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0064044,.0066747,104.2216, .0090983, .0113112,
 -.001196,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1937173,.0002866,.1479270, .1939054, .1933875,
 .1938590,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0048295,.0000629,1.301903, .0048492, .0047591,
 .0048801,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000845,.0000230,27.20195, .0000842, .0001076,
 .0000616,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 9.968167,.0359889,.3610382, 10.00871, 9.955799,
 9.939993,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001841,.0003788,205.7458, .0000838, -.000134,
 .0006030,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0008306,.0004961,59.71965, .0012777, .0002970,
 .0009172,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0450394,.0002833,.6289189, .0447167, .0452472,
 .0451542,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0036554,.0009207,25.18717, .0047003, .0029631,
 .0033028,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .4078129,.0189576,4.648609, .3862516, .4153190,
 .4218681,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 61.98824,.1734375,.2797909, 62.17836, 61.83867,
 61.94770,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.002719,.0026867,98.80705, -.002277, -.000281,
 -.005599,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .8081169,.0079203,.9800986, .8167271, .8064820,
 .8011415,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0146001,.0001447,.9912009, .0146872, .0146800,
 .0144330,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0042748,.0011618,27.17847, .0050065, .0029351,
 .0048827,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1860.916,6.645200,.3570930, 1864.309, 1865.179,
 1853.259,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0226891,.0007213,3.178911, .0223416, .0235183,
 .0222073,Chk Pass,,
 P,177.495 {490},Y1,ppm, .6319174,.0192649,3.048635, .6179938, .6238547, .6539036,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0067272,.0078000,115.9484, .0047928, .0000763,
 .0153124,Chk Pass,,
 S,182.034 {485},Y1,ppm, 90.23574,.5190454,.5752105, 90.82989, 90.00681, 89.87052,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0066943,.0061044,91.18703, -.000022, .0082009,
 .0119043,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0041879,.0156692,374.1548, -.013878, .0140778,
 .0123641,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 40.11048,.2093418,.5219130, 40.35174, 39.97690,
 40.00279,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.009931,.0054158,54.53567, -.012000, -.014007,
 -.003785,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .1436838,.0002968,.2065990, .1437534, .1433583,
 .1439396,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.019430,.0110129,56.67950, -.031968, -.011321,
 -.015002,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0112143,.0007053,6.289237, .0119954, .0106242,
 .0110233,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0015615,.0069622,445.8803, .0074317, -.006130,
 .0033831,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0384835,.0012024,3.124434, .0390651, .0371009,

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.0392846,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000443,.0010448,235.8280, .0006864, -.000640, -.001375,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0039396,.0001310,3.325372, .0040543, .0037968,
 .0039676,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000553,.0040126,725.6022, .0011500, .0023272,
 -.005136,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2658.603,10.89589,.4098352,2646.702,2668.088,2661.020,None,,
 Y2A,371.030 { 91}2,Cts/S,
 207280.1,424.5487,.2048188,207366.2,207655.0,206819.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15870.46,33.64596,.2120037,15856.45,15908.84,15846.08,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:39:11
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002184,.0002392,10.95174, -.001932, -.002213,
 -.002408,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .9082319,.0190536,2.097883, .8904909, .9058336,
 .9283712,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .9075540,.0142444,1.569538, .8923744, .9096586,
 .9206291,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0049649,.0060864,122.5887, -.001955, .0094877,
 .0073620,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0330088,.0006260,1.896306, .0331482, .0335533,
 .0323249,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0609918,.0000705,.1155133, .0609557, .0609468,
 .0610730,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000541,.0000237,43.76740, .0000303, .0000543,
 .0000777,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 37.68248,.0461344,.1224293, 37.64810, 37.73491,
 37.66444,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000012,.0001362,11412.33, .0000062, .0001348,
 -.000137,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0014562,.0003338,22.91971, .0013533, .0011861,
 .0018294,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0264866,.0004053,1.530322, .0268526, .0260510,
 .0265562,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0124073,.0010909,8.792348, .0136480, .0119757,
 .0115982,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 2.774947,.0107090,.3859168, 2.763732, 2.785065,
 2.776044,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 3.856996,.0096124,.2492210, 3.856207, 3.847803,
 3.866979,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0033687,.0007511,22.29631, .0028038, .0030813,
 .0042211,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 7.632406,.0077072,.1009799, 7.640951, 7.630287,

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7.625980,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .1581947,.0002953,.1866594, .1585244, .1579547,
.1581049,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0030253,.0007829,25.87730, .0029333, .0038502,
.0022926,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 106.7370,.1374908,.1288126, 106.6574, 106.8958,
106.6579,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0236348,.0001795,.7595671, .0234385, .0237906,
.0236754,Chk Pass,,
P,177.495 {490},Y1,ppm, .1054420,.0041596,3.944902, .1028704, .1032146, .1102410,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0055410,.0037795,68.20969, .0012215, .0071615,
.0082401,Chk Pass,,
S,182.034 {485},Y1,ppm, 3.128986,.0238640,.7626751, 3.114674, 3.156535, 3.115749,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0001367,.0068953,5042.223, -.006039, -.001127,
.0075766,Chk Pass,,
Se,196.090 {472},Y1,ppm, -.004912,.0083374,169.7532, -.014344, -.001863,
.0014725,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 3.770283,.0177463,.4706900, 3.756758, 3.763714,
3.790378,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0046845,.0002996,6.395679, .0043404, .0048259,
.0048873,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0859977,.0001125,.1307553, .0858765, .0860178,
.0860987,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.024481,.0170229,69.53567, -.043248, -.010035,
-.020159,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0351102,.0037479,10.67480, .0335024, .0393937,
.0324343,Chk Pass,,
Tl,190.856 {477},Y1,ppm, -.005480,.0033338,60.83645, -.003302, -.009318,
-.003820,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0050777,.0006298,12.40318, .0051952, .0043975,
.0056406,Chk Pass,,
W,207.911 {462},Y1,ppm, -.001197,.0010118,84.53682, -.001410, -.002085, -.000095,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .0925811,.0003745,.4045400, .0923164, .0924174,
.0930097,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.000349,.0033272,954.1208, -.003730, -.000237,
.0029213,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 2951.819,.2147215,.0072742,2951.622,2952.048,2951.788,None,,
Y2A,371.030 { 91}2,Cts/S,
242358.6,751.1844,.3099475,243177.8,242196.0,241702.0,None,,
Y2R,371.030 { 91}3,Cts/S,
16506.54,20.87320,.1264541,16522.10,16482.82,16514.70,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3196-B-7-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 18:42:19
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

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Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002498,.0006267,25.08184, -.001775, -.002878,
 -.002842,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .6690172,.0165651,2.476030, .6878546, .6624735,
 .6567236,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .6733019,.0028409,.4219384, .6705348, .6762113,
 .6731596,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0026265,.0061769,235.1773, -.001862, .0000699,
 .0096712,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0199686,.0002463,1.233629, .0201761, .0196964,
 .0200334,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1114707,.0002800,.2511681, .1116326, .1111474,
 .1116321,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000446,.0000069,15.40982, .0000372, .0000458,
 .0000508,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 32.58936,.1842421,.5653442, 32.54024, 32.79319,
 32.43466,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002181,.0001803,82.66320, .0002788, .0000153,
 .0003603,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0009952,.0001628,16.35478, .0009302, .0008750,
 .0011804,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0048059,.0005346,11.12331, .0042059, .0052313,
 .0049807,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0070805,.0004211,5.946811, .0066049, .0074055,
 .0072313,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 2.178743,.0243259,1.116509, 2.166915, 2.206721,
 2.162593,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.652009,.0230098,1.392840, 1.672000, 1.626857,
 1.657169,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0021460,.0028947,134.8874, .0003651, .0054860,
 .0005869,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 3.404205,.0175473,.5154584, 3.398864, 3.423802,
 3.389948,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .1111284,.0003427,.3084037, .1111856, .1107607,
 .1114390,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0000755,.0005608,743.0672, -.000559, .0002804,
 .0005049,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 49.64691,.1672019,.3367821, 49.61804, 49.82667,
 49.49603,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0106751,.0006126,5.738649, .0113510, .0105180,
 .0101563,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1171368,.0069308,5.916840, .1131708, .1131000, .1251397,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0086605,.0044966,51.92043, .0048540, .0136219,
 .0075057,Chk Pass,,
 S,182.034 {485},Y1,ppm, 3.977429,.0249894,.6282795, 3.949406, 3.985482, 3.997399,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0039000,.0051950,133.2059, -.001987, .0058435,
 .0078430,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.004998,.0135710,271.5426, .0100999, -.008911,
 -.016182,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 4.212078,.0264993,.6291271, 4.241165, 4.205761,
 4.189307,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0000418,.0037802,9034.977, .0027628, -.004274,
 .0016372,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0696242,.0001768,.2539515, .0697176, .0694203,
 .0697347,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.027358,.0131407,48.03197, -.014857, -.041057,
 -.026161,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0331753,.0006243,1.881782, .0327266, .0329110,
 .0338882,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0011959,.0068789,575.2044, .0001656, .0085319,
 -.005110,Chk Pass,,

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V,292.402 {115},Y2A,ppm, .0031973,.0003428,10.72164, .0028097, .0034608,
.0033213,Chk Pass,,
W,207.911 {462},Y1,ppm, -.002784,.0013898,49.92808, -.003028, -.001288, -.004035,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .2078846,.0010746,.5169020, .2070277, .2075359,
.2090902,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0017708,.0040263,227.3714, -.001396, .0063020,
.0004060,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 2979.714,6.525095,.2189839,2985.932,2980.290,2972.920,None,,
Y2A,371.030 { 91}2,Cts/S,
244893.1,864.7983,.3531330,245071.0,245655.1,243953.2,None,,
Y2R,371.030 { 91}3,Cts/S,
16667.51,77.72078,.4663010,16686.58,16582.03,16733.92,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3196-B-4-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 18:45:36
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.002116,.0002670,12.62058, -.001809, -.002244,
-.002294,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .1529179,.0252127,16.48772, .1469624, .1805752,
.1312162,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .1418687,.0063288,4.461018, .1349209, .1433805,
.1473047,Chk Pass,,
As,189.042 {478},Y1,ppm, .0077207,.0077709,100.6492, .0163215, .0012052,
.0056355,Chk Pass,,
B,249.773 {135},Y2A,ppm, .2662116,.0004580,.1720290, .2667371, .2658977,
.2660000,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0539321,.0001375,.2548497, .0539563, .0540559,
.0537842,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .0000994,.0000062,6.271078, .0001056, .0000995,
.0000932,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 52.12990,.2188238,.4197665, 52.32556, 52.17052,
51.89361,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0001657,.0002494,150.5030, .0001598, -.000081,
.0004180,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0167575,.0001977,1.179972, .0167631, .0169524,
.0165571,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0047289,.0009637,20.37813, .0037013, .0056125,
.0048728,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0007063,.0000845,11.96551, .0006657, .0008034,
.0006497,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 6.177900,.0267690,.4333021, 6.204164, 6.178882,
6.150653,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 28.07346,.0612099,.2180347, 28.07030, 28.13618,
28.01388,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0010562,.0037548,355.5047, -.000621, -.001568,
.0053572,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 21.56382,.0380764,.1765756, 21.59903, 21.56901,
 21.52341,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 2.952430,.0081769,.2769544, 2.958684, 2.955428,
 2.943177,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0005571,.0012180,218.6391, -.000314, .0000358,
 .0019490,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 658.6810,1.923111,.2919640, 660.7329, 656.9199,
 658.3901,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0279563,.0012574,4.497894, .0293844, .0270153,
 .0274691,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.202851,.0161085,1.339191, 1.200954, 1.187775, 1.219823,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0035771,.0087733,245.2661, .0079169, -.006520,
 .0093346,Chk Pass,,
 S,182.034 {485},Y1,ppm, 14.67211,.0905501,.6171579, 14.70602, 14.74082, 14.56950,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0076549,.0061094,79.81131, .0117042, .0006274,
 .0106329,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.006015,.0108169,179.8271, -.018297, .0020942,
 -.001843,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 10.05078,.0163014,.1621906, 10.03197, 10.05964,
 10.06074,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.002904,.0074509,256.6088, .0053171, -.009212,
 -.004816,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3141422,.0007598,.2418795, .3146634, .3144928,
 .3132703,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.010160,.0217205,213.7846, -.005731, .0090045,
 -.033754,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0072681,.0008584,11.80980, .0082422, .0066225,
 .0069397,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0015990,.0026418,165.2147, -.001342, .0037714,
 .0023676,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0058141,.0004094,7.042204, .0061281, .0059631,
 .0053510,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001092,.0024120,220.8981, .0009727, -.000505, -.003743,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0038058,.0002623,6.892900, .0036343, .0036753,
 .0041078,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000106,.0017684,1661.656, -.001053, .0019338,
 -.001200,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2778.937,2.886690,.1038775,2782.252,2776.980,2777.578,None,,
 Y2A,371.030 { 91}2,Cts/S,
 224815.0,243.0439,.1081084,224765.1,224600.8,225079.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16326.44,19.92955,.1220692,16307.30,16324.95,16347.07,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:49:01
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

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[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.4847	.0007	.1505	.4844	.4855	.4842	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	24.87	.0474	.1906	24.82	24.86	24.92	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	24.58	.0785	.3192	24.50	24.61	24.64	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.4865	.0036	.7444	.4902	.4829	.4863	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4868	.0019	.3950	.4873	.4847	.4884	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.5304	.0034	.6434	.5273	.5341	.5297	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.51111	.00266	.51950	.50916	.51413	.51003	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	25.47	.0209	.0819	25.45	25.49	25.47	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.4749	.0003	.0589	.4749	.4746	.4752	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.4900	.0010	.2073	.4891	.4911	.4899	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.4945	.0046	.9254	.4912	.4997	.4925	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5173	.0041	.7973	.5127	.5208	.5183	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	26.86	.0389	.1448	26.83	26.85	26.91	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	25.66	.1140	.4444	25.57	25.78	25.62	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.5153	.0008	.1549	.5146	.5162	.5153	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	26.33	.0538	.2045	26.37	26.35	26.27	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.49096	.00215	.43782	.48943	.49342	.49002	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.4672	.0020	.4361	.4674	.4691	.4650	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	26.07	.0780	.2993	26.03	26.16	26.03	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4767	.0024	.5071	.4781	.4780	.4739	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.4913	.0093	1.894	.4812	.4930	.4996	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.4824	.0056	1.159	.4760	.4847	.4864	Chk Pass,,		
S	182.034	{485}	Y1, ppm	23.64	.0772	.3266	23.55	23.69	23.68	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.4722	.0081	1.706	.4740	.4634	.4792	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4815	.0127	2.640	.4740	.4962	.4743	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	26.351	.04175	.15843	26.326	26.399	26.327	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4922	.0070	1.419	.4881	.5002	.4882	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.4979	.0038	.7641	.4952	.5022	.4961	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.5005	.0205	4.094	.5241	.4897	.4875	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5124	.0021	.4041	.5105	.5146	.5120	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4663	.0033	.7104	.4635	.4700	.4655	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5249	.0038	.7296	.5210	.5286	.5250	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5045	.0015	.2962	.5046	.5030	.5060	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.4719	.0009	.1855	.4713	.4729	.4716	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	.5604	.0044	.7833	.5616	.5555	.5640	Chk		
Fail				.5000		10.00%						

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/s	2973.0	2.9129	.09798	2973.2	2975.8
Y2A	371.030	{91}2	Cts/s	243520	.1405.1	.57697	244930	242120
Y2R	371.030	{91}3	Cts/s	16503	.52.998	.32114	16564	16469

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:52:20
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	-.0022	.0003	13.64	-.0022	-.0025	-.0019	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	.0058	.0180	311.1	.0040	.0246	-.0112	Chk Pass,,		

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Alum ax,308.215 {109}2,Y2A,ppm, .0021,.0016,76.13, .0021, .0037, .0005,Chk Pass,,
As,189.042 {478},Y1,ppm, .0044,.0139,315.6, .0055, -.0100, .0177,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0018,.0010,53.17, .0028, .0016, .0009,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0000,.0000,90.61, .0001, .0000, .0000,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.00000,.00001,307.94, .00000, .00000, -.00001,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, -.0019,.0059,304.6, -.0069, -.0035, .0046,Chk Pass,,
Cd,226.502 {449},Y1,ppm, -.0000,.0001,3884., -.0000, -.0001, .0001,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0006,.0006,101.6, .0002, .0012, .0002,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, -.0002,.0006,360.9, -.0008, -.0002, .0004,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0014,.0003,22.51, .0017, .0011, .0013,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0146,.0065,44.29, .0171, .0194, .0072,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .0388,.0236,60.82, .0208, .0301, .0655,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.0004,.0016,390.9, .0012, -.0020, -.0005,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, .0019,.0022,115.5, -.0006, .0029, .0034,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00019,.00003,13.233, .00016, .00019, .00022,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0003,.0010,315.3, .0010, .0007, -.0008,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .0924,.0113,12.23, .0962, .0797, .1013,Chk Pass,,
Ni,231.604 {445},Y1,ppm,F .0064,.0004,5.507, .0064, .0061, .0068,chk
Fail, .0050, -.0050
P,177.495 {490},Y1,ppm, -.0043,.0092,212.6, -.0120, .0059, -.0070,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0015,.0021,136.6, .0026, -.0009, .0029,Chk Pass,,
S,182.034 {485},Y1,ppm, -.0020,.0176,866.0, -.0096, -.0146, .0181,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0036,.0036,100.2, .0009, .0022, .0077,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0090,.0049,54.51, .0146, .0054, .0071,Chk Pass,,
Si,251.611 {134},Y2R,ppm, -.00008,.00658,8354.7, .00692, -.00102, -.00613,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0042,.0061,144.8, .0100, .0050, -.0022,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0000,.0000,18.45, .0000, .0000, .0000,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.0093,.0238,255.7, -.0368, .0051, .0037,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0000,.0001,1347., -.0000, -.0000, .0001,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0077,.0094,121.9, .0182, .0003, .0046,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0001,.0001,90.90, .0002, .0001, .0000,Chk Pass,,
W,207.911 {462},Y1,ppm, -.0024,.0019,79.10, -.0019, -.0045, -.0008,Chk Pass,,
Zn,213.856 {458},Y1,ppm, -.0010,.0003,26.07, -.0007, -.0012, -.0010,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.0029,.0030,100.9, -.0010, -.0014, -.0063,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 3026.9,1.5045,.04970,3028.3,3025.3,3027.2
Y2A,371.030 { 91}2,Cts/S, 252740.,1555.3,.61539,254530.,251930.,251760.
Y2R,371.030 { 91}3,Cts/S, 16658.,48.558,.29151,16672.,16697.,16603.

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3196-B-22-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 18:55:39
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.003362,.0005885,17.50410, -.002827, -.003266,
-.003992,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .0339602,.0480618,141.5240, .0633199, -.021505,
.0600657,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .0579865,.0021093,3.637652, .0567827, .0604222,
.0567547,Chk Pass,,

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As, 189.042 {478}, Y1, ppm, -.003827, .0076887, 200.8974, -.007668, .0050252,
 -.008838, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .8262052, .0028155, .3407792, .8253081, .8239475,
 .8293599, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .0357824, .0000615, .1719863, .0358492, .0357281,
 .0357698, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, .0000827, .0000133, 16.13164, .0000808, .0000704,
 .0000969, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 14.83365, .1304004, .8790851, 14.72665, 14.79541,
 14.97890, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, -.000112, .0000606, 53.97625, -.000063, -.000180,
 -.000094, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0003729, .0000962, 25.79860, .0003634, .0004736,
 .0002819, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0237652, .0002067, .8696567, .0235347, .0239339,
 .0238270, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0007066, .0014151, 200.2664, -.000877, .0011481,
 .0018484, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, .2060978, .0062030, 3.009754, .1995176, .2118380,
 .2069377, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, 49.07343, .5476337, 1.115948, 48.68397, 48.83671,
 49.69960, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, .0076220, .0033194, 43.55052, .0091870, .0038094,
 .0098696, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 31.30244, .2535241, .8099180, 31.11472, 31.20175,
 31.59084, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0060529, .0001316, 2.174878, .0061902, .0059278,
 .0060408, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0116180, .0009127, 7.856012, .0118170, .0124147,
 .0106222, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, F 1809.296, 10.50636, .5806877, 1802.289, 1804.223,
 1821.376, Chk Fail, 450.0000, -1.00000
 Ni, 231.604 {445}, Y1, ppm, .0132194, .0008126, 6.147278, .0125140, .0130361,
 .0141080, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, 2.370515, .0102033, .4304237, 2.362683, 2.366807, 2.382053, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0043698, .0027946, 63.95306, .0015042, .0045177,
 .0070876, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 7.546003, .0237891, .3152543, 7.564695, 7.554090, 7.519225, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0017575, .0057519, 327.2816, -.002240, -.000837,
 .0083497, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0142107, .0173637, 122.1869, .0090132, .0000394,
 .0335796, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 7.963653, .0617458, .7753454, 7.906360, 7.955550,
 8.029051, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, -.009860, .0059484, 60.32901, -.015503, -.010429,
 -.003648, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .1775955, .0003093, .1741486, .1775381, .1773189,
 .1779294, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, -.018552, .0159771, 86.12143, -.001900, -.019999,
 -.033756, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0105629, .0002675, 2.532687, .0103198, .0108495,
 .0105193, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0007556, .0040121, 530.9517, -.001434, -.001685,
 .0053861, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0095980, .0005186, 5.403262, .0090031, .0098361,
 .0099547, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, -.000656, .0013859, 211.1017, .0002673, .0000133, -.002250, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0228596, .0004231, 1.850797, .0228389, .0232927,
 .0224473, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, .0002457, .0022745, 925.8407, -.002290, .0021047,

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.0009228,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2667.755,3.933101,.1474311,2664.786,2672.216,2666.264,None,
 Y2A,371.030 { 91}2,Cts/S,
 208269.8,293.1420,.1407511,208518.8,208343.9,207946.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15915.92,112.8649,.7091320,16006.87,15951.29,15789.61,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3196-B-23-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 18:58:57
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.003117,.0004482,14.37879, -.003556, -.003135,
 -.002660,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .2471739,.0247752,10.02340, .2730883, .2447117,
 .2237216,Chk Pass,,
 Al_{um} ax,308.215 {109}2,Y2A,ppm, .2463585,.0057667,2.340768, .2502170, .2397294,
 .2491290,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0107059,.0065782,61.44424, .0176171, .0099796,
 .0045211,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0347336,.0007997,2.302408, .0353087, .0338204,
 .0350718,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0733320,.0002328,.3174061, .0734883, .0734432,
 .0730645,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000123,.0000088,71.51399, .0000082, .0000063,
 .0000223,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 89.66698,.3081160,.3436226, 89.83672, 89.85290,
 89.31132,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002006,.0003095,154.3229, .0003382, .0004174,
 -.000154,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0006640,.0002105,31.70813, .0004247, .0008208,
 .0007465,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0031284,.0004653,14.87358, .0030034, .0036434,
 .0027384,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0024913,.0004657,18.69323, .0030282, .0021980,
 .0022475,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 5.940484,.0241530,.4065839, 5.967765, 5.931862,
 5.921825,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 4.514426,.0551452,1.221533, 4.542651, 4.549745,
 4.450882,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0024475,.0025621,104.6811, .0008983, .0010394,
 .0054048,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 23.40989,.0633626,.2706660, 23.46878, 23.41804,
 23.34284,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .4920314,.0016148,.3281883, .4936703, .4919820,
 .4904419,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.000077,.0009979,1302.907, .0007336, -.001191,
 .0002279,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 312.1646,.8113624,.2599149, 312.6017, 311.2284,

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312.6636,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0089091,.0007826,8.784488, .0084110, .0098112,
 .0085053,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0362262,.0061864,17.07724, .0291976, .0386356, .0408455,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0050296,.0018039,35.86695, .0061899, .0029512,
 .0059476,Chk Pass,,
 S,182.034 {485},Y1,ppm, 22.04528,.1022745,.4639294, 22.11980, 22.08735, 21.92868,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.002411,.0098706,409.3222, .0063356, -.000457,
 -.013113,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0044259,.0290508,656.3828, .0378857, -.014372,
 -.010236,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.367152,.0202789,.6022576, 3.373636, 3.383396,
 3.344424,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.002143,.0020220,94.36579, .0001093, -.002735,
 -.003802,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2300048,.0005238,.2277420, .2304290, .2301661,
 .2294193,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.022573,.0310793,137.6810, -.052313, .0096913,
 -.025098,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0111998,.0002380,2.124864, .0113393, .0109251,
 .0113352,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.003051,.0019396,63.57854, -.000953, -.004779,
 -.003419,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0007271,.0004756,65.41077, .0007715, .0002308,
 .0011789,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001950,.0016566,84.95466, -.003425, -.002267, -.000158,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0337815,.0004349,1.287379, .0333348, .0338061,
 .0342036,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0008973,.0024694,275.1939, .0004720, -.001332,
 .0035517,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2844.439,7.229294,.2541553,2839.348,2841.256,2852.714,None,,
 Y2A,371.030 { 91}2,Cts/S,
 230924.4,19.77373,.0085629,230919.5,230907.5,230946.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16349.18,16.63459,.1017457,16366.18,16332.94,16348.44,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3196-B-21-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 19:02:14
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.003891,.0003594,9.237452, -.004301, -.003742,
 -.003631,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 3.432089,.0270083,.7869337, 3.434278, 3.404053,
 3.457936,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 3.357474,.0046112,.1373422, 3.353719, 3.362621,

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3.356083,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0154733,.0190926,123.3900, .0004645, .0369626,
 .0089928,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1018221,.0005770,.5667186, .1024489, .1013129,
 .1017046,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .6280690,.0015732,.2504883, .6263302, .6293939,
 .6284830,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0001587,.0000138,8.680334, .0001706, .0001436,
 .0001620,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 112.8597,.2575077,.2281662, 113.0054, 113.0114,
 112.5624,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001956,.0002743,140.2245, .0004415, -.000100,
 .0002456,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0043890,.0000596,1.356941, .0043792, .0043351,
 .0044529,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0525277,.0009033,1.719680, .0515357, .0527446,
 .0533029,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0514609,.0007720,1.500200, .0511127, .0523456,
 .0509242,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 43.99078,.0842984,.1916275, 44.06330, 44.01075,
 43.89829,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 15.30121,.0217913,.1424152, 15.29308, 15.32590,
 15.28466,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0149430,.0014738,9.862767, .0141220, .0140626,
 .0166445,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 72.76628,.1127477,.1549449, 72.88079, 72.76267,
 72.65538,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.145471,.0022990,.2007041, 1.144300, 1.148120,
 1.143994,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0014321,.0004294,29.98345, .0017413, .0016133,
 .0009419,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 560.9053,2.350141,.4189906, 563.6174, 559.4702,
 559.6281,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0356660,.0004379,1.227809, .0361616, .0355053,
 .0353312,Chk Pass,,
 P,177.495 {490},Y1,ppm, .2528436,.0060146,2.378786, .2464692, .2584184, .2536431,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0244502,.0002309,.9442381, .0245541, .0241856,
 .0246108,Chk Pass,,
 S,182.034 {485},Y1,ppm, 11.20088,.0869731,.7764848, 11.21511, 11.27986, 11.10767,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0010875,.0099506,915.0149, -.007790, .0118436,
 -.000791,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.000891,.0256201,2875.731, -.000980, -.026467,
 .0247734,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 11.50760,.0786518,.6834767, 11.48463, 11.44300,
 11.59518,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0024715,.0035536,143.7843, .0059026, .0027047,
 -.001193,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .4179026,.0021440,.5130393, .4167778, .4165551,
 .4203750,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.034491,.0367674,106.6015, -.041761, -.067080,
 .0053689,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1396791,.0027143,1.943219, .1428011, .1383580,
 .1378784,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.004800,.0034966,72.84972, -.008363, -.001374,
 -.004663,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0271956,.0004235,1.557174, .0267243, .0273185,
 .0275441,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000034,.0034058,10087.92, -.002277, .0038852, -.001709,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .7743306,.0083420,1.077312, .7767829, .7811715,
 .7650373,Chk Pass,,

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Zr,339.198 { 99},Y2R,ppm, .0028142,.0015651,55.61566, .0027181, .0044252,
.0012993,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 2750.242,20.67926,.7519068,2758.336,2726.740,2765.650,None,,
Y2A,371.030 { 91}2,Cts/S,
223127.6,779.4043,.3493088,224008.4,222527.2,222847.2,None,,
Y2R,371.030 { 91}3,Cts/S,
16117.30,22.50324,.1396217,16106.23,16102.48,16143.19,None,,

[Sample Header]

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SampleName=410-3196-B-24-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/7/2020 19:05:45
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.002480,.0002578,10.39519, -.002657, -.002599,
-.002184,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .1755774,.0086901,4.949451, .1835994, .1767869,
.1663459,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .1512633,.0045677,3.019705, .1499912, .1563322,
.1474665,Chk Pass,,
As,189.042 {478},Y1,ppm, .0010462,.0033373,318.9793, .0020216, .0037871,
-.002670,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0049796,.0003974,7.981373, .0047366, .0054383,
.0047641,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0502280,.0002715,.5405159, .0499347, .0504705,
.0502787,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .0003221,.0000215,6.685779, .0003154, .0003462,
.0003047,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 22.67987,.1467668,.6471239, 22.53957, 22.66768,
22.83235,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0001606,.0000067,4.169079, .0001594, .0001545,
.0001678,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0123167,.0003573,2.901060, .0123458, .0119457,
.0126586,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0026967,.0001870,6.934880, .0029127, .0025877,
.0025898,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0060786,.0003503,5.763388, .0057462, .0064444,
.0060452,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 1.722682,.0089235,.5180018, 1.716625, 1.718491,
1.732930,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 2.670592,.0426508,1.597054, 2.628444, 2.669605,
2.713728,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0087965,.0016972,19.29429, .0097419, .0068371,
.0098105,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 7.512513,.0491139,.6537618, 7.463713, 7.511890,
7.561935,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .1089507,.0005711,.5242266, .1085047, .1095945,
.1087530,Chk Pass,,
Mo,202.030 {467},Y1,ppm, -.000479,.0013782,287.7495, .0009805, -.000659,
-.001758,Chk Pass,,

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Na,589.592 { 57},Y2R,ppm, 28.51105,.2064392,.7240675, 28.34194, 28.45011,
 28.74110,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0269122,.0013960,5.187232, .0271070, .0254290,
 .0282006,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0023578,.0004993,21.17544, .0019093, .0022684, .0028957,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0032574,.0029990,92.06871, .0054991, -.000149,
 .0044223,Chk Pass,,
 S,182.034 {485},Y1,ppm, .2591780,.0058114,2.242229, .2566540, .2658246, .2550554,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.000562,.0067522,1201.204, .0058883, .0000056,
 -.007580,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0031036,.0127012,409.2351, -.007051, .0173454,
 -.000984,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 5.197170,.0409186,.7873251, 5.152290, 5.206817,
 5.232403,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.000306,.0003704,120.8774, -.000184, -.000013,
 -.000723,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0735617,.0003551,.4827829, .0731905, .0738983,
 .0735963,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.041527,.0109661,26.40740, -.032250, -.053629,
 -.038702,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0061051,.0000909,1.488393, .0060036, .0061328,
 .0061788,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0069103,.0111961,162.0196, .0127232, .0140045,
 -.005997,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000372,.0001114,29.90165, -.000494, -.000347,
 -.000276,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0005489,.0008694,158.3994, .0013585, -.000370, .0006581,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0749791,.0009116,1.215741, .0760205, .0745906,
 .0743261,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0006541,.0017909,273.8184, .0024425, -.001139,
 .0006590,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2990.475,8.678188,.2901943,2987.884,3000.154,2983.388,None,,
 Y2A,371.030 { 91}2,Cts/S,
 246778.6,953.0181,.3861835,247761.7,245858.8,246715.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16468.50,99.45173,.6038906,16579.17,16439.70,16386.63,None,,

[Sample Header]

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 SampleName=410-3196-B-25-A
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 19:09:03
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.001806,.0008201,45.41071, -.002205, -.000863,
 -.002350,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .1246529,.0490832,39.37592, .1795767, .1093027,
 .0850793,Chk Pass,,

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Al, 308.215 {109}, Y2A, ppm, .1291436, .0073926, 5.724334, .1239783, .1258407,
 .1376119, Chk Pass,,
 As, 189.042 {478}, Y1, ppm, -.003194, .0027827, 87.11696, -.005574, -.000135,
 -.003874, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .0041198, .0007550, 18.32698, .0044316, .0046690,
 .0032588, Chk Pass,,
 Ba, 455.403 {74}, Y2A, ppm, .0020010, .0000393, 1.963137, .0019696, .0020450,
 .0019882, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, -.000006, .0000115, 195.0307, -.000018, .0000048,
 -.000004, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, .3520260, .0038220, 1.085703, .3498762, .3497630,
 .3564387, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0002683, .0003005, 112.0255, .0001035, .0000862,
 .0006151, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0011620, .0002665, 22.92962, .0009917, .0010253,
 .0014691, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0768708, .0008460, 1.100514, .0760160, .0768887,
 .0777077, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0102911, .0004590, 4.459678, .0100864, .0108168,
 .0099702, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, .4957590, .0077980, 1.572939, .5046807, .4902437,
 .4923528, Chk Pass,,
 K, 766.490 {44}, Y2R, ppm, .0679326, .0423968, 62.41015, .0475760, .1166686,
 .0395532, Chk Pass,,
 Li, 670.784 {50}, Y2R, ppm, -.000859, .0023568, 274.2861, -.000842, -.003224,
 .0014891, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, .0779876, .0010244, 1.313541, .0784466, .0768139,
 .0787021, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0339561, .0001570, .4623684, .0337831, .0340896,
 .0339956, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0025218, .0000773, 3.064082, .0024359, .0025440,
 .0025855, Chk Pass,,
 Na, 589.592 {57}, Y2R, ppm, .6883373, .0047003, .6828559, .6907116, .6913768,
 .6829234, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0454365, .0004068, .8953721, .0458994, .0452745,
 .0451356, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .0686837, .0052384, 7.626816, .0745051, .0643501, .0671960, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, -.002157, .0023239, 107.7221, -.000101, -.004679,
 -.001692, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, .0503981, .0198389, 39.36442, .0277490, .0587486, .0646967, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0008030, .0058880, 733.2540, -.000960, .0073712,
 -.004002, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0057227, .0066556, 116.3026, .0114443, -.001582,
 .0073053, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, .1375202, .0201781, 14.67279, .1379174, .1574967,
 .1171465, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .0032882, .0038923, 118.3698, .0072669, -.000512,
 .0031093, Chk Pass,,
 Sr, 421.552 {80}, Y2A, ppm, .0024852, .0000168, .6771289, .0024666, .0024995,
 .0024894, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, -.000141, .0337101, 23961.24, -.027840, .0373931,
 -.009976, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0026948, .0000624, 2.316178, .0026293, .0027014,
 .0027536, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0030573, .0116192, 380.0407, -.002914, -.004362,
 .0164479, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0003990, .0004589, 115.0081, -.000131, .0006616,
 .0006662, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0008167, .0046023, 563.5150, .0060185, -.000843, -.002726, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0055739, .0000890, 1.596216, .0055490, .0055000,

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.0056726,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.003739,.0015914,42.56432, -.003253, -.005516,
 -.002447,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 3030.033,5.939443,.1960191,3025.398,3036.728,3027.972,None,,
 Y2A,371.030 { 91}2,Cts/S,
 253295.9,1008.865,.3982952,254236.5,253420.9,252230.4,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16381.47,6.080249,.0371166,16387.12,16382.27,16375.03,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3144-H-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 19:12:19
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002064,.0003657,17.72114, -.002031, -.002445,
 -.001715,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.000634,.0109359,1724.093, .0118340, -.005137,
 -.008600,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0092761,.0019602,21.13196, .0074027, .0113129,
 .0091128,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.004389,.0053116,121.0222, .0015578, -.006062,
 -.008662,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0804218,.0002074,.2578341, .0802877, .0803170,
 .0806606,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1539885,.0009327,.6056829, .1550319, .1532357,
 .1536980,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000030,.0000221,74.52482, -.000010, -.000025,
 -.000054,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 40.28728,.0696660,.1729230, 40.35728, 40.21795,
 40.28662,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002154,.0002629,122.0493, -.000070, .0004485,
 .0002673,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.000001,.0007339,87008.36, .0003030, -.000838,
 .0005324,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0021171,.0006316,29.83504, .0014019, .0025985,
 .0023509,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0155111,.0000868,.5597596, .0156077, .0154395,
 .0154861,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0220848,.0157573,71.34883, .0105406, .0156775,
 .0400364,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 4.003168,.0623871,1.558443, 4.034616, 3.931315,
 4.043572,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0194388,.0006782,3.488702, .0190371, .0202218,
 .0190574,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 8.095285,.0187407,.2315010, 8.093108, 8.077728,
 8.115019,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0003301,.0000145,4.392370, .0003267, .0003459,
 .0003175,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.000933,.0014062,150.7558, -.002025, -.001427,

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.0006539,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 22.88836,.0142461,.0622417, 22.88351, 22.90440,
 22.87717,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0071204,.0009393,13.19135, .0060915, .0073378,
 .0079319,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0018462,.0052972,286.9299, .0061827, .0034137, -.004058,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0054936,.0007000,12.74231, .0062260, .0054236,
 .0048312,Chk Pass,,
 S,182.034 {485},Y1,ppm, 8.847467,.0179230,.2025774, 8.834702, 8.839741, 8.867957,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0067580,.0079262,117.2857, .0158584, .0030515,
 .0013641,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0232234,.0041956,18.06623, .0219361, .0198222,
 .0279117,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 26.91208,.0653301,.2427537, 26.85602, 26.89640,
 26.98382,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0042853,.0042544,99.27901, .0085602, .0042441,
 .0000517,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .4824979,.0017341,.3594055, .4829975, .4805688,
 .4839273,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.016755,.0259417,154.8257, -.022574, -.039294,
 .0116014,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0018967,.0000796,4.194635, .0019322, .0019524,
 .0018056,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0064770,.0148891,229.8750, .0115300, .0181820,
 -.010281,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0098761,.0005162,5.226667, .0100775, .0102612,
 .0092896,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000238,.0046841,1965.643, -.001548, -.004128, .0049611,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0140823,.0002560,1.817679, .0140518, .0138430,
 .0143522,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000191,.0014995,783.8375, .0014404, -.000505,
 -.001509,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2995.103,.9797149,.0327106,2995.298,2995.970,2994.040,None,,
 Y2A,371.030 { 91}2,Cts/S,
 248099.0,955.8445,.3852674,246999.5,248732.3,248565.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16581.30,12.66507,.0763817,16587.30,16566.75,16589.85,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3144-H-5-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 19:15:38
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.002602,.0004972,19.11334, -.002031, -.002940,
 -.002834,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.008097,.0348064,429.8666, -.046245, .0000216,

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.0219325,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0116318,.0033144,28.49416, .0083566, .0115547,
 .0149840,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.000390,.0033927,870.4405, -.000537, .0030739,
 -.003707,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0213567,.0003746,1.754175, .0209252, .0215986,
 .0215464,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1522965,.0011198,.7353034, .1520679, .1513086,
 .1535130,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000010,.0000191,182.9707, -.000009, -.000030,
 .0000079,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 43.01625,.0296029,.0688181, 42.99576, 43.00279,
 43.05019,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000372,.0001463,393.5181, .0000982, .0001431,
 -.000130,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004625,.0004723,102.1062, .0008644, .0005808,
 -.000058,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0032675,.0001657,5.070698, .0033430, .0033819,
 .0030775,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0015251,.0009813,64.34141, .0025937, .0013172,
 .0006644,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0185755,.0052340,28.17661, .0245821, .0149929,
 .0161516,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 2.381187,.0170936,.7178627, 2.374928, 2.368104,
 2.400527,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0081151,.0023237,28.63438, .0073158, .0107330,
 .0062965,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 5.890140,.0158218,.2686150, 5.877328, 5.885268,
 5.907825,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0001302,.0000708,54.39914, .0000491, .0001616,
 .0001799,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.001904,.0007772,40.81585, -.002612, -.002027,
 -.001073,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 22.88380,.0121017,.0528833, 22.88047, 22.89721,
 22.87371,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0068835,.0003358,4.878546, .0071669, .0065126,
 .0069711,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0022002,.0078302,355.8896, .0001050, -.004369, .0108649,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0019248,.0052843,274.5335, .0012557, .0075118,
 -.002993,Chk Pass,,
 S,182.034 {485},Y1,ppm, 10.04079,.0045434,.0452496, 10.03568, 10.04439, 10.04230,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0088068,.0100483,114.0977, .0044856, .0202928,
 .0016419,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.007212,.0188899,261.9402, .0044047, -.029008,
 .0029686,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 13.38245,.0378323,.2827011, 13.37901, 13.34646,
 13.42189,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.001966,.0004347,22.10311, -.001746, -.001686,
 -.002467,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2450884,.0018592,.7585749, .2447649, .2434122,
 .2470881,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.033258,.0195676,58.83618, -.054839, -.028261,
 -.016673,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0018402,.0000642,3.489307, .0017923, .0018150,
 .0019131,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0027109,.0063576,234.5204, .0073038, -.004545,
 .0053739,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0062750,.0004392,6.999807, .0065530, .0057686,
 .0065033,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000199,.0025858,1296.308, -.002270, -.001027, .0026987,Chk
 Pass,,

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Zn,213.856 {458},Y1,ppm, .0008939,.0005237,58.58717, .0013080, .0010686,
 .0003052,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000186,.0023191,1249.007, .0024654, -.001184,
 -.001839,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2987.421,3.319219,.1111065,2986.216,2991.174,2984.872,None,,
 Y2A,371.030 { 91}2,Cts/S,
 248141.8,1894.492,.7634712,249113.3,249353.6,245958.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16624.30,24.67157,.1484067,16601.28,16650.34,16621.28,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 19:18:50
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4850,.0013,.2686, .4847, .4839, .4865,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 25.22,.0761,.3018, 25.30, 25.22, 25.15,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 24.62,.0741,.3011, 24.64, 24.54, 24.68,Chk Pass,,
 As,189.042 {478},Y1,ppm, .4798,.0131,2.732, .4949, .4716, .4729,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4838,.0026,.5283, .4809, .4854, .4852,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5232,.0027,.5219, .5252, .5244, .5201,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .50122,.00048,.09605, .50106, .50084, .50176,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 25.40,.2123,.8356, 25.49, 25.55, 25.16,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .4781,.0010,.2168, .4786, .4787, .4769,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4876,.0017,.3412, .4891, .4879, .4858,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4914,.0011,.2184, .4925, .4903, .4913,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5113,.0021,.4109, .5121, .5089, .5129,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 26.96,.1156,.4288, 26.89, 27.09, 26.90,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 25.47,.1873,.7355, 25.59, 25.56, 25.25,Chk Pass,,
 Li,179.784 { 50},Y2R,ppm, .5112,.0042,.8150, .5143, .5129, .5065,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 26.27,.1973,.7512, 26.36, 26.41, 26.04,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49110,.00027,.05455, .49120, .49131, .49080,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .4692,.0003,.0726, .4689, .4695, .4693,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 25.55,.2037,.7972, 25.68, 25.66, 25.32,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .4804,.0023,.4867, .4799, .4784, .4830,Chk Pass,,
 P,177.495 {490},Y1,ppm, .4874,.0167,3.430, .5059, .4734, .4828,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4811,.0010,.2068, .4801, .4812, .4820,Chk Pass,,
 S,182.034 {485},Y1,ppm, 23.90,.0101,.0425, 23.91, 23.91, 23.89,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .4685,.0082,1.756, .4619, .4659, .4777,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4766,.0118,2.467, .4901, .4706, .4690,Chk Pass,,
 Si,251.611 {134},Y2R,ppm,w 27.246,.14478,.53139, 27.351, 27.305, 27.081,Chk
 warn,25.000,8.0000%
 Sn,189.989 {477},Y1,ppm, .4843,.0055,1.142, .4899, .4788, .4843,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .4977,.0017,.3448, .4966, .4969, .4997,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5081,.0194,3.824, .4889, .5076, .5277,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5084,.0015,.2972, .5086, .5068, .5098,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .4718,.0047,1.003, .4682, .4701, .4772,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5136,.0011,.2226, .5137, .5124, .5146,Chk Pass,,
 W,207.911 {462},Y1,ppm, .4999,.0035,.7065, .5020, .5019, .4958,Chk Pass,,

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Zn,213.856 {458},Y1,ppm, .4769,.0010,.2170, .4777, .4773, .4757,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm,F .5569,.0114,2.040, .5655, .5611, .5440,Chk
 Fail, .5000,10.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2978.4,3.8043,.12773,2980.5,2974.0,2980.7
 Y2A,371.030 { 91}2,Cts/S, 247200.,737.77,.29845,248000.,247040.,246550.
 Y2R,371.030 { 91}3,Cts/S, 16631.,48.970,.29444,16603.,16603.,16688.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 CCB 0783
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/7/2020 19:22:03
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.0019,.0003,16.96, -.0015, -.0021, -.0021,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.0041,.0257,628.9, .0222, -.0053, -.0292,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0023,.0012,53.56, .0013, .0019, .0036,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0035,.0071,199.1, -.0033, .0108, .0031,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0020,.0006,31.07, .0017, .0027, .0016,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0000,.0000,5.422, .0000, .0000, .0000,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00002,.00002,92.840, .00000, -.00003, -.00004,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, -.0032,.0044,136.7, -.0055, -.0060, .0019,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003,.0000,16.67, .0003, .0002, .0003,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0002,.0002,78.54, .0003, .0003, .0000,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0001,.0006,437.9, .0003, .0006, -.0005,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0011,.0003,28.22, .0015, .0009, .0010,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0060,.0206,340.7, .0136, -.0172, .0218,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .0338,.0713,211.2, -.0424, .0989, .0449,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0017,.0026,154.8, -.0002, -.0046, -.0001,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, -.0025,.0017,69.59, -.0005, -.0037, -.0033,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00001,.00003,267.30, .00003, -.00002, .00002,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0004,.0015,349.2, -.0010, .0004, .0019,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0363,.0080,21.97, .0402, .0416, .0271,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0057,.0008,13.32, .0066, .0053, .0053,Chk
 Fail, .0050, -.0050
 P,177.495 {490},Y1,ppm, -.0050,.0077,154.3, -.0120, .0033, -.0063,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0004,.0032,844.5, .0039, -.0004, -.0023,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0098,.0123,125.1, .0011, -.0074, -.0232,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0027,.0059,217.2, -.0021, .0028, -.0090,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0100,.0043,43.10, .0143, .0057, .0100,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, -.00508,.00441,86.875, -.00933, -.00053, -.00537,Chk
 Pass,,
 Sn,189.989 {477},Y1,ppm, .0033,.0038,117.2, .0043, .0064, -.0010,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, -.0000,.0000,1418., -.0000, .0000, -.0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0018,.0147,838.1, -.0151, -.0042, .0140,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0001,.0002,267.9, .0002, -.0001, -.0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0040,.0017,42.56, .0059, .0035, .0026,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0002,.0002,100.9, -.0003, .0000, -.0002,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0020,.0016,82.35, -.0004, -.0019, -.0036,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0009,.0005,54.84, -.0008, -.0004, -.0014,Chk Pass,,

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Zr,339.198 { 99},Y2R,ppm, ¹¹²³²-.0009,.0024,270.7, .0010, -.0036, -.0001,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 3033.2,4.0068,.13210,3037.7,3030.0,3032.0
Y2A,371.030 { 91}2,Cts/S, 252120.,1407.5,.55827,253250.,252580.,250540.
Y2R,371.030 { 91}3,Cts/S, 16662.,48.303,.28991,16715.,16649.,16621.

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[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=Matrix_Rinse
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 15:29:26
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0012	.0003	25.57	.0014	.0014	.0008	None,,		
Al	308.215	{109}	Y2R,ppm	-.0140	.0059	41.87	-.0090	-.0205	-.0126	None,,		
Alum ax	308.215	{109}2	Y2A,ppm	.0038	.0059	155.0	.0013	-.0005	.0106	None,,		
As	189.042	{478}	Y1,ppm	-.0047	.0059	124.4	-.0024	-.0114	-.0003	None,,		
B	249.773	{135}	Y2A,ppm	-.0018	.0004	23.06	-.0019	-.0013	-.0021	None,,		
Ba	455.403	{ 74}	Y2A,ppm	.0001	.0000	27.24	.0001	.0001	.0002	None,,		
Be	313.042	{108}	Y2A,ppm	-.00004	.00001	30.123	-.00003	-.00005	-.00005	None,,		
Ca	317.933	{106}	Y2R,ppm	-.0074	.0018	24.58	-.0055	-.0075	-.0092	None,,		
Cd	226.502	{449}	Y1,ppm	.0001	.0002	178.1	.0003	.0001	-.0001	None,,		
Co	228.616	{447}	Y1,ppm	.0016	.0005	29.12	.0022	.0012	.0015	None,,		
Cr	267.716	{126}	Y2A,ppm	.0000	.0006	1590.	.0005	.0004	-.0007	None,,		
Cu	327.396	{103}	Y2A,ppm	-.0012	.0007	57.91	-.0007	-.0009	-.0020	None,,		
Fe	261.187	{129}	Y2R,ppm	.0031	.0031	101.0	.0052	.0045	-.0005	None,,		
K	766.490	{ 44}	Y2R,ppm	.0092	.0132	143.4	-.0039	.0224	.0091	None,,		
Li	670.784	{ 50}	Y2R,ppm	.0015	.0025	173.2	.0012	.0041	-.0009	None,,		
Mg	285.213	{118}	Y2R,ppm	-.0011	.0019	164.7	-.0027	-.0016	.0009	None,,		
Mn	257.610	{131}	Y2A,ppm	.00003	.00013	428.01	.00011	-.00012	.00010	None,,		
Mo	202.030	{467}	Y1,ppm	.0020	.0009	48.21	.0019	.0010	.0029	None,,		
Na	589.592	{ 57}	Y2R,ppm	-.0022	.0088	394.1	.0011	.0044	-.0122	None,,		
Ni	231.604	{445}	Y1,ppm	.0018	.0006	32.83	.0025	.0017	.0013	None,,		
P	177.495	{490}	Y1,ppm	-.0231	.0111	48.16	-.0256	-.0327	-.0109	None,,		
Pb	220.353	{453}	Y1,ppm	.0033	.0022	66.07	.0011	.0055	.0034	None,,		
S	182.034	{485}	Y1,ppm	.0074	.0230	310.5	.0302	.0079	-.0159	None,,		
Sb	206.833	{463}	Y1,ppm	-.0032	.0035	109.5	-.0022	-.0003	-.0070	None,,		
Se	196.090	{472}	Y1,ppm	-.0176	.0172	97.61	-.0351	-.0172	-.0007	None,,		
Si	251.611	{134}	Y2R,ppm	.01409	.00281	19.956	.01717	.01343	.01167	None,,		
Sn	189.989	{477}	Y1,ppm	-.0035	.0032	90.41	-.0054	.0002	-.0054	None,,		
Sr	421.552	{ 80}	Y2A,ppm	.0001	.0000	15.01	.0001	.0001	.0001	None,,		
Th	283.730	{119}	Y2R,ppm	-.0139	.0120	86.51	-.0274	-.0097	-.0045	None,,		
Ti	334.941	{101}	Y2A,ppm	.0000	.0001	540.1	.0001	-.0001	.0001	None,,		
Tl	190.856	{477}	Y1,ppm	.0044	.0122	278.0	.0001	-.0051	.0182	None,,		
V	292.402	{115}	Y2A,ppm	.0005	.0004	80.89	.0005	.0008	.0001	None,,		
W	207.911	{462}	Y1,ppm	-.0020	.0009	45.26	-.0015	-.0014	-.0030	None,,		
Zn	213.856	{458}	Y1,ppm	.0007	.0004	58.43	.0003	.0011	.0009	None,,		
Zr	339.198	{ 99}	Y2R,ppm	.0009	.0008	85.06	.0018	.0003	.0006	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2892.6	7.7300	.26723	2899.6	2894.0	2884.3
Y2A	371.030	{ 91}2	Cts/S	256060.	804.03	.31400	256980.	255710.	255490.
Y2R	371.030	{ 91}3	Cts/S	16254.	41.335	.25431	16282.	16273.	16207.

[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=S0
 Username=dept 22

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Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 15:32:36
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Ag	328.068	{103}	Y2A,Cts/S	-.0294	.0010	3.450	-.0288	-.0288	-.0306
Al	308.215	{109}	Y2R,Cts/S	.0584	.0064	10.94	.0524	.0575	.0651
Alum ax	308.215	{109}2	Y2A,Cts/S	.0571	.0024	4.198	.0544	.0587	.0583
As	189.042	{478}	Y1,Cts/S	.0031	.0080	256.0	-.0058	.0097	.0055
B	249.773	{135}	Y2A,Cts/S	-.0000	.0000	965.3	-.0000	-.0000	.0000
Ba	455.403	{74}	Y2A,Cts/S	.0004	.0000	5.312	.0004	.0004	.0004
Be	313.042	{108}	Y2A,Cts/S	.01813	.00152	8.3814	.01777	.01683	.01980
Ca	317.933	{106}	Y2R,Cts/S	.0029	.0005	18.11	.0024	.0029	.0035
Cd	226.502	{449}	Y1,Cts/S	-.0088	.0053	60.98	-.0026	-.0121	-.0116
Co	228.616	{447}	Y1,Cts/S	-.0379	.0040	10.44	-.0400	-.0333	-.0404
Cr	267.716	{126}	Y2A,Cts/S	.0000	.0000	82.84	.0000	.0000	.0000
Cu	327.396	{103}	Y2A,Cts/S	-.0288	.0017	6.076	-.0281	-.0274	-.0307
Fe	261.187	{129}	Y2R,Cts/S	-.0001	.0002	178.0	.0001	-.0004	-.0002
K	766.490	{44}	Y2R,Cts/S	-.1240	.0891	71.83	-.2078	-.0305	-.1338
Li	670.784	{50}	Y2R,Cts/S	.0024	.0007	29.83	.0020	.0019	.0032
Mg	285.213	{118}	Y2R,Cts/S	-.0006	.0001	21.20	-.0007	-.0004	-.0006
Mn	257.610	{131}	Y2A,Cts/S	-.00122	.00101	82.452	-.00180	-.00182	-.00006
Mo	202.030	{467}	Y1,Cts/S	.0086	.0095	110.6	.0196	.0035	.0028
Na	589.592	{57}	Y2R,Cts/S	-.0067	.0008	11.37	-.0058	-.0072	-.0071
Ni	231.604	{445}	Y1,Cts/S	-.0640	.0224	34.97	-.0665	-.0850	-.0405
P	177.495	{490}	Y1,Cts/S	.0008	.0001	17.77	.0008	.0007	.0010
Pb	220.353	{453}	Y1,Cts/S	.0987	.0123	12.43	.0866	.1111	.0985
S	182.034	{485}	Y1,Cts/S	.0007	.0003	47.07	.0004	.0011	.0008
Sb	206.833	{463}	Y1,Cts/S	-.0004	.0002	55.40	-.0006	-.0006	-.0002
Se	196.090	{472}	Y1,Cts/S	.0182	.0209	114.5	.0353	.0244	-.0050
Si	251.611	{134}	Y2R,Cts/S	.00006	.00014	231.88	-.00004	.00023	.00000
Sn	189.989	{477}	Y1,Cts/S	-.0007	.0130	1751.	.0139	-.0052	-.0109
Sr	421.552	{80}	Y2A,Cts/S	-.0003	.0000	14.43	-.0004	-.0003	-.0003
Th	283.730	{119}	Y2R,Cts/S	-.0002	.0001	43.80	-.0001	-.0002	-.0004
Ti	334.941	{101}	Y2A,Cts/S	.0050	.0011	22.09	.0058	.0038	.0055
Tl	190.856	{477}	Y1,Cts/S	.0072	.0038	53.27	.0096	.0028	.0092
V	292.402	{115}	Y2A,Cts/S	.0022	.0021	95.54	-.0001	.0028	.0040
W	207.911	{462}	Y1,Cts/S	.0005	.0000	6.466	.0005	.0005	.0005
Zn	213.856	{458}	Y1,Cts/S	.0401	.0046	11.38	.0443	.0408	.0353
Zr	339.198	{99}	Y2R,Cts/S	.0004	.0002	37.11	.0006	.0003	.0004

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2891.7	3.7395	.12932	2887.6	2894.9	2892.4
Y2A	371.030	{91}2	Cts/S	254190.	539.38	.21220	253870.	253890.	254810.
Y2R	371.030	{91}3	Cts/S	16124.	23.958	.14859	16105.	16151.	16116.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=S1
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 15:35:45

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Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Al,308.215 {109},Y2R,Cts/S, 19.21,.0847,.4409, 19.25, 19.26, 19.11
 Alum ax,308.215 {109}2,Y2A,Cts/S, 26.90,.0401,.1489, 26.86, 26.93, 26.93
 Ca,317.933 {106},Y2R,Cts/S, 3.220,.0141,.4381, 3.236, 3.216, 3.209
 Fe,261.187 {129},Y2R,Cts/S, .6978,.0024,.3380, .7000, .6980, .6953
 K,766.490 { 44},Y2R,Cts/S, 49.87,.2001,.4012, 50.08, 49.86, 49.68
 Mg,285.213 {118},Y2R,Cts/S, 5.010,.0147,.2924, 5.026, 5.007, 4.997
 Na,589.592 { 57},Y2R,Cts/S, 3.165,.0091,.2885, 3.173, 3.167, 3.155
 S,182.034 {485},Y1,Cts/S, .6134,.0026,.4211, .6110, .6130, .6161
 Si,251.611 {134},Y2R,Cts/S, .43464,.00164,.37656, .43600, .43510, .43282

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2828.7,10.448,.36937,2840.6,2824.7,2820.8
 Y2A,371.030 { 91}2,Cts/S, 246190.,586.81,.23836,246570.,245510.,246480.
 Y2R,371.030 { 91}3,Cts/S, 16349.,53.727,.32863,16287.,16385.,16374.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=S2
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 15:38:50
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Ag,328.068 {103},Y2A,Cts/S, 2.685,.0077,.2871, 2.676, 2.690, 2.689
 As,189.042 {478},Y1,Cts/S, 1.339,.0193,1.439, 1.361, 1.324, 1.333
 B,249.773 {135},Y2A,Cts/S, .0229,.0000,.1321, .0229, .0229, .0229
 Ba,455.403 { 74},Y2A,Cts/S, 2.876,.0183,.6381, 2.855, 2.887, 2.885
 Be,313.042 {108},Y2A,Cts/S, 83.824,.38520,.45954, 83.455, 84.223, 83.792
 Cd,226.502 {449},Y1,Cts/S, 71.92,.4880,.6786, 72.48, 71.65, 71.62
 Co,228.616 {447},Y1,Cts/S, 38.51,.3154,.8190, 38.87, 38.37, 38.29
 Cu,327.396 {103},Y2A,Cts/S, 2.773,.0162,.5853, 2.754, 2.785, 2.779
 Li,670.784 { 50},Y2R,Cts/S, .3779,.0013,.3542, .3767, .3777, .3794
 Mn,257.610 {131},Y2A,Cts/S, 9.5922,.03905,.40713, 9.5477, 9.6211, 9.6077
 Ni,231.604 {445},Y1,Cts/S, 22.53,.1947,.8642, 22.75, 22.39, 22.44
 P,177.495 {490},Y1,Cts/S, .0248,.0004,1.799, .0254, .0246, .0245
 Pb,220.353 {453},Y1,Cts/S, 6.235,.0513,.8223, 6.291, 6.226, 6.189
 Se,196.090 {472},Y1,Cts/S, .9037,.0107,1.186, .9160, .8964, .8987
 Sr,421.552 { 80},Y2A,Cts/S, 3.755,.0173,.4596, 3.742, 3.749, 3.775
 Th,283.730 {119},Y2R,Cts/S, .0093,.0001,1.591, .0094, .0091, .0093
 Tl,190.856 {477},Y1,Cts/S, 1.242,.0257,2.072, 1.272, 1.224, 1.231
 W,207.911 {462},Y1,Cts/S, .0990,.0011,1.064, .1002, .0984, .0984
 Zn,213.856 {458},Y1,Cts/S, 44.33,.3298,.7440, 44.70, 44.09, 44.19

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2826.8,17.834,.63088,2806.7,2840.7,2833.1
 Y2A,371.030 { 91}2,Cts/S, 244620.,1203.2,.49187,246000.,244070.,243780.

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Y2R,371.030 { 91}3,Cts/S, 16099.,104.63,.64992,16218.,16022.,16057.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=S3
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 15:42:16
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Cr,267.716 {126},Y2A,Cts/S, .0333,.0002,.4931, .0334, .0331, .0333
 Mo,202.030 {467},Y1,Cts/S, 10.18,.0500,.4908, 10.12, 10.22, 10.20
 Sb,206.833 {463},Y1,Cts/S, .0446,.0005,1.139, .0441, .0451, .0444
 Sn,189.989 {477},Y1,Cts/S, 2.805,.0291,1.038, 2.813, 2.772, 2.829
 Ti,334.941 {101},Y2A,Cts/S, 12.60,.0593,.4708, 12.61, 12.54, 12.66
 V,292.402 {115},Y2A,Cts/S, 2.136,.0099,.4654, 2.136, 2.126, 2.146
 Zr,339.198 { 99},Y2R,Cts/S, .1584,.0001,.0810, .1583, .1584, .1585

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2880.9,13.647,.47372,2894.9,2880.0,2867.7
 Y2A,371.030 { 91}2,Cts/S, 252390.,815.73,.32321,252590.,253080.,251490.
 Y2R,371.030 { 91}3,Cts/S, 16040.,31.991,.19945,16075.,16012.,16032.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=ICV 062173
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 15:45:24
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .6011,.0011,.1842, .6015, .5999, .6020,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 30.40,.1321,.4344, 30.39, 30.28, 30.54,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 30.46,.2163,.7102, 30.52, 30.22, 30.64,Chk Pass,,
 As,189.042 {478},Y1,ppm, .6101,.0061,1.007, .6092, .6045, .6167,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6042,.0035,.5845, .6031, .6013, .6081,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .6110,.0034,.5624, .6094, .6087, .6149,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .58946,.00108,.18336, .58822, .59025, .58990,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 30.19,.0664,.2199, 30.11, 30.21, 30.23,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5979,.0029,.4877, .5984, .5948, .6005,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .6006,.0013,.2114, .6016, .5992, .6010,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .5995,.0017,.2817, .6000, .5976, .6009,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .6117,.0027,.4362, .6103, .6101, .6148,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 30.44,.0093,.0307, 30.44, 30.45, 30.43,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 30.50,.0536,.1756, 30.44, 30.54, 30.52,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .6200,.0047,.7595, .6146, .6220, .6233,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 30.49,.0305,.1001, 30.47, 30.47, 30.52,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .59906,.00096,.16010, .59796, .59954, .59970,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .6009,.0012,.2050, .6021, .6010, .5997,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 30.13,.0609,.2021, 30.08, 30.11, 30.20,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .6005,.0008,.1255, .6009, .5996, .6010,Chk Pass,,
P,177.495 {490},Y1,ppm, .6161,.0064,1.031, .6088, .6195, .6200,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .5986,.0060,1.002, .5918, .6007, .6033,Chk Pass,,
S,182.034 {485},Y1,ppm, 30.22,.1135,.3755, 30.21, 30.10, 30.33,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .6175,.0072,1.159, .6232, .6200, .6095,Chk Pass,,
Se,196.090 {472},Y1,ppm,w .5575,.0113,2.031, .5449, .5608, .5668,Chk
warn,.6000,-5.000%
Si,251.611 {134},Y2R,ppm, 30.817,.10630,.34493, 30.814, 30.713, 30.925, None,,
Sn,189.989 {477},Y1,ppm, .5844,.0037,.6416, .5836, .5811, .5885,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .5992,.0037,.6163, .5992, .5956, .6029,Chk Pass,,
Th,283.730 {119},Y2R,ppm,w .5613,.0169,3.010, .5758, .5427, .5653,Chk
warn,.6000,-5.000%
Ti,334.941 {101},Y2A,ppm, .6166,.0010,.1696, .6163, .6158, .6178,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .5807,.0058,1.003, .5786, .5762, .5872,Chk Pass,,
V,292.402 {115},Y2A,ppm, .6121,.0005,.0754, .6124, .6116, .6124,Chk Pass,,
W,207.911 {462},Y1,ppm, .6163,.0033,.5323, .6186, .6126, .6177,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5884,.0048,.8181, .5929, .5833, .5890,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm,F .6791,.0040,.5822, .6756, .6783, .6834,Chk
Fail,.6000,10.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 2774.9,10.927,.39376,2774.8,2785.9,2764.1
Y2A,371.030 { 91}2,Cts/S, 238670.,815.59,.34173,239600.,238320.,238080.
Y2R,371.030 { 91}3,Cts/S, 15813.,71.734,.45364,15858.,15850.,15730.

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=ICB 078331
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/11/2020 15:48:36
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.0000,.0008,5138., .0006, .0004, -.0010,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .0841,.0294,34.99, .1179, .0695, .0648,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, .0059,.0023,38.38, .0050, .0084, .0042,Chk Pass,,
As,189.042 {478},Y1,ppm, -.0030,.0072,236.9, .0011, -.0114, .0012,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0016,.0005,33.24, .0021, .0011, .0016,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, -.0000,.0000,409.1, .0000, -.0000, -.0000,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .00006,.00001,16.579, .00007, .00005, .00005,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, .0315,.0324,102.9, .0686, .0176, .0083,Chk Pass,,
Cd,226.502 {449},Y1,ppm, -.0001,.0002,165.2, .0001, -.0003, -.0001,Chk Pass,,
Co,228.616 {447},Y1,ppm, -.0007,.0006,96.65, -.0014, -.0003, -.0003,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0006,.0004,67.08, .0002, .0010, .0006,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0010,.0003,35.12, -.0006, -.0010, -.0013,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0293,.0397,135.7, .0748, .0114, .0016,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .0604,.0480,79.56, .1053, .0661, .0097,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0006,.0033,580.5, .0036, -.0029, .0010,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, .0270,.0350,129.9, .0672, .0105, .0032,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00010,.00010,98.201, .00018, .00013, -.00001,Chk Pass,,

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Mo,202.030 {467},Y1,ppm, -.0006,.0012,211.6, -.0020, .0003, -.0001,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .0271,.0377,139.2, .0641, .0284, -.0113,Chk Pass,,
Ni,231.604 {445},Y1,ppm,F .0066,.0005,8.065, .0071, .0067, .0061,chk
Fail,.0050,-.0050
P,177.495 {490},Y1,ppm, -.0116,.0032,27.67, -.0115, -.0084, -.0148,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0024,.0042,173.4, .0048, .0050, -.0024,Chk Pass,,
S,182.034 {485},Y1,ppm, .0059,.0102,172.7, .0152, .0076, -.0051,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0035,.0055,157.1, -.0027, .0078, .0055,Chk Pass,,
Se,196.090 {472},Y1,ppm, -.0142,.0108,76.42, -.0047, -.0118, -.0260,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .02868,.01944,67.800, .04726, .00848, .03030,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0039,.0013,32.58, .0049, .0043, .0025,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0000,.0000,75.20, .0001, .0000, .0000,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.0235,.0168,71.51, -.0048, -.0374, -.0284,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0002,.0001,38.61, .0001, .0002, .0003,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0027,.0114,418.8, .0138, -.0088, .0031,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0000,.0006,8667., .0005, .0001, -.0006,Chk Pass,,
W,207.911 {462},Y1,ppm, -.0002,.0022,1359., -.0023, -.0004, .0022,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0003,.0003,95.69, .0003, .0000, .0007,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0022,.0011,50.01, .0012, .0033, .0020,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 2791.9,78.635,2.8165,2701.2,2839.9,2834.8

Y2A,371.030 { 91}2,Cts/S, 252150.,548.54,.21755,252050.,252730.,251650.

Y2R,371.030 { 91}3,Cts/S, 16153.,31.265,.19355,16186.,16124.,16150.

[Sample Header]

Method=New TRACE Fast(v1398)

SampleName=CRI 58707

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/11/2020 15:51:46

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm,W .0124,.0002,1.441, .0126, .0124, .0122,chk

Warn,.0100,20.00%

Al,308.215 {109},Y2R,ppm,W .2520,.0292,11.57, .2198, .2768, .2593,chk

Warn,.2000,20.00%

Alum ax,308.215 {109}2,Y2A,ppm, .2240,.0054,2.394, .2252, .2286, .2181,Chk Pass,,

As,189.042 {478},Y1,ppm, .0339,.0058,17.16, .0287, .0328, .0401,Chk Pass,,

B,249.773 {135},Y2A,ppm, .0314,.0007,2.384, .0308, .0322, .0311,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .0054,.0000,.8209, .0054, .0055, .0054,Chk Pass,,

Be,313.042 {108},Y2A,ppm, .00522,.00000,.08726, .00522, .00522, .00523,Chk Pass,,

Ca,317.933 {106},Y2R,ppm, .2020,.0044,2.184, .2066, .2016, .1978,Chk Pass,,

Cd,226.502 {449},Y1,ppm, .0054,.0000,.8773, .0054, .0054, .0054,Chk Pass,,

Co,228.616 {447},Y1,ppm, .0044,.0005,10.47, .0049, .0041, .0042,Chk Pass,,

Cr,267.716 {126},Y2A,ppm, .0158,.0008,5.182, .0167, .0154, .0153,Chk Pass,,

Cu,327.396 {103},Y2A,ppm, .0205,.0014,7.047, .0213, .0214, .0189,Chk Pass,,

Fe,261.187 {129},Y2R,ppm, .2187,.0067,3.048, .2260, .2172, .2130,Chk Pass,,

K,766.490 { 44},Y2R,ppm, .2908,.0232,7.975, .2652, .2970, .3103,Chk Pass,,

Li,670.784 { 50},Y2R,ppm, .0526,.0033,6.194, .0529, .0492, .0557,Chk Pass,,

Mg,285.213 {118},Y2R,ppm, .1095,.0044,4.017, .1046, .1132, .1108,Chk Pass,,

Mn,257.610 {131},Y2A,ppm, .01064,.00006,5.6630, .01065, .01058, .01070,Chk Pass,,

Mo,202.030 {467},Y1,ppm, .0099,.0005,5.081, .0103, .0094, .0100,Chk Pass,,

Na,589.592 { 57},Y2R,ppm, 1.088,.0241,2.215, 1.073, 1.116, 1.075,Chk Pass,,

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Ni,231.604 {445},Y1,ppm,F .0169,.0002,.9741, .0170, .0170, .0167,Chk
Fail,.0100,50.00%
P,177.495 {490},Y1,ppm, .1081,.0034,3.107, .1075, .1117, .1051,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0149,.0018,12.02, .0164, .0130, .0154,Chk Pass,,
S,182.034 {485},Y1,ppm, .5252,.0128,2.447, .5127, .5384, .5245,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0524,.0084,15.94, .0620, .0467, .0485,Chk Pass,,
Se,196.090 {472},Y1,ppm,w .0400,.0117,29.21, .0428, .0500, .0271,Chk
warn,.0500,-20.00%
Si,251.611 {134},Y2R,ppm, .52820,.01299,2.4591, .52093, .54319, .52047,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0557,.0016,2.925, .0571, .0562, .0539,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0054,.0000,.1091, .0053, .0053, .0054,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .4707,.0310,6.592, .4766, .4371, .4983,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0107,.0002,1.416, .0109, .0106, .0108,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0277,.0077,27.84, .0361, .0259, .0210,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0103,.0002,1.757, .0102, .0102, .0105,Chk Pass,,
W,207.911 {462},Y1,ppm, .0327,.0022,6.694, .0310, .0352, .0320,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0211,.0003,1.566, .0209, .0209, .0215,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0591,.0014,2.429, .0607, .0582, .0584,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 2855.8,5.3130,.18604,2861.9,2853.5,2852.0
Y2A,371.030 { 91}2,Cts/S, 249060.,348.17,.13979,249230.,249290.,248660.
Y2R,371.030 { 91}3,Cts/S, 15887.,28.764,.18105,15898.,15910.,15855.

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=ICSA 078287
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/11/2020 15:54:55
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.0058,.0007,12.44, -.0061, -.0050, -.0064,Chk Pass,,
Al,308.215 {109},Y2R,ppm, 486.3,1.130,.2324, 487.5, 486.3, 485.2,Chk Pass,,
Alum ax,308.215 {109}2,Y2A,ppm, 466.7,5.007,1.073, 465.2, 462.6, 472.3,Chk Pass,,
As,189.042 {478},Y1,ppm, .0158,.0087,55.14, .0104, .0111, .0258,Chk Pass,,
B,249.773 {135},Y2A,ppm, -.0065,.0006,8.830, -.0063, -.0072, -.0061,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0019,.0001,3.041, .0019, .0019, .0020,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .00000,.00003,700.05, .00000, .00003, -.00002,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 511.8,1.876,.3665, 512.6, 509.7, 513.2,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0009,.0002,23.86, .0009, .0006, .0011,Chk Pass,,
Co,228.616 {447},Y1,ppm, -.0008,.0005,54.59, -.0011, -.0010, -.0003,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0016,.0004,25.05, .0013, .0021, .0015,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0060,.0004,6.966, .0062, .0062, .0055,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 200.9,.6841,.3406, 201.3, 201.3, 200.1,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .1553,.0749,48.24, .0920, .1358, .2380,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.0056,.0018,31.73, -.0054, -.0038, -.0074,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 503.4,2.122,.4214, 504.7, 504.6, 501.0,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, -.00052,.00032,61.021, -.00052, -.00083, -.00020,Chk
Pass,,
Mo,202.030 {467},Y1,ppm, -.0078,.0020,25.79, -.0055, -.0089, -.0091,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .0565,.0055,9.751, .0628, .0538, .0529,Chk Pass,,
Ni,231.604 {445},Y1,ppm,w .0126,.0012,9.143, .0132, .0133, .0113,Chk
warn,.0100,-.0100

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P,177.495 {490},Y1,ppm, -.0286,.0160,55.99, -.0178, -.0470, -.0209,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0013,.0027,208.2, .0010, -.0012, .0041,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0633,.0266,42.03, -.0877, -.0671, -.0350,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0003,.0267,9145., .0301, -.0111, -.0199,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0027,.0285,1051., .0350, -.0079, -.0190,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .01751,.01046,59.698, .02836, .01668, .00750,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0170,.0070,41.29, .0250, .0140, .0120,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0006,.0000,7.910, .0006, .0006, .0007,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0951,.0235,24.75, -.0998, -.1160, -.0696,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0002,.0000,18.38, -.0002, -.0002, -.0002,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.0242,.0030,12.32, -.0277, -.0226, -.0224,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0024,.0003,13.58, -.0022, -.0022, -.0027,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0087,.0084,96.52, .0053, .0026, .0183,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0183,.0005,2.724, .0183, .0188, .0178,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0106,.0020,19.23, .0099, .0129, .0090,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/s, 2551.4, 5.8453, .22911,2546.6,2549.6,2557.9

Y2A,371.030 { 91}2,Cts/s, 213720.,2166.5,1.0137,214470.,215420.,211280.

Y2R,371.030 { 91}3,Cts/s, 15381.,32.510, .21136,15389.,15346.,15409.

[Sample Header]

Method=New TRACE Fast(v1398)

SampleName=ICSAB 070731

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/11/2020 15:58:28

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .2114,.0012,.5578, .2101, .2116, .2124,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 500.1,2.202,.4402, 502.3, 500.2, 497.9,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 476.3,5.649,1.186, 482.6, 474.4, 471.8,Chk Pass,,
 As,189.042 {478},Y1,ppm, .1089,.0028,2.603, .1084, .1119, .1063,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0067,.0016,23.57, -.0068, -.0050, -.0082,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5215,.0024,.4532, .5189, .5236, .5219,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .51257,.00250,.48859, .51510, .51252, .51009,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 529.1,5013,.0947, 528.6, 529.1, 529.6,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .9125,.0039,.4262, .9164, .9125, .9086,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4599,.0017,.3658, .4603, .4613, .4580,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4943,.0027,.5419, .4965, .4951, .4913,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5561,.0008,.1385, .5559, .5570, .5555,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 207.0,.8239,.3979, 208.0, 206.7, 206.4,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .0963,.0809,84.01, .1843, .0254, .0791,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0020,.0018,91.47, -.0040, -.0014, -.0006,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 514.9,1.054,.2047, 516.1, 514.1, 514.5,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49234,.00226,.45855, .49449, .49253, .48999,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0079,.0012,15.65, -.0069, -.0093, -.0075,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0631,.0119,18.92, .0688, .0710, .0494,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,W .8995,.0015,.1677, .9003, .9004, .8977,Chk
 Warn,1.100, .9000
 P,177.495 {490},Y1,ppm, -.0283,.0082,29.06, -.0218, -.0256, -.0375,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4949,.0121,2.454, .5070, .4949, .4828,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0696,.0217,31.12, -.0853, -.0787, -.0449,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6126,.0078,1.266, .6208, .6118, .6053,Chk Pass,,

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Se,196.090 {472},Y1,ppm, .5335,.0192,3.592, .5119, .5402, .5485,Chk Pass,,
 Si,251.611 {134},Y2R,ppm,F .01151,.00692,60.124, .00518, .01889, .01045,Chk
 Fail,1.0000,1.0000
 Sn,189.989 {477},Y1,ppm, .0165,.0020,11.82, .0151, .0187, .0156,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0006,.0000,1.705, .0007, .0006, .0006,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.1322,.0376,28.46, -.1632, -.1432, -.0904,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0001,.0002,184.6, -.0001, .0003, .0001,Chk Pass,,
 Tl,190.856 {477},Y1,ppm,F .0661,.0206,31.11, .0828, .0431, .0724,Chk
 Fail,.1200,.0800
 V,292.402 {115},Y2A,ppm, .5278,.0013,.2549, .5291, .5280, .5264,Chk Pass,,
 W,207.911 {462},Y1,ppm,F .0099,.0041,41.34, .0072, .0078, .0146,Chk
 Fail,-.0600,-.0600
 Zn,213.856 {458},Y1,ppm, .9826,.0014,.1462, .9842, .9821, .9815,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0110,.0018,16.39, .0130, .0106, .0094,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2559.0,3.9747, .15533,2555.3,2558.5,2563.2
 Y2A,371.030 { 91}2,Cts/S, 211920.942.30,.44464,211330.,211430.,213010.
 Y2R,371.030 { 91}3,Cts/S, 15250.,7.1966,.04719,15242.,15255.,15254.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:02:02
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4995,.0050,1.010, .5010, .4939, .5037,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 25.69,.1950,.7593, 25.84, 25.47, 25.76,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 25.54,.1765,.6910, 25.49, 25.40, 25.74,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5142,.0135,2.634, .5255, .5180, .4992,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4879,.0037,.7564, .4888, .4838, .4911,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5224,.0052,.9992, .5230, .5170, .5273,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .50108,.00509,1.0166, .50253, .49542, .50529,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 26.00,.0574,.2208, 26.07, 25.99, 25.96,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .4963,.0040,.8012, .4993, .4979, .4918,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .5021,.0045,.8898, .5059, .5032, .4972,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4999,.0054,1.071, .5010, .4940, .5046,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5159,.0064,1.249, .5159, .5095, .5223,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 26.38,.1562,.5923, 26.54, 26.37, 26.23,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 26.49,.1392,.5254, 26.62, 26.50, 26.34,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5302,.0030,.5718, .5331, .5270, .5304,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 26.31,.0729,.2772, 26.38, 26.23, 26.31,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49958,.00473,.94670, .50042, .49449, .50384,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .4910,.0028,.5771, .4919, .4933, .4879,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 26.66,.0437,.1640, 26.69, 26.61, 26.66,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .5000,.0059,1.180, .5059, .4999, .4941,Chk Pass,,
 P,177.495 {490},Y1,ppm, .5162,.0085,1.654, .5124, .5260, .5102,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .5006,.0061,1.215, .5023, .5057, .4939,Chk Pass,,
 S,182.034 {485},Y1,ppm, 24.79,.1609,.6490, 24.92, 24.83, 24.61,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .4888,.0113,2.316, .4950, .4958, .4758,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4859,.0111,2.280, .4796, .4794, .4987,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 25.611,.15228,.59458, 25.785, 25.546, 25.502,Chk Pass,,

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Sn,189.989 {477},Y1,ppm, .4882,.0073,1.504, .4886, .4954, .4807,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5073,.0073,1.447, .5083, .4995, .5140,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .4970,.0281,5.654, .5067, .4654, .5190,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5168,.0054,1.038, .5182, .5109, .5214,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .4921,.0148,3.003, .4920, .5069, .4773,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5192,.0059,1.142, .5212, .5126, .5239,Chk Pass,,
 W,207.911 {462},Y1,ppm, .5222,.0090,1.718, .5292, .5253, .5121,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .4948,.0034,.6853, .4984, .4943, .4916,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm,F .5639,.0047,.8341, .5692, .5605, .5619,Chk
 Fail,.5000,10.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 2823.6,16.395,.58063,2811.5,2817.1,2842.3
 Y2A,371.030 { 91}2,Cts/s, 241330.,2321.2,.96183,240590.,243930.,239470.
 Y2R,371.030 { 91}3,Cts/s, 15842.,26.365,.16642,15830.,15873.,15824.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:05:18
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.0003,.0004,131.3, -.0005, -.0006, .0002,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0733,.0403,54.96, .0849, .0285, .1064,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0139,.0016,11.58, .0120, .0148, .0147,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0040,.0070,177.1, -.0018, .0019, .0118,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0011,.0003,27.84, .0011, .0014, .0008,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, -.0001,.0000,31.70, -.0001, -.0000, -.0000,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00004,.00001,36.940, .00003, .00005, .00003,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0135,.0055,40.98, .0075, .0146, .0183,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001,.0003,329.2, .0003, -.0002, .0001,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.0007,.0003,42.97, -.0011, -.0006, -.0005,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0002,.0002,79.93, .0001, .0002, .0004,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0009,.0002,24.29, -.0011, -.0009, -.0007,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0135,.0067,49.59, .0141, .0199, .0065,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0062,.0494,802.2, .0105, -.0617, .0327,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0005,.0008,150.1, -.0014, .0001, -.0003,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0114,.0030,26.17, .0083, .0116, .0143,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00009,.00009,95.353, .00019, .00004, .00005,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0002,.0004,191.0, .0006, .0002, -.0002,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, -.0159,.0111,69.66, -.0211, -.0032, -.0234,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0059,.0002,3.509, .0061, .0060, .0057,Chk
 Fail,.0050,-.0050
 P,177.495 {490},Y1,ppm, -.0077,.0039,50.88, -.0071, -.0120, -.0042,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0036,.0015,40.88, -.0047, -.0019, -.0040,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0096,.0202,211.1, .0022, .0020, -.0329,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0063,.0041,64.73, -.0081, -.0092, -.0016,Chk Pass,,
 Se,196.090 {472},Y1,ppm,F -.0268,.0094,34.92, -.0355, -.0281, -.0169,Chk
 Fail,.0250,-.0250
 Si,251.611 {134},Y2R,ppm, .01327,.00763,57.529, .02074, .01359, .00548,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0011,.0059,516.3, -.0073, -.0004, .0043,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000,.0000,269.7, .0000, -.0000, .0000,Chk Pass,,

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 Th,283.730 {119},Y2R,ppm, -.0132,.0025,18.78, -.0142, -.0104, -.0151,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0001,.0001,65.39, .0001, .0000, .0002,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0010,.0024,232.0, .0029, -.0016, .0018,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0003,.0001,30.82, .0002, .0003, .0004,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0016,.0005,28.72, -.0012, -.0015, -.0021,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0001,.0000,26.15, .0002, .0001, .0001,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0032,.0003,9.707, .0035, .0032, .0029,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 2872.9,11.511,.40068,2863.5,2869.5,2885.8
 Y2A,371.030 { 91}2,Cts/s, 246050.,172.57,.07014,246190.,246100.,245860.
 Y2R,371.030 { 91}3,Cts/s, 15869.,48.149,.30341,15822.,15918.,15869.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=LRC 083291
 Username=dept 22
 Comment=LRS2
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:08:28
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm,F 2.826,.0071,.2526, 2.821, 2.834, 2.823,Chk
 Fail,5.000,-10.00%
 Al,308.215 {109},Y2R,ppm, -.3198,.0311,9.722, -.3473, -.2861, -.3260,None,,
 Alum ax,308.215 {109}2,Y2A,ppm, -.4738,.0301,6.355, -.4995, -.4407, -.4810,None,,
 As,189.042 {478},Y1,ppm, 20.27,.2133,1.052, 20.48, 20.27, 20.06,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 4.778,.0195,.4079, 4.787, 4.792, 4.756,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 4.964,.0373,.7505, 4.963, 4.927, 5.002,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, 4.8588,.00839,.17272, 4.8631, 4.8491, 4.8641,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, -.0347,.0024,7.066, -.0351, -.0368, -.0320,None,,
 Cd,226.502 {449},Y1,ppm, 20.02,.1540,.7693, 20.18, 20.02, 19.87,Chk Pass,,
 Co,228.616 {447},Y1,ppm, 21.06,.1659,.7879, 21.22, 21.06, 20.89,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 20.03,.0796,.3977, 20.09, 20.05, 19.94,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, 20.82,.0561,.2695, 20.81, 20.88, 20.77,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0870,.0082,9.433, -.0862, -.0793, -.0957,None,,
 K,766.490 { 44},Y2R,ppm, -.1203,.0679,56.42, -.1985, -.0853, -.0770,None,,
 Li,670.784 { 50},Y2R,ppm, 21.09,.0675,.3200, 21.14, 21.11, 21.01,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0090,.0012,13.59, .0081, .0085, .0104,None,,
 Mn,257.610 {131},Y2A,ppm, 19.009,.05782,.30414, 19.064, 19.016, 18.949,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, 20.56,.1872,.9104, 20.74, 20.58, 20.36,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0862,.0102,11.81, .0841, .0972, .0771,None,,
 Ni,231.604 {445},Y1,ppm, 20.48,.1617,.7896, 20.63, 20.50, 20.31,Chk Pass,,
 P,177.495 {490},Y1,ppm, 20.84,.1654,.7936, 21.01, 20.83, 20.68,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, 20.79,.1414,.6800, 20.94, 20.76, 20.67,Chk Pass,,
 S,182.034 {485},Y1,ppm, .3800,.0205,5.388, .3586, .3993, .3820,None,,
 Sb,206.833 {463},Y1,ppm, 21.37,.1938,.9070, 21.57, 21.35, 21.19,Chk Pass,,
 Se,196.090 {472},Y1,ppm, 20.24,.1265,.6251, 20.38, 20.14, 20.20,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.0009,.21076,10.533, 1.7881, 2.0050, 2.2096,None,,
 Sn,189.989 {477},Y1,ppm, 20.39,.1507,.7393, 20.53, 20.39, 20.23,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 4.787,.0230,.4804, 4.814, 4.772, 4.776,Chk Pass,,
 Th,283.730 {119},Y2R,ppm,F 3.899,.0359,.9215, 3.926, 3.913, 3.858,Chk
 Fail,20.00,-10.00%
 Ti,334.941 {101},Y2A,ppm, 19.96,.0982,.4918, 20.07, 19.92, 19.89,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 20.10,.2081,1.035, 20.33, 20.07, 19.92,Chk Pass,,

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V,292.402 {115},Y2A,ppm, 21.17,.1946,.9191, 21.36, 20.97, 21.20,Chk Pass,,
 W,207.911 {462},Y1,ppm, 21.77,.1578,.7247, 21.91, 21.81, 21.60,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, 9.717,.0700,.7199, 9.785, 9.722, 9.645,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 21.50,.0483,.2246, 21.53, 21.52, 21.44,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/s, 2671.0,12.507,.46826,2659.9,2668.4,2684.6

Y2A,371.030 { 91}2,Cts/s, 238680.,1353.7,.56715,237120.,239540.,239380.

Y2R,371.030 { 91}3,Cts/s, 15775.,15.725,.09968,15766.,15766.,15793.

[Sample Header]

Method=New TRACE Fast(v1398)

SampleName=LRC 083294

Username=dept 22

Comment=LRS4

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/11/2020 16:12:02

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.2361	.0078	3.289	.2372	.2433	.2279	None,,		
Al	308.215	{109}	Y2R,ppm	497.7	9.701	1.949	504.8	486.6	501.6	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A,ppm	469.2	2.605	.5551	466.3	470.0	471.3	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0199	.0031	15.69	.0172	.0234	.0192	None,,		
B	249.773	{135}	Y2A,ppm	-.0906	.0045	5.001	-.0934	-.0854	-.0929	None,,		
Ba	455.403	{ 74}	Y2A,ppm	.0017	.0001	3.082	.0018	.0017	.0017	None,,		
Be	313.042	{108}	Y2A,ppm	.00014	.00003	19.728	.00016	.00015	.00011	None,,		
Ca	317.933	{106}	Y2R,ppm	516.2	6.403	1.240	519.9	508.8	519.9	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0016	.0006	39.69	.0014	.0024	.0011	None,,		
Co	228.616	{447}	Y1,ppm	.0009	.0003	33.80	.0007	.0013	.0008	None,,		
Cr	267.716	{126}	Y2A,ppm	-.0012	.0008	66.16	-.0005	-.0011	-.0021	None,,		
Cu	327.396	{103}	Y2A,ppm	.0128	.0007	5.272	.0125	.0123	.0136	None,,		
Fe	261.187	{129}	Y2R,ppm	314.6	7.155	2.274	320.8	306.8	316.3	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm	524.8	11.87	2.263	536.3	512.5	525.5	Chk Pass,,		
Li	670.784	{ 50}	Y2R,ppm	.0024	.0042	174.9	.0001	.0072	-.0002	None,,		
Mg	285.213	{118}	Y2R,ppm	508.6	9.285	1.826	518.9	500.9	506.0	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	-.01556	.00074	4.7593	-.01601	-.01470	-.01595	None,,		
Mo	202.030	{467}	Y1,ppm	.0036	.0025	69.71	.0021	.0023	.0066	None,,		
Na	589.592	{ 57}	Y2R,ppm	511.0	6.532	1.278	513.1	503.6	516.2	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0237	.0013	5.485	.0249	.0240	.0223	None,,		
P	177.495	{490}	Y1,ppm	-.0445	.0144	32.34	-.0559	-.0283	-.0494	None,,		
Pb	220.353	{453}	Y1,ppm	-.0069	.0105	151.5	-.0063	-.0177	.0033	None,,		
S	182.034	{485}	Y1,ppm	201.2	1.237	.6146	201.9	201.9	199.8	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0075	.0168	224.7	.0268	-.0002	-.0041	None,,		
Se	196.090	{472}	Y1,ppm	.0219	.0075	34.45	.0214	.0146	.0297	None,,		
Si	251.611	{134}	Y2R,ppm	200.30	3.9107	1.9524	203.00	195.81	202.08	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	.0156	.0099	63.74	.0239	.0183	.0046	None,,		
Sr	421.552	{ 80}	Y2A,ppm	.0097	.0001	.9857	.0098	.0098	.0096	None,,		
Th	283.730	{119}	Y2R,ppm	-.1091	.0113	10.33	-.0985	-.1209	-.1079	None,,		
Ti	334.941	{101}	Y2A,ppm	.0195	.0001	.5097	.0195	.0195	.0193	None,,		
Tl	190.856	{477}	Y1,ppm	-.0240	.0104	43.18	-.0354	-.0151	-.0216	None,,		
V	292.402	{115}	Y2A,ppm	-.0021	.0005	23.68	-.0023	-.0025	-.0015	None,,		
W	207.911	{462}	Y1,ppm	.0152	.0019	12.63	.0151	.0133	.0171	None,,		
Zn	213.856	{458}	Y1,ppm	-.0004	.0009	250.4	-.0002	.0005	-.0013	None,,		
Zr	339.198	{ 99}	Y2R,ppm	.0313	.0034	10.95	.0288	.0352	.0300	None,,		

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2462.7,8.6095,.34960,2453.7,2463.6,2470.8
 Y2A,371.030 { 91}2,Cts/S, 205060.,327.73,.15982,204690.,205180.,205310.
 Y2R,371.030 { 91}3,Cts/S, 14961.,201.24,1.3451,14804.,15188.,14891.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=LRC 083293
 Username=dept 22
 Comment=LRS3
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:15:41
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, 2.528,.0085,.3344, 2.538, 2.521, 2.526,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.5120,.0459,8.965, -.5023, -.5619, -.4717,None,,
 Alum ax,308.215 {109}2,Y2A,ppm, -.3990,.0106,2.653, -.3893, -.3974, -.4102,None,,
 As,189.042 {478},Y1,ppm, 10.24,1.221,1.192, 10.21, 10.14, 10.38,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 2.445,.0072,.2958, 2.448, 2.436, 2.450,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 2.608,.0225,.8627, 2.622, 2.582, 2.621,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, 2.4927,.01135,.45516, 2.5033, 2.4808, 2.4940,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, -.1049,.0382,36.47, -.1278, -.1260, -.0607,None,,
 Cd,226.502 {449},Y1,ppm, 10.27,.1247,1.213, 10.23, 10.17, 10.41,Chk Pass,,
 Co,228.616 {447},Y1,ppm, 10.68,1.226,1.148, 10.63, 10.59, 10.82,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 10.06,.0300,.2985, 10.09, 10.04, 10.04,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, 10.52,.0323,.3073, 10.55, 10.49, 10.52,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0050,.0272,538.7, -.0086, -.0303, .0237,None,,
 K,766.490 { 44},Y2R,ppm, .2051,.0466,22.71, .1531, .2194, .2429,None,,
 Li,670.784 { 50},Y2R,ppm, 10.70,.0582,.5444, 10.76, 10.65, 10.68,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0480,.0402,83.84, .0284, .0212, .0942,None,,
 Mn,257.610 {131},Y2A,ppm, 9.8580,.06065,.61528, 9.9228, 9.8027, 9.8485,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, 10.32,.0971,.9409, 10.31, 10.22, 10.42,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .1357,.0184,13.53, .1269, .1234, .1568,None,,
 Ni,231.604 {445},Y1,ppm, 10.44,.1260,1.207, 10.40, 10.34, 10.58,Chk Pass,,
 P,177.495 {490},Y1,ppm, 10.59,.1129,1.066, 10.53, 10.52, 10.72,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, 10.66,.1178,1.106, 10.62, 10.56, 10.79,Chk Pass,,
 S,182.034 {485},Y1,ppm, .1672,.0035,2.108, .1708, .1638, .1671,None,,
 Sb,206.833 {463},Y1,ppm, 10.79,.1187,1.099, 10.76, 10.69, 10.92,Chk Pass,,
 Se,196.090 {472},Y1,ppm, 10.41,.0841,.8075, 10.41, 10.33, 10.50,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.4582,.05229,3.5857, 1.4018, 1.4677, 1.5050,None,,
 Sn,189.989 {477},Y1,ppm, 10.30,.1103,1.071, 10.26, 10.20, 10.42,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 2.472,.0095,.3831, 2.481, 2.462, 2.473,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, 9.229,.0307,.3324, 9.227, 9.260, 9.199,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, 10.10,.0095,.0940, 10.11, 10.10, 10.09,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 10.47,.0980,.9360, 10.42, 10.41, 10.58,Chk Pass,,
 V,292.402 {115},Y2A,ppm, 10.58,.0179,.1691, 10.60, 10.57, 10.57,Chk Pass,,
 W,207.911 {462},Y1,ppm, 10.85,.1227,1.131, 10.82, 10.75, 10.99,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, 5.025,.0607,1.208, 5.006, 4.977, 5.093,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 10.94,.0329,.3004, 10.98, 10.93, 10.92,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2722.3,28.047,1.0303,2734.4,2742.2,2690.2
 Y2A,371.030 { 91}2,Cts/S, 243130.,572.75,.23557,242700.,243780.,242910.
 Y2R,371.030 { 91}3,Cts/S, 15658.,139.50,.89090,15551.,15608.,15816.

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[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=LRC 083311
 Username=dept 22
 Comment=LRS5
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:19:14
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0848	.0028	3.300	.0858	.0869	.0816	None,,		
Al	308.215	{109}	Y2R, ppm	251.1	1.029	.4097	252.1	251.2	250.0	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	245.8	4.187	1.704	241.2	249.4	246.7	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.0017	.0095	556.7	-.0051	.0125	-.0023	None,,		
B	249.773	{135}	Y2A, ppm	-.0326	.0006	1.775	-.0332	-.0321	-.0325	None,,		
Ba	455.403	{ 74}	Y2A, ppm	.0009	.0000	1.301	.0009	.0009	.0009	None,,		
Be	313.042	{108}	Y2A, ppm	.00014	.00005	38.795	.00020	.00012	.00009	None,,		
Ca	317.933	{106}	Y2R, ppm	257.7	1.194	.4634	258.6	258.1	256.4	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.0008	.0002	21.15	.0010	.0008	.0006	None,,		
Co	228.616	{447}	Y1, ppm	-.0006	.0003	56.41	-.0004	-.0003	-.0009	None,,		
Cr	267.716	{126}	Y2A, ppm	.0010	.0004	43.48	.0012	.0011	.0005	None,,		
Cu	327.396	{103}	Y2A, ppm	.0055	.0007	12.04	.0062	.0049	.0054	None,,		
Fe	261.187	{129}	Y2R, ppm	153.3	.6866	.4478	154.0	153.4	152.6	Chk Pass,,		
K	766.490	{ 44}	Y2R, ppm	261.9	1.534	.5858	263.0	262.7	260.2	Chk Pass,,		
Li	670.784	{ 50}	Y2R, ppm	.0003	.0005	204.0	.0005	-.0003	.0006	None,,		
Mg	285.213	{118}	Y2R, ppm	257.2	1.645	.6395	258.2	258.1	255.3	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	-.00678	.00010	1.4931	-.00687	-.00667	-.00678	None,,		
Mo	202.030	{467}	Y1, ppm	.0025	.0019	73.46	.0029	.0042	.0005	None,,		
Na	589.592	{ 57}	Y2R, ppm	258.9	1.267	.4894	258.4	260.3	257.9	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.0149	.0011	7.112	.0146	.0140	.0161	None,,		
P	177.495	{490}	Y1, ppm	-.0344	.0089	26.01	-.0246	-.0364	-.0422	None,,		
Pb	220.353	{453}	Y1, ppm	-.0000	.0005	1226.	.0004	.0001	-.0006	None,,		
S	182.034	{485}	Y1, ppm	100.4	.5055	.5035	100.9	100.4	99.89	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	-.0077	.0005	6.602	-.0083	-.0073	-.0076	None,,		
Se	196.090	{472}	Y1, ppm	.0126	.0398	316.2	.0043	.0559	-.0225	None,,		
Si	251.611	{134}	Y2R, ppm	102.71	.62983	.61321	103.35	102.69	102.09	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0070	.0034	48.42	.0081	.0097	.0032	None,,		
Sr	421.552	{ 80}	Y2A, ppm	.0051	.0001	1.220	.0050	.0051	.0051	None,,		
Th	283.730	{119}	Y2R, ppm	-.0331	.0192	58.03	-.0464	-.0111	-.0418	None,,		
Ti	334.941	{101}	Y2A, ppm	.0121	.0000	.3295	.0121	.0121	.0121	None,,		
Tl	190.856	{477}	Y1, ppm	-.0124	.0011	9.041	-.0112	-.0125	-.0134	None,,		
V	292.402	{115}	Y2A, ppm	-.0016	.0008	47.43	-.0007	-.0019	-.0021	None,,		
W	207.911	{462}	Y1, ppm	.0042	.0025	59.33	.0042	.0017	.0067	None,,		
Zn	213.856	{458}	Y1, ppm	-.0001	.0003	537.7	-.0004	-.0001	.0003	None,,		
Zr	339.198	{ 99}	Y2R, ppm	.0286	.0026	9.247	.0308	.0257	.0294	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2608.0	7.5703	.29027	2600.3	2608.3	2615.5
Y2A	371.030	{ 91}2	Cts/S	215680.	2230.9	1.0344	218190.	213920.	214930.
Y2R	371.030	{ 91}3	Cts/S	15229.	23.283	.15288	15218.	15213.	15256.

[Sample Header]
 Method=New TRACE Fast(v1398)
 SampleName=CCV 095153
 Username=dept 22

12396

Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:22:45
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.5393	.0040	.7352	.5349	.5426	.5404	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	25.65	.1371	.5346	25.69	25.50	25.77	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	25.97	.2505	.9647	25.78	26.25	25.87	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.5060	.0118	2.325	.5193	.5017	.4970	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.5018	.0035	.6939	.4979	.5047	.5028	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.5284	.0021	.4055	.5290	.5260	.5301	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.50769	.00298	.58696	.50425	.50928	.50953	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	25.83	.0973	.3766	25.94	25.78	25.76	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.4904	.0030	.6204	.4934	.4905	.4873	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.4979	.0034	.6809	.5005	.4991	.4941	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.5038	.0014	.2712	.5026	.5053	.5035	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5235	.0032	.6072	.5201	.5264	.5241	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	26.22	.0429	.1636	26.26	26.17	26.22	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	26.73	.1843	.6896	26.94	26.59	26.67	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.5306	.0015	.2824	.5319	.5310	.5290	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	26.32	.0358	.1362	26.33	26.28	26.34	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.50117	.00335	.66906	.49738	.50373	.50240	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.4867	.0028	.5792	.4897	.4864	.4841	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	26.70	.0657	.2459	26.75	26.63	26.72	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4904	.0021	.4374	.4928	.4889	.4894	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.5173	.0016	.3109	.5185	.5155	.5179	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.5003	.0053	1.064	.5045	.5020	.4943	Chk Pass,,		
S	182.034	{485}	Y1, ppm	24.38	.1243	.5097	24.45	24.45	24.24	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.5008	.0056	1.121	.5049	.5031	.4944	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4821	.0030	.6161	.4855	.4800	.4808	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	25.784	.09502	.36852	25.888	25.701	25.763	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4883	.0047	.9557	.4888	.4927	.4834	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.5085	.0044	.8723	.5061	.5059	.5137	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.5223	.0310	5.934	.5572	.4978	.5120	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5213	.0033	.6328	.5175	.5232	.5232	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4821	.0101	2.094	.4868	.4705	.4889	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5185	.0022	.4316	.5160	.5204	.5189	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5185	.0055	1.062	.5139	.5246	.5170	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.4890	.0023	.4611	.4906	.4900	.4864	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	F .5513	.0037	.6629	.5554	.5498	.5486	Chk		
Fail				.5000	10.00%							

[Internal standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2843.9	10.639	.37409	2838.0	2837.4	2856.1
Y2A	371.030	{91}2	Cts/S	238420	.880.98	.36950	239410	238130	237730
Y2R	371.030	{91}3	Cts/S	15694	.48.633	.30987	15646	15744	15694

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=

12396

Run Time=6/11/2020 16:25:57
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm,F .0262,.0012,4.540, .0276, .0259, .0253,chk
 Fail,.0050,-.0050
 Al,308.215 {109},Y2R,ppm, .0850,.0249,29.32, .0690, .0722, .1137,chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0094,.0023,24.59, .0119, .0089, .0073,chk Pass,,
 As,189.042 {478},Y1,ppm, .0042,.0040,93.92, .0002, .0081, .0042,chk Pass,,
 B,249.773 {135},Y2A,ppm, .0043,.0006,13.92, .0047, .0046, .0036,chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, -.0000,.0000,103.2, .0000, -.0000, -.0000,chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00002,.00002,84.067, .00000, .00004, .00002,chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0053,.0058,108.5, .0025, .0120, .0015,chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003,.0002,84.36, .0001, .0006, .0002,chk Pass,,
 Co,228.616 {447},Y1,ppm, -.0009,.0004,41.96, -.0005, -.0010, -.0013,chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0006,.0004,55.80, .0011, .0005, .0004,chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0015,.0007,46.32, -.0021, -.0007, -.0016,chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0052,.0017,32.50, .0042, .0042, .0071,chk Pass,,
 K,766.490 { 44},Y2R,ppm, .1520,.0302,19.88, .1238, .1482, .1839,chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0004,.0021,590.6, -.0026, .0000, .0015,chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0048,.0018,36.54, .0048, .0067, .0031,chk Pass,,
 Mn,257.610 {131},Y2A,ppm, -.00005,.00012,249.68, -.00014, .00008, -.00008,chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0011,.0013,116.3, -.0017, -.0021, .0004,chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0163,.0068,41.35, .0097, .0161, .0232,chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0061,.0003,4.464, .0059, .0064, .0060,chk
 Fail,.0050,-.0050
 P,177.495 {490},Y1,ppm, -.0098,.0024,23.97, -.0124, -.0077, -.0094,chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0041,.0009,21.56, -.0034, -.0051, -.0039,chk Pass,,
 S,182.034 {485},Y1,ppm, .0311,.0097,31.30, .0292, .0416, .0224,chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0043,.0014,32.49, -.0035, -.0035, -.0058,chk Pass,,
 Se,196.090 {472},Y1,ppm, -.0064,.0052,81.02, -.0075, -.0109, -.0007,chk Pass,,
 Si,251.611 {134},Y2R,ppm, .03258,.00926,28.425, .03043, .04273, .02458,chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0067,.0038,56.98, .0079, .0024, .0097,chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000,.0000,273.7, .0000, .0000, -.0000,chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0211,.0113,53.42, .0232, .0090, .0312,chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0003,.0001,23.18, .0003, .0004, .0002,chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0014,.0030,215.5, .0034, .0029, -.0021,chk Pass,,
 V,292.402 {115},Y2A,ppm, .0002,.0003,157.2, -.0000, .0001, .0006,chk Pass,,
 W,207.911 {462},Y1,ppm, -.0033,.0036,108.6, -.0016, -.0075, -.0009,chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0001,.0005,309.5, .0001, -.0003, .0006,chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0018,.0023,129.0, -.0009, .0030, .0033,chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2896.5,13.811,.47682,2880.6,2905.0,2903.9
 Y2A,371.030 { 91}2,Cts/S, 244010.,965.75,.39579,242920.,244780.,244310.
 Y2R,371.030 { 91}3,Cts/S, 15713.,12.509,.07961,15725.,15700.,15712.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=MB 410-10582/1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:29:10
 Sample Type=Unk
 Mode=CONC

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CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0076757	.0000627	.8166296	.0077472	.0076304	.0076494	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	.0265906	.0265709	99.92615	.0507137	.0309476	-.001890	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A,ppm	.0088465	.0012828	14.50055	.0099349	.0074322	.0091726	Chk Pass,,		
As	189.042	{478}	Y1,ppm	-.002480	.0099255	400.1452	-.006332	.0087936	-.009903	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0034682	.0005114	14.74615	.0038333	.0028837	.0036876	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	-.000039	.0000257	66.47328	-.000024	-.000023	-.000068	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0000181	.0000222	122.0842	.0000397	-.000005	.0000192	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	.0049502	.0083670	169.0225	.0091708	.0103664	-.004686	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002483	.0002604	104.8569	-.000038	.0003118	.0004710	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	-.000932	.0002565	27.51720	-.000878	-.000707	-.001211	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0006378	.0005714	89.58813	-.000015	.0010446	.0008844	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	-.000676	.0011519	170.3031	.0006239	-.001569	-.001084	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0020589	.0031250	151.7812	.0021927	-.001131	.0051149	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm	.1479744	.0163856	11.07327	.1658352	.1444503	.1336375	Chk Pass,,		
Li	670.784	{ 50}	Y2R,ppm	.0012333	.0017131	138.9058	.0005698	-.000049	.0031788	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	.0092355	.0071025	76.90390	.0147146	.0117808	.0012111	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0001766	.0001143	64.73022	.0003049	.0001395	.0000855	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0010011	.0008018	80.08866	.0018451	.0002496	.0009087	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	.0111412	.0174242	156.3942	.0299914	-.004375	.0078077	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0052057	.0010997	21.12392	.0041470	.0063422	.0051280	Chk Pass,,		
P	177.495	{490}	Y1,ppm	-.001632	.0028806	176.5062	.0006867	-.000726	-.004857	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	-.001344	.0022296	165.8403	.0003129	-.003879	-.000467	Chk Pass,,		
S	182.034	{485}	Y1,ppm	.0132803	.0055300	41.64082	.0195179	.0089783	.0113446	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0066877	.0026637	39.82978	.0046192	.0057507	.0096933	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	-.027394	.0131730	48.08747	-.035751	-.012209	-.034222	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	.0171903	.0061255	35.63337	.0199514	.0214492	.0101703	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	.0073863	.0036693	49.67653	.0059334	.0115596	.0046660	Chk Pass,,		
Sr	421.552	{ 80}	Y2A,ppm	-.000022	.0000100	44.72438	-.000013	-.000033	-.000022	Chk Pass,,		
Th	283.730	{119}	Y2R,ppm	-.009398	.0197627	210.2804	-.031016	.0077417	-.004921	Chk Pass,,		

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Ti, 334.941 {101}, Y2A, ppm, .0002198, .0000808, 36.74591, .0002459, .0002844,
 .0001293, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0008218, .0058129, 707.3688, -.002429, -.002639,
 .0075328, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0002845, .0000635, 22.31850, .0002974, .0002155,
 .0003405, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, -.002609, .0002522, 9.667993, -.002511, -.002895, -.002420, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, -.000086, .0002727, 316.7747, .0001028, -.000399,
 .0000377, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, .0024863, .0034839, 140.1271, .0050876, -.001472,
 .0038431, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 2919.113, 4.266403, .1461541, 2923.460, 2918.948, 2914.932, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 248574.5, 135.1438, .0543675, 248661.4, 248643.3, 248418.8, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 15960.44, 200.7951, 1.258080, 16090.24, 16061.92, 15729.16, None, ,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=LCS 410-10582/2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:32:23
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .0244278, .0004066, 1.664559, .0246793, .0239587,
 .0246454, Chk Pass,,
 Al, 308.215 {109}, Y2R, ppm, .4626193, .0177627, 3.839599, .4818382, .4592137,
 .4468059, Chk Pass,,
 Alum ax, 308.215 {109}2, Y2A, ppm, .4400281, .0038040, .8644798, .4369932, .4387957,
 .4442955, Chk Pass,,
 As, 189.042 {478}, Y1, ppm, .0609136, .0093578, 15.36242, .0664817, .0501099,
 .0661493, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .0610500, .0004307, .7054724, .0607884, .0615471,
 .0608145, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .0108602, .0000384, .3534501, .0108926, .0108703,
 .0108178, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, .0102323, .0000155, .1515669, .0102498, .0102268,
 .0102203, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, .4241251, .0080230, 1.891668, .4303468, .4269588,
 .4150698, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0099345, .0001310, 1.318256, .0100856, .0098624,
 .0098553, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0093987, .0004266, 4.538819, .0098736, .0092745,
 .0090481, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0312521, .0006059, 1.938697, .0314934, .0317003,
 .0305628, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0417691, .0009127, 2.185070, .0409697, .0427635,
 .0415742, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, .4288919, .0091238, 2.127307, .4183889, .4334291,
 .4348577, Chk Pass,,

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K,766.490 { 44},Y2R,ppm, 6.135401,.0704087,1.147580, 6.158336, 6.191482,
 6.056384,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1101748,.0033724,3.060960, .1078035, .1086854,
 .1140355,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .2155492,.0024333,1.128901, .2155692, .2131059,
 .2179725,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0207532,.0001495,.7201639, .0208896, .0205935,
 .0207766,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0202364,.0007573,3.742465, .0210963, .0199444,
 .0196685,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 2.170385,.0147579,.6799662, 2.171947, 2.154908,
 2.184299,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, 2.048843,.0042568,.2077641, 2.052109, 2.050393,
 2.044029,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1928262,.0112814,5.850571, .1820662, .1918472, .2045653,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0335084,.0020862,6.225892, .0352993, .0312177,
 .0340081,Chk Pass,,
 S,182.034 {485},Y1,ppm, .9919833,.0208635,2.103209, .9867618, 1.014962, .9742266,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .1048887,.0084621,8.067670, .1093106, .0951318,
 .1102238,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0831441,.0177359,21.33151, .0661863, .0816789,
 .1015672,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.043162,.0055241,.5295541, 1.036795, 1.046007,
 1.046683,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .1089215,.0044403,4.076597, .1066473, .1060789,
 .1140381,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0103512,.0000481,.4643072, .0103888, .0102971,
 .0103678,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.015701,.0197591,125.8438, .0068379, -.030038,
 -.023903,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0211204,.0002476,1.172529, .0211935, .0208444,
 .0213232,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0622634,.0032276,5.183748, .0630022, .0650575,
 .0587305,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0207142,.0003333,1.609227, .0203351, .0208458,
 .0209616,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0583227,.0005573,.9555038, .0587948, .0577080, .0584652,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4225582,.0013849,.3277460, .4239145, .4211463,
 .4226139,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1023842,.0014550,1.421104, .1013566, .1017469,
 .1040491,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2955.669,4.756445,.1609262,2950.240,2957.666,2959.102,None,
 Y2A,371.030 { 91}2,Cts/S,
 247714.8,355.8679,.1436603,247358.5,247715.7,248070.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15731.64,20.69389,.1315431,15739.67,15708.13,15747.12,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:35:30
 Sample Type=Unk

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Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0015467,.0001903,12.30248, .0017664, .0014371,
 .0014366,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 3.297618,.0310906,.9428201, 3.322827, 3.262877,
 3.307149,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 3.288099,.0263814,.8023307, 3.315343, 3.262674,
 3.286281,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0239675,.0098253,40.99433, .0315308, .0128623,
 .0275093,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6125322,.0034563,.5642639, .6150302, .6085877,
 .6139788,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5657968,.0034453,.6089264, .5674985, .5680602,
 .5618318,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0003611,.0000325,8.990589, .0003444, .0003404,
 .0003985,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 134.7780,.1861114,.1380874, 134.8074, 134.9476,
 134.5789,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001980,.0000987,49.85439, .0000974, .0002017,
 .0002947,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0040238,.0001328,3.300107, .0041677, .0039060,
 .0039977,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0230706,.0003008,1.303586, .0233352, .0231332,
 .0227435,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0176545,.0010334,5.853584, .0176722, .0166123,
 .0186789,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 40.85528,.1050111,.2570319, 40.74328, 40.87106,
 40.95151,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 49.55387,.1721683,.3474366, 49.35515, 49.65824,
 49.64822,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0102616,.0039998,38.97878, .0109197, .0059735,
 .0138915,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 160.4802,.1068419,.0665764, 160.3676, 160.5801,
 160.4929,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.406460,.0036051,.2563272, 1.409541, 1.402495,
 1.407346,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.003274,.0013217,40.36564, -.003275, -.001952,
 -.004596,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1352.090,7.395733,.5469854, 1356.788, 1343.565,
 1355.916,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0142337,.0007637,5.365701, .0151019, .0136653,
 .0139341,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.245752,.0174887,1.403866, 1.251243, 1.226176, 1.259836,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0196803,.0032440,16.48352, .0222674, .0207328,
 .0160408,Chk Pass,,
 S,182.034 {485},Y1,ppm, .7667240,.0390742,5.096251, .7369028, .7523121, .8109572,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.005059,.0070448,139.2426, -.013164, -.001610,
 -.000404,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.005429,.0176307,324.7676, -.025683, .0064762,
 .0029208,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 21.60717,.0932450,.4315465, 21.51423, 21.60657,
 21.70072,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0001735,.0038789,2235.830, .0045658, -.002782,
 -.001263,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.157205,.0054072,.4672617, 1.159306, 1.151063,
 1.161246,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.030305,.0231876,76.51530, -.022560, -.011980,

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-.056373,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0999957,.0008569,.8569303, .1008107, .0991023,
 .1000743,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.006593,.0084831,128.6685, -.005448, -.015591,
 .0012593,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0141018,.0015816,11.21575, .0137149, .0127496,
 .0158410,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.003387,.0019057,56.25807, -.002298, -.005588, -.002277,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .1424474,.0006015,.4222925, .1417641, .1428972,
 .1426810,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0055781,.0016063,28.79631, .0069219, .0060134,
 .0037991,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2570.469,3.435058,.1336355,2568.568,2574.434,2568.404,None,,
 Y2A,371.030 { 91}2,Cts/S,
 210002.7,299.2635,.1425046,209827.9,210348.3,209832.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15309.45,24.36899,.1591761,15329.20,15316.93,15282.21,None,,

[Sample Header]

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 Comment=UP
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:39:06
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0164579,.0011113,6.752185, .0151748, .0171025,
 .0170965,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 4.244097,.0130496,.3074772, 4.230522, 4.256548,
 4.245221,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 4.200246,.0075590,.1799644, 4.201355, 4.207189,
 4.192193,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5593946,.0157832,2.821475, .5766897, .5457702,
 .5557238,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .8025989,.0039146,.4877446, .8001774, .8071152,
 .8005040,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .6021721,.0035256,.5854824, .6045632, .6038300,
 .5981232,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0213001,.0001004,.4711295, .0213192, .0213895,
 .0211915,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 133.1510,.3807929,.2859858, 133.2253, 133.4891,
 132.7385,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0468322,.0002162,.4616235, .0470770, .0466676,
 .0467518,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0981067,.0007142,.7280112, .0987891, .0973644,
 .0981665,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .2233400,.0015555,.6964914, .2236840, .2246947,
 .2216412,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5424109,.0007486,.1380126, .5431066, .5425073,
 .5416188,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 40.64186,.1552878,.3820884, 40.64141, 40.79738,

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40.48680,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 50.64310,.0927581,.1831604, 50.59613, 50.74995,
 50.58322,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, 1.077989,.0060939,.5653074, 1.084211, 1.077724,
 1.072032,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 158.2723,.5069620,.3203100, 158.5563, 158.5737,
 157.6870,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.436861,.0051201,.3563391, 1.441528, 1.437672,
 1.431384,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .1904256,.0005487,.2881662, .1901900, .1900341,
 .1910528,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1333.488,7.043152,.5281751, 1335.876, 1339.027,
 1325.561,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .1524529,.0008073,.5295144, .1533349, .1522731,
 .1517507,Chk Pass,,
 P,177.495 {490},Y1,ppm, 2.341779,.0242856,1.037059, 2.368641, 2.321375, 2.335322,Chk
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 .4637161,Chk Pass,,
 S,182.034 {485},Y1,ppm, 1.819699,.0142787,.7846714, 1.804596, 1.832978, 1.821523,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .4164284,.0063849,1.533256, .4090592, .4199172,
 .4203087,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .7668551,.0104300,1.360098, .7598736, .7618471,
 .7788446,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 22.15486,.0608098,.2744762, 22.13668, 22.22268,
 22.10521,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .5639631,.0048071,.8523873, .5661366, .5672995,
 .5584530,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.156007,.0026446,.2287741, 1.155263, 1.158944,
 1.153814,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.013599,.0543555,399.6940, -.053108, .0483904,
 -.036081,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .2044630,.0002809,.1373936, .2046385, .2046114,
 .2041390,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .8121372,.0149397,1.839550, .7950605, .8227929,
 .8185583,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .1220660,.0011054,.9055355, .1233386, .1215147,
 .1213448,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.002633,.0029192,110.8566, -.000325, -.001660, -.005915,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .2602066,.0006216,.2388753, .2598603, .2609242,
 .2598353,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 1.084347,.0045045,.4154152, 1.089523, 1.082206,
 1.081313,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2540.761,2.241389,.0882172,2543.292,2539.962,2539.028,None,,
 Y2A,371.030 { 91}2,Cts/S,
 209279.0,427.3956,.2042229,208913.8,209174.2,209749.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
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[Sample Header]

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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:42:35

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Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0002079,.0015428,742.1526, -.000944, .0019607,
 -.000393,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 3.278330,.0268660,.8195028, 3.301230, 3.248756,
 3.285003,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 3.294918,.0147510,.4476896, 3.309782, 3.280283,
 3.294690,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0197320,.0084374,42.75988, .0159059, .0294045,
 .0138855,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6251711,.0038413,.6144394, .6292987, .6217009,
 .6245137,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5768580,.0026366,.4570670, .5795268, .5767926,
 .5742547,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0003877,.0000266,6.868603, .0003875, .0003611,
 .0004144,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 137.1300,.3432412,.2503035, 137.4927, 137.0869,
 136.8103,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0006021,.0000723,12.01011, .0005468, .0005756,
 .0006840,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0042260,.0001458,3.449794, .0043282, .0042907,
 .0040591,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0238581,.0002275,.9537264, .0239192, .0240489,
 .0236063,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0176318,.0015176,8.607195, .0160018, .0178896,
 .0190039,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 41.52407,.1687376,.4063611, 41.67835, 41.54998,
 41.34387,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 50.39411,.1799996,.3571837, 50.59283, 50.34752,
 50.24199,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0085868,.0025146,29.28488, .0083330, .0062087,
 .0112187,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 163.2555,.4219630,.2584679, 163.7197, 163.1516,
 162.8951,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.427886,.0052124,.3650425, 1.433901, 1.425069,
 1.424689,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.005417,.0010461,19.31118, -.004230, -.005815,
 -.006206,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1386.646,7.090090,.5113121, 1389.994, 1391.443,
 1378.502,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0143447,.0007600,5.298157, .0150720, .0144064,
 .0135557,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.256570,.0110930,.8827972, 1.263319, 1.262623, 1.243767,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0120742,.0041824,34.63875, .0168161, .0104960,
 .0089106,Chk Pass,,
 S,182.034 {485},Y1,ppm, .8035746,.0169422,2.108359, .7902804, .7977924, .8226511,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0039778,.0028497,71.64062, .0069017, .0038230,
 .0012086,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.013287,.0159676,120.1778, -.028535, .0033138,
 -.014638,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 21.81254,.0199154,.0913027, 21.78999, 21.81989,
 21.82773,Chk Pass,,
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 -.000921,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.172701,.0061618,.5254366, 1.179277, 1.171765,
 1.167061,Chk Pass,,

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Th,283.730 {119},Y2R,ppm, -.002399,.0398462,1660.804, .0353355, .0015323,
 -.044065,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1021059,.0004979,.4876069, .1026799, .1018478,
 .1017902,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.006237,.0046945,75.26878, -.008430, -.000847,
 -.009434,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0145364,.0006657,4.579809, .0147360, .0150796,
 .0137937,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.003326,.0021929,65.94109, -.000896, -.005159, -.003922,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .1439099,.0002255,.1567210, .1439216, .1441293,
 .1436787,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0037439,.0007146,19.08725, .0038296, .0044119,
 .0029904,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2558.319,3.126829,.1222220,2555.328,2561.566,2558.064,None,,
 Y2A,371.030 { 91}2,Cts/S,
 207063.7,571.4076,.2759574,206430.3,207540.5,207220.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15077.58,52.98723,.3514305,15058.80,15036.55,15137.41,None,,

[Sample Header]

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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:46:08
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0193171,.0008996,4.657148, .0202083, .0193338,
 .0184093,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 7.095568,.0182402,.2570641, 7.112855, 7.097344,
 7.076505,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 7.039307,.0528504,.7507902, 7.092572, 7.038466,
 6.986882,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0872547,.0038155,4.372821, .0915102, .0841390,
 .0861150,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6760885,.0042703,.6316183, .6779142, .6791425,
 .6712089,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5972336,.0015349,.2569959, .5990030, .5964365,
 .5962612,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0109551,.0000348,.3173411, .0109787, .0109714,
 .0109151,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 148.8917,.6771009,.4547606, 149.3433, 149.2187,
 148.1132,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0098199,.0002578,2.625393, .0099296, .0095253,
 .0100046,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0156124,.0005118,3.277962, .0156678, .0150752,
 .0160942,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0612045,.0004022,.6570894, .0612475, .0615835,
 .0607826,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0681193,.0010446,1.533420, .0689662, .0684396,
 .0669521,Chk Pass,,

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Fe,261.187 {129},Y2R,ppm, 45.23550,.2919259,.6453470, 45.27232, 45.50727,
 44.92691,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 56.63741,.0700485,.1236789, 56.62675, 56.71218,
 56.57330,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1165129,.0020302,1.742474, .1161687, .1146768,
 .1186932,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 165.1031,.7176873,.4346903, 165.6662, 165.3482,
 164.2950,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.486740,.0069114,.4648723, 1.490218, 1.491222,
 1.478781,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0132590,.0007250,5.467821, .0138383, .0124460,
 .0134928,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1378.398,8.083806,.5864637, 1387.457, 1375.818,
 1371.920,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, 1.827936,.0112810,.6171441, 1.835942, 1.832832,
 1.815034,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.580449,.0198696,1.257211, 1.600775, 1.561070, 1.579502,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0581304,.0028470,4.897542, .0570426, .0559877,
 .0613608,Chk Pass,,
 S,182.034 {485},Y1,ppm, 2.130253,.0373080,1.751342, 2.093463, 2.168058, 2.129238,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0970834,.0103185,10.62853, .0934687, .0890586,
 .1087230,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0563338,.0139307,24.72877, .0695826, .0418090,
 .0576099,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 27.65568,.0905974,.3275907, 27.74096, 27.66551,
 27.56057,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0889105,.0023127,2.601203, .0907419, .0896779,
 .0863116,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.180449,.0039149,.3316412, 1.181772, 1.183531,
 1.176044,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.044126,.0222550,50.43497, -.066950, -.042942,
 -.022487,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1679102,.0007011,.4175528, .1678090, .1686564,
 .1672652,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0427293,.0038642,9.043341, .0430681, .0464130,
 .0387070,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0429270,.0005533,1.288874, .0435644, .0426460,
 .0425706,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0534902,.0015409,2.880710, .0552534, .0524021, .0528151,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .6205553,.0020374,.3283253, .6225222, .6206897,
 .6184540,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1119593,.0001143,.1020939, .1120834, .1118583,
 .1119363,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2560.119,4.454672,.1740025,2560.778,2555.372,2564.208,None,,
 Y2A,371.030 { 91}2,Cts/S,
 210527.1,388.2305,.1844088,210393.9,210222.9,210964.4,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15175.49,115.0161,.7579072,15127.83,15091.96,15306.67,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3196-B-8-B MSD
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=

12396

Run Time=6/11/2020 16:49:38
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0195620	.0006035	3.085132	.0202072	.0194674				
	.0190114		Chk Pass,,									
Al	308.215	{109}	Y2R,ppm	6.278888	.0085726	.1365314	6.269018	6.283162				
	6.284483		Chk Pass,,									
Alum ax	308.215	{109}2	Y2A,ppm	6.225303	.0467556	.7510568	6.276596	6.214247				
	6.185067		Chk Pass,,									
As	189.042	{478}	Y1,ppm	.0845740	.0070438	8.328543	.0772614	.0913140				
	.0851465		Chk Pass,,									
B	249.773	{135}	Y2A,ppm	.6724590	.0074728	1.111259	.6802538	.6717666				
	.6653565		Chk Pass,,									
Ba	455.403	{ 74}	Y2A,ppm	.5935095	.0038132	.6424798	.5978671	.5918771				
	.5907842		Chk Pass,,									
Be	313.042	{108}	Y2A,ppm	.0110116	.0000450	.4086417	.0110619	.0109979				
	.0109751		Chk Pass,,									
Ca	317.933	{106}	Y2R,ppm	147.8474	.2567464	.1736563	147.9519	147.5549				
	148.0355		Chk Pass,,									
Cd	226.502	{449}	Y1,ppm	.0091374	.0003279	3.588754	.0095155	.0089323				
	.0089642		Chk Pass,,									
Co	228.616	{447}	Y1,ppm	.0137706	.0004344	3.154853	.0138323	.0141709				
	.0133086		Chk Pass,,									
Cr	267.716	{126}	Y2A,ppm	.0579341	.0003707	.6398821	.0575823	.0583212				
	.0578988		Chk Pass,,									
Cu	327.396	{103}	Y2A,ppm	.0658257	.0001509	.2292548	.0659826	.0656816				
	.0658129		Chk Pass,,									
Fe	261.187	{129}	Y2R,ppm	44.63379	.2678599	.6001280	44.93498	44.42226				
	44.54414		Chk Pass,,									
K	766.490	{ 44}	Y2R,ppm	56.20262	.1551722	.2760942	56.29768	56.02356				
	56.28663		Chk Pass,,									
Li	670.784	{ 50}	Y2R,ppm	.1190156	.0015072	1.266423	.1194470	.1202601				
	.1173397		Chk Pass,,									
Mg	285.213	{118}	Y2R,ppm	164.3391	.2078984	.1265057	164.4660	164.0992				
	164.4521		Chk Pass,,									
Mn	257.610	{131}	Y2A,ppm	1.497903	.0079134	.5282990	1.506290	1.496851				
	1.490568		Chk Pass,,									
Mo	202.030	{467}	Y1,ppm	.0123186	.0010341	8.394693	.0132844	.0124440				
	.0112276		Chk Pass,,									
Na	589.592	{ 57}	Y2R,ppm,F	1370.813	4.415134	.3220814	1373.285	1373.439				
	1365.716		Chk Fail,450.0000,-1.00000									
Ni	231.604	{445}	Y1,ppm	1.806988	.0063419	.3509646	1.810469	1.810826				
	1.799668		Chk Pass,,									
P	177.495	{490}	Y1,ppm	1.644501	.0080530	.4896947	1.648504	1.635231	1.649768			
			Chk Pass,,									
Pb	220.353	{453}	Y1,ppm	.0477914	.0040185	8.408464	.0440997	.0520718				
	.0472026		Chk Pass,,									
S	182.034	{485}	Y1,ppm	2.086170	.0189401	.9078911	2.076508	2.074010	2.107993			
			Chk Pass,,									
Sb	206.833	{463}	Y1,ppm	.0947409	.0031418	3.316246	.0937207	.0982660				
	.0922359		Chk Pass,,									
Se	196.090	{472}	Y1,ppm	.0864808	.0182765	21.13360	.1065820	.0708636				
	.0819969		Chk Pass,,									
Si	251.611	{134}	Y2R,ppm	26.49531	.0681531	.2572272	26.54466	26.41755				
	26.52371		Chk Pass,,									
Sn	189.989	{477}	Y1,ppm	.0935754	.0059269	6.333857	.0898894	.0904245				
	.1004122		Chk Pass,,									
Sr	421.552	{ 80}	Y2A,ppm	1.178868	.0059854	.5077288	1.185715	1.174632				

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1.176257,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.012352,.0090095,72.94018, -.006110, -.022681,
 -.008265,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1567572,.0008132,.5187395, .1570340, .1573958,
 .1558418,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0367918,.0052945,14.39037, .0378972, .0414463,
 .0310319,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0401755,.0005848,1.455617, .0396746, .0408181,
 .0400339,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0568560,.0037546,6.603644, .0537508, .0610288, .0557886,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .5943932,.0006513,.1095683, .5951413, .5940854,
 .5939529,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1087861,.0015070,1.385296, .1104391, .1084307,
 .1074886,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2584.055,4.593801,.1777749,2581.158,2581.656,2589.352,None,,
 Y2A,371.030 { 91}2,Cts/S,
 208600.2,735.1027,.3523978,208036.2,208332.9,209431.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15109.71,29.61666,.1960108,15121.40,15131.69,15076.03,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3196-A-8-A SD@5
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 Comment=UL
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:53:08
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000061,.0001621,264.0260, -.000216, -.000075,
 .0001072,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .6132625,.0419996,6.848548, .5772926, .6030767,
 .6594182,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .6505798,.0031090,.4778821, .6510436, .6534309,
 .6472650,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0082613,.0053127,64.30752, .0083405, .0135339,
 .0029095,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1230834,.0004030,.3273968, .1230025, .1235207,
 .1227270,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1161715,.0002369,.2039257, .1161761, .1164061,
 .1159323,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000964,.0000248,25.76990, .0001248, .0000786,
 .0000858,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 25.87719,.3057886,1.181692, 25.52441, 26.04060,
 26.06655,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000583,.0001189,203.9940, .0000339, -.000047,
 .0001875,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0002035,.0002959,145.3700, .0004910, -.000100,
 .0002196,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0046828,.0007255,15.49242, .0054863, .0040760,
 .0044860,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0014739,.0000745,5.057690, .0014064, .0015539,

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.0014614,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 8.030214,.0787459,.9806202, 7.940808, 8.089264,
 8.060571,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 9.669218,.1626091,1.681719, 9.481591, 9.756809,
 9.769255,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0035397,.0013341,37.69070, .0030837, .0050420,
 .0024933,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 31.15152,.3146020,1.009909, 30.78825, 31.33482,
 31.33149,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2796700,.0006063,.2167853, .2793543, .2803690,
 .2792867,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.002013,.0018964,94.19009, -.004172, -.001253,
 -.000615,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 281.4361,2.619791,.9308653, 278.4378, 283.2831,
 282.5874,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0085269,.0009847,11.54817, .0082391, .0096234,
 .0077181,Chk Pass,,
 P,177.495 {490},Y1,ppm, .2262811,.0061277,2.708017, .2233922, .2333192, .2221317,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0045023,.0024382,54.15453, .0019034, .0067393,
 .0048644,Chk Pass,,
 S,182.034 {485},Y1,ppm, .1390547,.0143042,10.28674, .1304485, .1311487, .1555668,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.001796,.0014586,81.23420, -.000437, -.003337,
 -.001613,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.020671,.0108315,52.39929, -.008470, -.029152,
 -.024392,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 4.117319,.0521480,1.266551, 4.058683, 4.158502,
 4.134772,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0030483,.0020224,66.34449, .0008443, .0034818,
 .0048187,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2388602,.0007364,.3082845, .2389689, .2395362,
 .2380755,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0008924,.0077068,863.6276, .0031848, -.007701,
 .0071929,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0209413,.0002319,1.107387, .0211951, .0207405,
 .0208884,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0093735,.0033364,35.59407, .0100315, .0057571,
 .0123319,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0026279,.0001718,6.538307, .0025548, .0028242,
 .0025047,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000334,.0005514,165.0982, .0000869, -.000958, -.000131,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0281150,.0003631,1.291410, .0277578, .0284837,
 .0281036,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0041379,.0017236,41.65344, .0025339, .0059602,
 .0039195,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2769.989,7.684988,.2774375,2762.748,2769.168,2778.052,None,,
 Y2A,371.030 { 91}2,Cts/S,
 228529.8,488.5481,.2137787,228446.3,228088.4,229054.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15509.70,162.7298,1.049213,15697.44,15422.57,15409.09,None,,

[Sample Header]

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 SampleName=410-3144-H-4-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=

12396

Custom ID3=
 Run Time=6/11/2020 16:56:26
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	-.000219	.0003885	177.6147	.0000081	.0000031				
Al	308.215	{109}	Y2R,ppm	.0328109	.0466414	142.1523	.0620665	-.020977				
Alum ax	308.215	{109}2	Y2A,ppm	.0211361	.0029267	13.84705	.0180486	.0214900				
As	189.042	{478}	Y1,ppm	.0322341	.0087539	27.15726	.0399946	.0227448				
B	249.773	{135}	Y2A,ppm	.1264117	.0002788	.2205631	.1264910	.1266423				
Ba	455.403	{ 74}	Y2A,ppm	.1766753	.0000607	.0343384	.1767347	.1766777				
Be	313.042	{108}	Y2A,ppm	.0000282	.0000181	64.19681	.0000477	.0000121				
Ca	317.933	{106}	Y2R,ppm	50.39673	.1145961	.2273880	50.32664	50.52897				
Cd	226.502	{449}	Y1,ppm	-.000105	.0001204	114.1873	.0000286	-.000204				
Co	228.616	{447}	Y1,ppm	-.000786	.0003585	45.62016	-.001105	-.000855				
Cr	267.716	{126}	Y2A,ppm	.0020760	.0006013	28.96465	.0015445	.0027287				
Cu	327.396	{103}	Y2A,ppm	-.000467	.0008490	181.6736	-.000375	-.001359				
Fe	261.187	{129}	Y2R,ppm	.0248778	.0081634	32.81398	.0312950	.0276486				
K	766.490	{ 44}	Y2R,ppm	3.984436	.0624160	1.566496	4.042178	3.992919				
Li	670.784	{ 50}	Y2R,ppm	.0380574	.0018075	4.749522	.0380261	.0362657				
Mg	285.213	{118}	Y2R,ppm	5.947519	.0347358	.5840380	5.923893	5.987402				
Mn	257.610	{131}	Y2A,ppm	.0069000	.0000484	.7008522	.0068466	.0069408				
Mo	202.030	{467}	Y1,ppm	.0022734	.0014788	65.04811	.0025679	.0006695				
Na	589.592	{ 57}	Y2R,ppm	31.30804	.0908592	.2902104	31.37611	31.34315				
Ni	231.604	{445}	Y1,ppm	.0073424	.0003557	4.844764	.0074371	.0069489				
P	177.495	{490}	Y1,ppm	.0014614	.0021462	146.8590	.0036835	.0013005				
Pb	220.353	{453}	Y1,ppm	.0051229	.0029433	57.45340	.0060323	.0075041				
S	182.034	{485}	Y1,ppm	10.87799	.0207360	.1906236	10.88118	10.89695				
Sb	206.833	{463}	Y1,ppm	.0009230	.0149024	1614.618	.0181308	-.007720				
Se	196.090	{472}	Y1,ppm	-.000479	.0022771	475.6611	-.002017	.0021371				
Si	251.611	{134}	Y2R,ppm	19.90796	.0870306	.4371648	19.83440	19.88544				
Sn	189.989	{477}	Y1,ppm	.0069877	.0035743	51.15085	.0080140	.0099366				

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Sr,421.552 { 80},Y2A,ppm, .5246569,.0010627,.2025463, .5248082, .5256359,
 .5235267,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.009459,.0078370,82.85083, -.006396, -.003617,
 -.018365,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0022036,.0000834,3.785852, .0022612, .0022418,
 .0021079,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0071918,.0043028,59.82888, .0023761, .0106583,
 .0085410,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000151,.0002899,191.4159, -.000478, .0000757,
 -.000052,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0003106,.0039296,1265.205, .0013616, .0036079, -.004038,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0072235,.0000717,.9925423, .0072316, .0072908,
 .0071481,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0015091,.0038965,258.2017, -.002923, .0043957,
 .0030548,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2853.441,2.269380,.0795313,2851.536,2855.952,2852.836,None,,
 Y2A,371.030 { 91}2,Cts/S,
 240235.6,880.7448,.3666171,239885.7,241237.6,239583.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15748.40,70.75402,.4492777,15823.05,15682.32,15739.82,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3144-H-3-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 16:59:46
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000027,.0002864,1048.038, .0000333, -.000339,
 .0002239,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0009973,.0187633,1881.346, -.012234, -.007245,
 .0224710,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0157485,.0016540,10.50242, .0172721, .0139894,
 .0159839,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0142420,.0098254,68.98856, .0068110, .0105330,
 .0253820,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1102777,.0010031,.9096335, .1107179, .1109855,
 .1091298,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1565780,.0002383,.1522035, .1566999, .1567306,
 .1563034,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000304,.0000115,37.70071, .0000287, .0000198,
 .0000425,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 32.25517,.1650640,.5117444, 32.31372, 32.38298,
 32.06881,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, -.000164,.0001087,66.39459, -.000219, -.000234,
 -.000039,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.000455,.0007221,158.7371, .0003539, -.000684,
 -.001035,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0008927,.0004603,51.56275, .0009451, .0013246,
 .0004085,Chk Pass,,

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Cu,327.396 {103},Y2A,ppm, -.001579,.0003271,20.71327, -.001464, -.001325,
 -.001948,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0177121,.0084478,47.69538, .0202805, .0245776,
 .0082781,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 7.186227,.0299403,.4166347, 7.178453, 7.219288,
 7.160941,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0893474,.0022206,2.485295, .0871574, .0892877,
 .0915973,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 8.317909,.0482499,.5800729, 8.336245, 8.354303,
 8.263179,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0289160,.0000810,.2801595, .0289392, .0289829,
 .0288259,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0038580,.0016718,43.33460, .0028070, .0057858,
 .0029810,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 40.31323,.1603743,.3978206, 40.40048, 40.41106,
 40.12814,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0063497,.0010015,15.77169, .0056885, .0058586,
 .0075019,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.019012,.0036476,19.18599, -.016718, -.017099, -.023218,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0012668,.0039736,313.6734, .0042673, -.003240,
 .0027728,Chk Pass,,
 S,182.034 {485},Y1,ppm, 10.55273,.0115911,.1098396, 10.53986, 10.55595, 10.56236,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.006289,.0010003,15.90627, -.006651, -.007057,
 -.005158,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.015943,.0059896,37.56763, -.009168, -.020534,
 -.018129,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 31.89212,.2443834,.7662814, 32.00576, 32.05899,
 31.61161,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0032101,.0009572,29.81711, .0037909, .0037340,
 .0021053,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3761830,.0020533,.5458355, .3781754, .3740737,
 .3762998,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.016746,.0199168,118.9362, -.033429, -.022114,
 .0053048,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0018878,.0000450,2.382935, .0018408, .0019304,
 .0018920,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.005968,.0101576,170.1964, -.006985, -.015579,
 .0046597,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0050098,.0001129,2.253112, .0050975, .0048824,
 .0050495,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001729,.0016363,94.65423, -.001902, -.000013, -.003271,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0080507,.0001452,1.803765, .0079447, .0079913,
 .0082162,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0019602,.0030908,157.6764, .0033133, .0041438,
 -.001576,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2886.526,14.68738,.5088254,2880.176,2876.082,2903.320,None,,
 Y2A,371.030 { 91}2,Cts/S,
 239420.4,459.7255,.1920160,239833.9,239502.0,238925.4,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15643.79,86.34267,.5519295,15581.00,15608.11,15742.25,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=

12396

Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 17:03:03
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.4886	.0017	.3486	.4886	.4904	.4870	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	25.22	.1617	.6411	25.05	25.26	25.37	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	25.46	.1624	.6379	25.57	25.54	25.27	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.5102	.0139	2.721	.4975	.5250	.5081	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4919	.0025	.5013	.4913	.4946	.4897	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.5322	.0021	.4012	.5311	.5307	.5346	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.51185	.00042	.08138	.51161	.51160	.51233	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	25.79	.0272	.1056	25.79	25.76	25.81	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.4901	.0054	1.096	.4858	.4961	.4883	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.5011	.0038	.7601	.4993	.5055	.4986	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.5032	.0009	.1770	.5028	.5026	.5042	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5209	.0013	.2560	.5194	.5215	.5218	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	26.03	.0930	.3573	26.07	25.92	26.09	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	26.63	.1213	.4554	26.49	26.68	26.72	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.5339	.0021	.3953	.5332	.5362	.5322	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	26.37	.0383	.1454	26.33	26.37	26.41	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.49679	.00013	.02625	.49666	.49681	.49692	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.4863	.0067	1.374	.4818	.4939	.4830	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	26.92	.1324	.4918	26.77	27.00	27.00	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4871	.0056	1.153	.4830	.4935	.4848	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.5198	.0052	.9953	.5258	.5171	.5165	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.4982	.0046	.9230	.4939	.5030	.4977	Chk Pass,,		
S	182.034	{485}	Y1, ppm	24.22	.2243	.9262	24.05	24.47	24.13	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.4842	.0087	1.797	.4742	.4890	.4895	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4771	.0138	2.892	.4854	.4611	.4847	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	25.210	.03246	.12874	25.176	25.241	25.213	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4986	.0056	1.123	.4923	.5031	.5003	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.5016	.0011	.2192	.5029	.5011	.5009	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.4834	.0170	3.510	.5013	.4813	.4676	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5196	.0006	.1245	.5196	.5202	.5189	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4786	.0075	1.574	.4873	.4744	.4742	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5222	.0007	.1393	.5220	.5216	.5230	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5275	.0034	.6531	.5248	.5314	.5264	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.4872	.0063	1.286	.4827	.4944	.4845	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	F .5943	.0049	.8224	.5902	.5929	.5997	Chk		
Fail	.5000			10.00%								

[Internal standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2840.4	26.351	.92771	2853.6	2810.1	2857.6
Y2A	371.030	{91}2	Cts/S	237670.	279.40	.11756	237660.	237950.	237390.
Y2R	371.030	{91}3	Cts/S	15587.	35.848	.22999	15616.	15597.	15547.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 17:06:16
 Sample Type=QC

12396

Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0001	.0001	242.0	.0002	-.0001	.0000	chk Pass,,		
Al	308.215	{109}	Y2R, ppm	.0208	.0225	108.2	.0468	.0071	.0085	chk Pass,,		
Alum ax	308.215	{109}2	Y2A, ppm	.0078	.0009	11.94	.0076	.0088	.0070	chk Pass,,		
As	189.042	{478}	Y1, ppm	-.0058	.0052	91.02	-.0109	-.0059	-.0004	chk Pass,,		
B	249.773	{135}	Y2A, ppm	.0023	.0009	36.54	.0019	.0018	.0033	chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	-.0000	.0000	139.8	-.0000	-.0001	.0000	chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.00002	.00001	52.844	.00003	.00002	.00001	chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	.0077	.0053	68.42	.0126	.0085	.0021	chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.0001	.0003	220.7	.0003	.0003	-.0002	chk Pass,,		
Co	228.616	{447}	Y1, ppm	-.0009	.0004	50.35	-.0005	-.0008	-.0013	chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.0006	.0004	59.84	.0007	.0002	.0010	chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	-.0006	.0003	39.87	-.0009	-.0005	-.0005	chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	.0162	.0087	53.75	.0257	.0141	.0087	chk Pass,,		
K	766.490	{44}	Y2R, ppm	.0265	.0270	101.9	.0016	.0228	.0552	chk Pass,,		
Li	670.784	{50}	Y2R, ppm	-.0026	.0019	73.35	-.0021	-.0047	-.0010	chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	.0035	.0019	53.95	.0041	.0051	.0014	chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	-.00004	.00003	94.922	-.00004	-.00000	-.00007	chk Pass,,		
Mo	202.030	{467}	Y1, ppm	-.0005	.0004	88.63	-.0001	-.0009	-.0003	chk Pass,,		
Na	589.592	{57}	Y2R, ppm	.0586	.0264	44.98	.0352	.0872	.0534	chk Pass,,		
Ni	231.604	{445}	Y1, ppm, F	.0062	.0006	10.31	.0054	.0067	.0064	chk Pass,,		
Fail	.0050			-.0050								
P	177.495	{490}	Y1, ppm	-.0084	.0100	118.9	.0008	-.0191	-.0069	chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.0009	.0044	514.5	.0005	.0055	-.0034	chk Pass,,		
S	182.034	{485}	Y1, ppm	.0015	.0098	636.9	-.0085	.0022	.0110	chk Pass,,		
Sb	206.833	{463}	Y1, ppm	-.0032	.0046	147.1	-.0053	-.0064	.0022	chk Pass,,		
Se	196.090	{472}	Y1, ppm	-.0127	.0136	106.6	.0015	-.0141	-.0255	chk Pass,,		
Si	251.611	{134}	Y2R, ppm	.01455	.01343	92.319	.02898	.01228	.00240	chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0028	.0030	109.5	.0054	-.0005	.0034	chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.0000	.0000	60.24	.0000	.0000	.0000	chk Pass,,		
Th	283.730	{119}	Y2R, ppm	-.0137	.0068	49.45	-.0068	-.0140	-.0203	chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.0001	.0001	82.95	.0000	.0001	.0002	chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.0027	.0101	380.7	.0105	-.0088	.0063	chk Pass,,		
V	292.402	{115}	Y2A, ppm	.0006	.0005	82.01	.0001	.0010	.0006	chk Pass,,		
W	207.911	{462}	Y1, ppm	-.0020	.0018	87.18	-.0024	-.0036	-.0001	chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.0004	.0002	67.96	.0007	.0002	.0003	chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	.0013	.0016	126.3	.0027	-.0005	.0017	chk Pass,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2918.3	25.750	.88235	2899.6	2907.6	2947.7
Y2A	371.030	{91}2	Cts/S	245110.	427.47	.17440	244780.	245590.	244950.
Y2R	371.030	{91}3	Cts/S	15545.	46.317	.29796	15552.	15495.	15587.

[Sample Header]

Method=New TRACE Fast(v1398)
SampleName=410-3144-H-1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/11/2020 17:09:27
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

12396

[Results]

Elem,WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103},Y2A	ppm	-.000327	.0005158	157.9487	-.000863	-.000282	.0001656	Chk Pass,,	
Al	308.215	{109},Y2R	ppm	.0242057	.0328918	135.8846	-.012440	.0338844	.0511721	Chk Pass,,	
Alum ax	308.215	{109}2,Y2A	ppm	.0137031	.0026559	19.38213	.0146135	.0107117	.0157841	Chk Pass,,	
As	189.042	{478},Y1	ppm	.0043366	.0051882	119.6373	.0063048	.0082526	-.001548	Chk Pass,,	
B	249.773	{135},Y2A	ppm	.0812583	.0002556	.3145971	.0814209	.0813904	.0809637	Chk Pass,,	
Ba	455.403	{74},Y2A	ppm	.1543758	.0005064	.3280372	.1538159	.1548017	.1545099	Chk Pass,,	
Be	313.042	{108},Y2A	ppm	.0000171	.0000164	96.02073	.0000018	.0000151	.0000344	Chk Pass,,	
Ca	317.933	{106},Y2R	ppm	40.10862	.1352878	.3373037	40.05215	40.26299	40.01071	Chk Pass,,	
Cd	226.502	{449},Y1	ppm	.0001685	.0002908	172.6154	.0001256	.0004784	-.000098	Chk Pass,,	
Co	228.616	{447},Y1	ppm	-.001005	.0006504	64.68728	-.000517	-.000756	-.001744	Chk Pass,,	
Cr	267.716	{126},Y2A	ppm	.0024063	.0002306	9.582164	.0022450	.0023035	.0026704	Chk Pass,,	
Cu	327.396	{103},Y2A	ppm	.0171444	.0005323	3.104668	.0175386	.0165389	.0173557	Chk Pass,,	
Fe	261.187	{129},Y2R	ppm	.0069304	.0090697	130.8674	.0083647	-.002771	.0151975	Chk Pass,,	
K	766.490	{44},Y2R	ppm	4.115384	.0289774	.7041247	4.122680	4.083456	4.140016	Chk Pass,,	
Li	670.784	{50},Y2R	ppm	.0208712	.0002355	1.128146	.0211270	.0206635	.0208231	Chk Pass,,	
Mg	285.213	{118},Y2R	ppm	8.006188	.0275533	.3441503	7.993084	8.037847	7.987632	Chk Pass,,	
Mn	257.610	{131},Y2A	ppm	.0002693	.0000384	14.25073	.0002733	.0002291	.0003055	Chk Pass,,	
Mo	202.030	{467},Y1	ppm	-.002139	.0015226	71.16861	-.002123	-.003670	-.000625	Chk Pass,,	
Na	589.592	{57},Y2R	ppm	23.68472	.0509158	.2149730	23.68119	23.73731	23.63566	Chk Pass,,	
Ni	231.604	{445},Y1	ppm	.0075215	.0006661	8.855978	.0071344	.0082906	.0071394	Chk Pass,,	
P	177.495	{490},Y1	ppm	-.003089	.0103512	335.0807	-.012988	-.003942	.0076619	Chk Pass,,	
Pb	220.353	{453},Y1	ppm	.0006056	.0025916	427.9395	.0021417	.0020617	-.002387	Chk Pass,,	
S	182.034	{485},Y1	ppm	8.764681	.0059002	.0673179	8.764142	8.770833	8.759069	Chk Pass,,	
Sb	206.833	{463},Y1	ppm	-.001842	.0070064	380.4356	-.009654	.0038864	.0002422	Chk Pass,,	
Se	196.090	{472},Y1	ppm	-.021943	.0036922	16.82599	-.019524	-.026193	-.020112	Chk Pass,,	
Si	251.611	{134},Y2R	ppm	24.84825	.0890629	.3584270	24.90241	24.89689	24.74546	Chk Pass,,	
Sn	189.989	{477},Y1	ppm	.0018724	.0041770	223.0787	.0060566	-.002297	.0018581	Chk Pass,,	
Sr	421.552	{80},Y2A	ppm	.4736876	.0011467	.2420846	.4744446	.4742500	.4723683	Chk Pass,,	
Th	283.730	{119},Y2R	ppm	-.001208	.0128653	1064.608	-.014035	.0116957	-.001287	Chk Pass,,	
Ti	334.941	{101},Y2A	ppm	.0020489	.0000973	4.750662	.0021437	.0020537	.0019492	Chk Pass,,	

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Tl,190.856 {477},Y1,ppm, .0024207,.0080145,331.0846, .0111287, -.004646,
 .0007796,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0103010,.0001545,1.499668, .0103990, .0103811,
 .0101229,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0011038,.0002462,22.30366, .0009648, .0009585, .0013880,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0178416,.0002080,1.166101, .0177182, .0177249,
 .0180818,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000347,.0010071,290.3946, -.001382, -.000289,
 .0006299,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2917.299,9.517153,.3262316,2922.840,2922.748,2906.310,None,,
 Y2A,371.030 { 91}2,Cts/S,
 244599.2,822.1442,.3361190,245406.8,244627.4,243763.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 16008.05,59.23883,.3700564,16070.71,15952.95,16000.50,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3235-Q-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 17:12:46
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000132,.0004148,314.0307, .0003249, -.000485,
 -.000236,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0248615,.0133284,53.61066, .0262591, .0374360,
 .0108894,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0154147,.0025934,16.82420, .0180782, .0128975,
 .0152685,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0117367,.0106105,90.40442, .0173224, -.000500,
 .0183874,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0582479,.0011197,1.922357, .0587000, .0590709,
 .0569728,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0853671,.0001746,.2045560, .0851666, .0854862,
 .0854483,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0000041,.0000310,764.6651, -.000032, .0000193,
 .0000245,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 96.58721,.2768630,.2866456, 96.90681, 96.42074,
 96.43407,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000732,.0002775,379.2349, .0002634, -.000245,
 .0002014,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.000404,.0008463,209.4870, .0005121, -.000567,
 -.001157,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0030010,.0009096,30.30835, .0038095, .0031773,
 .0020162,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.000896,.0002467,27.52542, -.001063, -.000613,
 -.001012,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0173469,.0031414,18.10945, .0148001, .0208573,
 .0163834,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.593683,.0072470,.4547297, 1.589266, 1.589737,
 1.602047,Chk Pass,,

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Li,670.784 { 50},Y2R,ppm, .0055502,.0022034,39.69902, .0030433, .0071798,
 .0064274,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 15.89498,.0618724,.3892574, 15.94725, 15.82667,
 15.91103,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0002163,.0001092,50.51055, .0001221, .0001907,
 .0003360,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.004276,.0012966,30.32164, -.003975, -.003157,
 -.005697,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 35.97794,.0968561,.2692096, 36.08822, 35.90671,
 35.93887,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0075646,.0002588,3.421418, .0072718, .0077630,
 .0076589,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.007021,.0058472,83.28551, -.000287, -.009962, -.010813,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0040637,.0054275,133.5595, -.000063, .0102117,
 .0020428,Chk Pass,,
 S,182.034 {485},Y1,ppm, 25.96550,.0802944,.3092349, 25.92262, 26.05814, 25.91576,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.001604,.0054840,341.9147, -.002152, .0041334,
 -.006793,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.019672,.0148053,75.25907, -.033867, -.004324,
 -.020827,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.743410,.0109122,.2915053, 3.743699, 3.732356,
 3.754175,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0075407,.0023219,30.79194, .0065056, .0059163,
 .0102001,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.867992,.0053282,.2852386, 1.861952, 1.872025,
 1.870001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.017656,.0053601,30.35865, -.019446, -.011630,
 -.021892,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0024894,.0002846,11.43396, .0022597, .0024005,
 .0028078,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0069123,.0072483,104.8604, .0134882, -.000860,
 .0081084,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0003923,.0002561,65.28851, .0002277, .0002618,
 .0006873,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001577,.0024616,156.1256, .0006537, -.001166, -.004218,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0305614,.0002285,.7476452, .0305263, .0303524,
 .0308053,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0017094,.0014237,83.28880, .0000810, .0027194,
 .0023278,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2816.339,10.30979,.3660705,2826.784,2806.170,2816.062,None,,
 Y2A,371.030 { 91}2,Cts/S,
 237302.6,393.1576,.1656777,237567.6,237489.3,236850.9,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15728.30,21.24729,.1350896,15730.64,15748.27,15705.97,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=410-3235-Q-1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 17:16:05
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000

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Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	-.000306	.0002795	91.24298	-.000106	-.000187	-.000626	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	.0288615	.0394852	136.8090	-.014529	.0626818	.0384318	Chk Pass,,		
Alum ax	308.215	{109}2	Y2A,ppm	.0169683	.0042705	25.16760	.0207910	.0123593	.0177545	Chk Pass,,		
As	189.042	{478}	Y1,ppm	-.004597	.0027993	60.89117	-.002623	-.003368	-.007801	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0568200	.0003320	.5842046	.0569380	.0564452	.0570769	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0851299	.0002596	.3049001	.0851413	.0848649	.0853837	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0000214	.0000055	25.88942	.0000199	.0000167	.0000275	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	94.40652	.1774006	.1879113	94.20182	94.50211	94.51563	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	-.000057	.0001649	288.8475	.0000341	.0000421	-.000247	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	-.000788	.0000984	12.47837	-.000857	-.000676	-.000831	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0043255	.0003786	8.751709	.0046432	.0039067	.0044267	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	-.002715	.0003769	13.87969	-.002552	-.003146	-.002447	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.5638993	.0050940	.9033546	.5628126	.5694489	.5594363	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	1.590168	.0695811	4.375708	1.669756	1.540845	1.559902	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0011157	.0048982	439.0385	.0022514	.0053463	-.004251	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	15.53955	.0590060	.3797148	15.47809	15.59575	15.54481	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0799959	.0004143	.5178628	.0795946	.0799710	.0804220	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	-.005613	.0010093	17.98362	-.004476	-.006405	-.005957	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	35.02737	.1062910	.3034513	34.90504	35.09715	35.07991	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0064867	.0012424	19.15353	.0050564	.0071052	.0072985	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0020752	.0102461	493.7504	-.000341	-.006747	.0133134	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0026356	.0008644	32.79674	.0016388	.0030898	.0031783	Chk Pass,,		
S	182.034	{485}	Y1,ppm	25.14326	.1178256	.4686170	25.27134	25.03947	25.11897	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	-.004628	.0039329	84.97983	-.000565	-.004904	-.008416	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	-.018991	.0098218	51.71838	-.008524	-.020442	-.028007	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	3.672114	.0205992	.5609631	3.651963	3.671247	3.693134	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	.0035064	.0028188	80.38855	.0048847	.0002637	.0053708	Chk Pass,,		
Sr	421.552	{80}	Y2A,ppm	1.821671	.0044779	.2458151	1.816718	1.822864	1.825432	Chk Pass,,		
Th	283.730	{119}	Y2R,ppm	.0045740	.0140841	307.9171	.0208318	-.003204	-.003906	Chk Pass,,		
Ti	334.941	{101}	Y2A,ppm	.0026269	.0000473	1.798983	.0026743	.0025797				

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.0026268,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.003433,.0043947,128.0083, -.008488, -.000515,
 -.001297,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000103,.0005098,493.1519, .0004348, -.000579,
 -.000166,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001648,.0035975,218.3513, .0015409, -.005548, -.000936,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0006059,.0003366,55.55671, .0009882, .0003541,
 .0004754,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0002821,.0008317,294.8177, .0011980, -.000426,
 .0000743,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 2823.764,7.234172,.2561890,2815.522,2829.062,2826.708,None,,
 Y2A,371.030 { 91}2,Cts/S,
 235814.1,381.2886,.1616903,236205.3,235793.4,235443.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 15684.10,37.90998,.2417097,15724.15,15679.37,15648.77,None,,

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 17:19:21
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4848,.0016,.3350, .4839, .4839, .4867,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 25.00,.1076,.4306, 25.09, 25.02, 24.88,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, 25.31,.1855,.7328, 25.51, 25.14, 25.30,Chk Pass,,
 As,189.042 {478},Y1,ppm, .4976,.0147,2.953, .4933, .5140, .4856,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4896,.0017,.3544, .4899, .4878, .4912,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5278,.0033,.6270, .5245, .5277, .5311,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .50535,.00255,.50460, .50248, .50620, .50736,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 25.31,.0873,.3450, 25.35, 25.38, 25.21,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .4831,.0006,.1258, .4829, .4838, .4826,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4908,.0019,.3824, .4893, .4929, .4902,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .5002,.0010,.2048, .4991, .5004, .5011,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5166,.0010,.1862, .5170, .5155, .5173,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 25.61,.1031,.4025, 25.65, 25.69, 25.50,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 26.33,.0786,.2986, 26.30, 26.42, 26.28,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5201,.0045,.8628, .5202, .5245, .5155,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 25.87,.0737,.2851, 25.86, 25.94, 25.80,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49222,.00176,.35814, .49032, .49253, .49381,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .4788,.0009,.1923, .4797, .4789, .4779,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 26.36,.0924,.3506, 26.36, 26.45, 26.27,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .4824,.0014,.2855, .4816, .4840, .4816,Chk Pass,,
 P,177.495 {490},Y1,ppm, .5019,.0062,1.230, .5084, .5011, .4961,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4913,.0053,1.075, .4866, .4970, .4903,Chk Pass,,
 S,182.034 {485},Y1,ppm, 23.88,.0791,.3311, 23.86, 23.97, 23.82,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .4915,.0117,2.386, .4962, .4782, .5002,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4784,.0124,2.598, .4912, .4777, .4664,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 25.037,.07682,.30684, 25.072, 25.090, 24.949,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .4871,.0021,.4307, .4881, .4885, .4847,Chk Pass,,

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Sr,421.552 { 80},Y2A,ppm, .4976,.0024,.4908, .4952, .5001, .4975,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5022,.0179,3.556, .4860, .5214, .4993,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5134,.0016,.3170, .5115, .5141, .5145,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .4729,.0097,2.048, .4618, .4771, .4798,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5130,.0014,.2640, .5116, .5143, .5130,Chk Pass,,
 W,207.911 {462},Y1,ppm, .5124,.0024,.4749, .5119, .5103, .5151,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .4808,.0021,.4384, .4803, .4831, .4790,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm,F .5596,.0033,.5864, .5607, .5621, .5558,Chk
 Fail,.5000,10.00%

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2879.7,5.7834,.20083,2882.1,2873.1,2883.8
 Y2A,371.030 { 91}2,Cts/S, 239880.,1206.0,.50274,241220.,239550.,238870.
 Y2R,371.030 { 91}3,Cts/S, 15786.,16.870,.10687,15790.,15768.,15801.

[Sample Header]

Method=New TRACE Fast(v1398)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/11/2020 17:22:33
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0000,.0004,1583., -.0004, .0005, -.0000,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0059,.0646,1099., .0140, .0661, -.0624,Chk Pass,,
 Alum ax,308.215 {109}2,Y2A,ppm, .0037,.0011,30.49, .0050, .0031, .0029,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0021,.0020,94.85, .0035, .0028, -.0002,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0027,.0005,19.48, .0034, .0024, .0025,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, -.0001,.0001,111.6, -.0000, -.0001, -.0000,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00001,.00002,186.54, .00002, -.00001, .00003,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0038,.0042,110.9, .0026, .0003, .0085,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003,.0002,61.47, .0001, .0003, .0004,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.0008,.0002,27.17, -.0007, -.0007, -.0011,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0005,.0005,94.64, .0011, .0003, .0002,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0019,.0009,49.35, -.0011, -.0029, -.0015,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0013,.0075,573.0, -.0072, .0070, .0041,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0041,.0675,1635., -.0815, .0428, .0263,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0027,.0010,38.82, .0016, .0028, .0037,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0003,.0027,844.0, -.0005, -.0019, .0034,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, -.00000,.00007,1502.6, .00005, -.00008, .00001,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0009,.0003,31.39, -.0006, -.0008, -.0012,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0200,.0115,57.61, .0067, .0269, .0264,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,F .0066,.0007,10.07, .0068, .0058, .0071,Chk
 Fail,.0050, -.0050
 P,177.495 {490},Y1,ppm, -.0093,.0033,35.45, -.0093, -.0060, -.0126,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0024,.0041,170.2, -.0007, .0005, -.0070,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0074,.0089,120.5, .0019, -.0158, -.0081,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0070,.0037,53.38, -.0040, -.0112, -.0058,Chk Pass,,
 Se,196.090 {472},Y1,ppm,F -.0289,.0122,42.27, -.0316, -.0156, -.0396,Chk
 Fail,.0250, -.0250
 Si,251.611 {134},Y2R,ppm, .01469,.01239,84.343, .02894, .00858, .00654,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0056,.0031,55.20, .0091, .0037, .0039,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, -.0000,.0000,143.7, .0000, -.0000, -.0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0022,.0228,1052., -.0183, .0268, -.0020,Chk Pass,,

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Ti,334.941 {101},Y2A,ppm, .0001,.0002,229.5, .0000, .0003, -.0001,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0036,.0076,211.1, .0004, .0123, -.0019,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0001,.0005,321.1, .0003, -.0006, -.0001,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0009,.0003,34.41, -.0008, -.0012, -.0006,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0005,.0002,43.29, .0002, .0006, .0005,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0017,.0019,112.0, .0037, -.0002, .0017,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2921.4,8.4680,.28986,2930.2,2920.8,2913.3
 Y2A,371.030 { 91}2,Cts/S, 248810.,205.64,.08265,248890.,248570.,248960.
 Y2R,371.030 { 91}3,Cts/S, 15913.,59.884,.37631,15969.,15850.,15921.

T2016401T74

[Sample Header]
 Method=New TRACE Fast w axial Al(v227)
 SampleName=Matrix_Rinse
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 8:46:24
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	-.0008	.0009	117.8	.0003	-.0013	-.0013	None,,		
Al	308.215	{109}	Y2R,ppm	-.0952	.0962	101.1	-.1891	-.0996	.0032	None,,		
Al ax	308.215	{109}2	Y2A,ppm	-.0036	.0023	63.94	-.0058	-.0013	-.0036	None,,		
As	189.042	{478}	Y1,ppm	-.0022	.0110	508.6	-.0144	.0070	.0009	None,,		
B	249.773	{135}	Y2A,ppm	-.0003	.0009	293.3	-.0013	.0001	.0003	None,,		
Ba	455.403	{74}	Y2A,ppm	.0000	.0000	196.9	.0000	.0000	-.0000	None,,		
Be	313.042	{108}	Y2A,ppm	.00024	.00001	4.1629	.00025	.00023	.00025	None,,		
Ca	317.933	{106}	Y2R,ppm	-.0115	.0120	104.2	.0013	-.0134	-.0226	None,,		
Cd	226.502	{449}	Y1,ppm	.0002	.0002	87.15	.0002	.0001	.0005	None,,		
Co	228.616	{447}	Y1,ppm	-.0007	.0003	53.27	-.0010	-.0006	-.0003	None,,		
Cr	267.716	{126}	Y2A,ppm	-.0003	.0009	255.9	.0007	-.0008	-.0009	None,,		
Cu	327.396	{103}	Y2A,ppm	-.0001	.0021	2970.	-.0015	-.0011	.0024	None,,		
Fe	261.187	{129}	Y2R,ppm	.0310	.0096	30.99	.0239	.0420	.0272	None,,		
K	766.490	{44}	Y2R,ppm	.3185	.0382	12.01	.2752	.3323	.3478	None,,		
Li	670.784	{50}	Y2R,ppm	.0116	.0018	15.30	.0136	.0107	.0104	None,,		
Mg	285.213	{118}	Y2R,ppm	.0055	.0054	98.43	.0067	-.0004	.0102	None,,		
Mn	257.610	{131}	Y2A,ppm	.00003	.00024	702.30	.00001	.00028	-.00019	None,,		
Mo	202.030	{467}	Y1,ppm	.0003	.0000	17.48	.0003	.0002	.0003	None,,		
Na	589.592	{57}	Y2R,ppm	.0195	.0074	37.95	.0136	.0278	.0171	None,,		
Ni	231.604	{445}	Y1,ppm	.0002	.0011	553.0	.0010	.0005	-.0010	None,,		
P	177.495	{490}	Y1,ppm	-.0063	.0089	141.3	.0019	-.0051	-.0157	None,,		
Pb	220.353	{453}	Y1,ppm	-.0002	.0033	1512.	.0032	-.0005	-.0034	None,,		
S	182.034	{485}	Y1,ppm	-.0078	.0297	378.7	.0106	-.0421	.0080	None,,		
Sb	206.833	{463}	Y1,ppm	-.0029	.0082	284.3	-.0100	-.0047	.0061	None,,		
Se	196.090	{472}	Y1,ppm	-.0058	.0153	266.3	-.0234	.0036	.0026	None,,		
Si	251.611	{134}	Y2R,ppm	.01124	.02972	264.47	.00389	.04395	-.01412	None,,		
Sn	189.989	{477}	Y1,ppm	-.0043	.0059	138.8	-.0043	-.0102	.0017	None,,		
Sr	421.552	{80}	Y2A,ppm	.0000	.0000	95.64	.0000	.0000	-.0000	None,,		
Th	283.730	{119}	Y2R,ppm	-.0080	.0376	469.3	.0069	.0198	-.0508	None,,		
Ti	334.941	{101}	Y2A,ppm	.0003	.0001	37.35	.0004	.0002	.0003	None,,		
Tl	190.856	{477}	Y1,ppm	.0057	.0017	30.14	.0075	.0054	.0041	None,,		
V	292.402	{115}	Y2A,ppm	.0005	.0003	66.51	.0002	.0009	.0005	None,,		
W	207.911	{462}	Y1,ppm	.0016	.0012	78.66	.0030	.0008	.0009	None,,		
Zn	213.856	{458}	Y1,ppm	.0004	.0005	111.8	.0009	-.0001	.0005	None,,		
Zr	339.198	{99}	Y2R,ppm	.0019	.0073	373.5	-.0062	.0077	.0044	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	3026.4	3.9875	.13176	3027.2	3022.0	3029.9
Y2A	371.030	{91}2	Cts/S	141180.	1142.8	.80941	142500.	140560.	140490.
Y2R	371.030	{91}3	Cts/S	3899.1	18.008	.46185	3905.3	3878.8	3913.1

[Sample Header]
 Method=New TRACE Fast w axial Al(v227)
 SampleName=S0
 Username=dept 22

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Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 8:49:33
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Ag	328.068	{103}	Y2A,Cts/S	-.0016	.0011	67.47	-.0026	-.0005	-.0017
Al	308.215	{109}	Y2R,Cts/S	.0307	.0029	9.574	.0303	.0280	.0338
Al	ax,308.215	{109}2	Y2A,Cts/S	.0072	.0017	24.28	.0052	.0082	.0082
As	189.042	{478}	Y1,Cts/S	.0020	.0113	572.8	-.0105	.0115	.0049
B	249.773	{135}	Y2A,Cts/S	.0000	.0000	93.61	.0000	.0000	.0000
Ba	455.403	{74}	Y2A,Cts/S	.0007	.0001	13.12	.0008	.0006	.0007
Be	313.042	{108}	Y2A,Cts/S	.01214	.00487	40.145	.00814	.01071	.01756
Ca	317.933	{106}	Y2R,Cts/S	.0019	.0005	25.47	.0020	.0013	.0023
Cd	226.502	{449}	Y1,Cts/S	-.0479	.0256	53.51	-.0246	-.0754	-.0438
Co	228.616	{447}	Y1,Cts/S	.0277	.0092	33.21	.0190	.0268	.0374
Cr	267.716	{126}	Y2A,Cts/S	.0001	.0000	20.13	.0001	.0001	.0001
Cu	327.396	{103}	Y2A,Cts/S	.0018	.0009	50.43	.0008	.0026	.0021
Fe	261.187	{129}	Y2R,Cts/S	-.0002	.0003	168.6	-.0001	-.0005	.0001
K	766.490	{44}	Y2R,Cts/S	.6474	.0912	14.08	.5436	.7144	.6844
Li	670.784	{50}	Y2R,Cts/S	.0029	.0002	5.865	.0031	.0029	.0028
Mg	285.213	{118}	Y2R,Cts/S	.0003	.0004	150.0	.0005	.0006	-.0002
Mn	257.610	{131}	Y2A,Cts/S	-.00068	.00108	157.89	-.00088	-.00165	.00048
Mo	202.030	{467}	Y1,Cts/S	-.0048	.0181	377.7	.0114	-.0244	-.0014
Na	589.592	{57}	Y2R,Cts/S	.0359	.0038	10.71	.0392	.0368	.0317
Ni	231.604	{445}	Y1,Cts/S	.0317	.0188	59.25	.0448	.0102	.0402
P	177.495	{490}	Y1,Cts/S	.0008	.0001	13.63	.0008	.0008	.0006
Pb	220.353	{453}	Y1,Cts/S	.0035	.0116	334.3	.0093	-.0099	.0109
S	182.034	{485}	Y1,Cts/S	.0012	.0001	12.45	.0010	.0013	.0012
Sb	206.833	{463}	Y1,Cts/S	.0000	.0005	1258.	.0005	-.0005	.0001
Se	196.090	{472}	Y1,Cts/S	.0065	.0104	161.7	-.0036	.0058	.0172
Si	251.611	{134}	Y2R,Cts/S	.00002	.00021	1035.3	.00022	-.00020	.00004
Sn	189.989	{477}	Y1,Cts/S	.0208	.0009	4.088	.0218	.0204	.0203
Sr	421.552	{80}	Y2A,Cts/S	-.0003	.0001	20.45	-.0003	-.0003	-.0004
Th	283.730	{119}	Y2R,Cts/S	-.0001	.0008	973.0	-.0000	-.0009	.0007
Ti	334.941	{101}	Y2A,Cts/S	.0027	.0022	80.99	.0045	.0003	.0033
Tl	190.856	{477}	Y1,Cts/S	.0058	.0066	115.0	-.0013	.0067	.0118
V	292.402	{115}	Y2A,Cts/S	-.0052	.0031	59.00	-.0070	-.0069	-.0017
W	207.911	{462}	Y1,Cts/S	.0001	.0002	126.8	-.0000	.0001	.0003
Zn	213.856	{458}	Y1,Cts/S	.0276	.0296	107.2	.0338	.0537	-.0046
Zr	339.198	{99}	Y2R,Cts/S	.0001	.0009	667.6	.0009	-.0008	.0003

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	3046.0	2.9147	.09569	3046.1	3043.0	3048.8
Y2A	371.030	{91}2	Cts/S	141800.	1072.5	.75636	142100.	142680.	140600.
Y2R	371.030	{91}3	Cts/S	3910.1	29.428	.75262	3877.1	3933.5	3919.7

[Sample Header]

Method=New TRACE Fast w axial A1(v227)
 SampleName=S1
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 8:52:41

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Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Al,308.215 {109},Y2R,Cts/S, 14.09,.0746,.5298, 14.14, 14.00, 14.12
 Al ax,308.215 {109}2,Y2A,Cts/S, 20.04,.0257,.1282, 20.05, 20.06, 20.01
 Ca,317.933 {106},Y2R,Cts/S, 3.286,.0139,.4227, 3.293, 3.270, 3.295
 Fe,261.187 {129},Y2R,Cts/S, .9428,.0024,.2506, .9411, .9419, .9455
 K,766.490 { 44},Y2R,Cts/S, 230.0,.1725,.0750, 230.2, 230.0, 229.8
 Mg,285.213 {118},Y2R,Cts/S, 4.312,.0142,.3286, 4.310, 4.298, 4.327
 Na,589.592 { 57},Y2R,Cts/S, 11.11,.0314,.2830, 11.10, 11.08, 11.15
 S,182.034 {485},Y1,Cts/S, .7338,.0019,.2608, .7317, .7344, .7353
 Si,251.611 {134},Y2R,Cts/S, .66179,.00225,.34020, .66438, .66030, .66070

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2899.3,5.5395,.19107,2904.0,2900.6,2893.2
 Y2A,371.030 { 91}2,Cts/S, 135630.,1103.9,.81395,134830.,135170.,136890.
 Y2R,371.030 { 91}3,Cts/S, 3872.5,17.016,.43939,3855.5,3872.6,3889.5

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=S2
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 8:55:46
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Ag,328.068 {103},Y2A,Cts/S, 4.381,.0139,.3164, 4.367, 4.381, 4.394
 As,189.042 {478},Y1,Cts/S, 1.082,.0015,.1404, 1.080, 1.083, 1.083
 B,249.773 {135},Y2A,Cts/S, .0404,.0002,.6027, .0403, .0403, .0407
 Ba,455.403 { 74},Y2A,Cts/S, 3.672,.0095,.2589, 3.677, 3.679, 3.661
 Be,313.042 {108},Y2A,Cts/S, 105.66,.97510,.92283, 104.54, 106.17, 106.28
 Cd,226.502 {449},Y1,Cts/S, 117.1,.0621,.0531, 117.2, 117.1, 117.1
 Co,228.616 {447},Y1,Cts/S, 28.22,.0484,.1716, 28.27, 28.21, 28.18
 Cu,327.396 {103},Y2A,Cts/S, 2.233,.0081,.3649, 2.230, 2.227, 2.243
 Li,670.784 { 50},Y2R,Cts/S, 1.578,.0072,.4560, 1.581, 1.583, 1.570
 Mn,257.610 {131},Y2A,Cts/S, 16.689,.03523,.21108, 16.654, 16.689, 16.724
 Ni,231.604 {445},Y1,Cts/S, 14.34,.0508,.3542, 14.37, 14.37, 14.28
 P,177.495 {490},Y1,Cts/S, .0434,.0005,1.248, .0437, .0427, .0436
 Pb,220.353 {453},Y1,Cts/S, 8.777,.0245,.2795, 8.763, 8.763, 8.806
 Se,196.090 {472},Y1,Cts/S, 1.309,.0038,.2894, 1.306, 1.309, 1.313
 Sr,421.552 { 80},Y2A,Cts/S, 3.753,.0453,1.206, 3.704, 3.761, 3.794
 Th,283.730 {119},Y2R,Cts/S, .0114,.0011,9.384, .0126, .0111, .0106
 Tl,190.856 {477},Y1,Cts/S, 2.779,.0202,.7274, 2.787, 2.793, 2.756
 W,207.911 {462},Y1,Cts/S, .1179,.0005,.3883, .1181, .1174, .1182
 Zn,213.856 {458},Y1,Cts/S, 66.50,.1001,.1505, 66.49, 66.41, 66.61

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2940.0,7.7729,.26439,2938.8,2948.3,2932.8
 Y2A,371.030 { 91}2,Cts/S, 136460.,902.75,.66155,137490.,135800.,136090.

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Y2R,371.030 { 91}3,Cts/S, 3867.3,42.418,1.0968,3841.7,3843.9,3916.2

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=S3
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 8:59:09
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Cr,267.716 {126},Y2A,Cts/S, .0442,.0001,.2047, .0441, .0443, .0442
 Mo,202.030 {467},Y1,Cts/S, 15.60,.0880,.5643, 15.70, 15.56, 15.54
 Sb,206.833 {463},Y1,Cts/S, .0617,.0001,.2026, .0618, .0615, .0617
 Sn,189.989 {477},Y1,Cts/S, 2.128,.0049,.2291, 2.129, 2.123, 2.132
 Ti,334.941 {101},Y2A,Cts/S, 14.26,.0506,.3544, 14.21, 14.29, 14.30
 V,292.402 {115},Y2A,Cts/S, 2.886,.0064,.2221, 2.889, 2.890, 2.878
 Zr,339.198 { 99},Y2R,Cts/S, .1177,.0006,.5008, .1179, .1171, .1182

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3050.4,7.1590,.23469,3042.9,3057.2,3051.1
 Y2A,371.030 { 91}2,Cts/S, 143790.,1090.8,.75861,145050.,143170.,143160.
 Y2R,371.030 { 91}3,Cts/S, 3966.8,12.519,.31560,3960.2,3959.1,3981.3

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=ICV 62173
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:02:16
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .5885,.0023,.3976, .5879, .5865, .5911,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 29.67,.3402,1.146, 29.77, 29.95, 29.30,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 29.21,.0172,.0589, 29.19, 29.21, 29.22,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5879,.0200,3.404, .5854, .5692, .6090,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .5963,.0028,.4648, .5937, .5962, .5992,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5994,.0106,1.762, .5895, .6105, .5981,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .57419,.00122,.21214, .57326, .57374, .57557,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 29.18,.1973,.6762, 29.15, 29.39, 29.00,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5908,.0010,.1772, .5918, .5909, .5897,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .5890,.0014,.2316, .5874, .5899, .5895,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .5877,.0008,.1344, .5874, .5871, .5886,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .6027,.0007,.1117, .6035, .6022, .6025,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 28.98,.1126,.3887, 28.98, 29.09, 28.87,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 29.57,.1360,.4600, 29.67, 29.63, 29.42,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .6154,.0024,.3914, .6127, .6160, .6174,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 29.29,.2022,.6904, 29.28, 29.51, 29.10,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .58142,.00140,.24105, .58091, .58034, .58300,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .5999,.0012,.1986, .5986, .6010, .6002,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 28.75,.0912,.3173, 28.74, 28.84, 28.66,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .5877,.0038,.6472, .5834, .5891, .5907,Chk Pass,,
P,177.495 {490},Y1,ppm, .6009,.0018,.3010, .5991, .6027, .6009,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .5828,.0048,.8205, .5779, .5831, .5874,Chk Pass,,
S,182.034 {485},Y1,ppm, 29.68,.0397,.1338, 29.71, 29.63, 29.68,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .6192,.0021,.3400, .6169, .6210, .6196,Chk Pass,,
Se,196.090 {472},Y1,ppm, .5893,.0062,1.056, .5965, .5854, .5860,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 29.901,.13270,.44378, 29.963, 29.991, 29.749,None,,
Sn,189.989 {477},Y1,ppm, .5778,.0030,.5213, .5780, .5806, .5746,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .6000,.0020,.3358, .5988, .6023, .5988,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .6057,.0456,7.532, .5542, .6219, .6410,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .6089,.0008,.1386, .6081, .6090, .6098,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .5929,.0055,.9308, .5868, .5976, .5944,Chk Pass,,
V,292.402 {115},Y2A,ppm, .6035,.0012,.2022, .6021, .6038, .6045,Chk Pass,,
W,207.911 {462},Y1,ppm, .5951,.0019,.3138, .5951, .5932, .5969,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5835,.0012,.2110, .5846, .5836, .5822,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .6021,.0067,1.108, .6070, .5945, .6047,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 2939.0,72750,.02475,2939.0,2939.8,2938.3

Y2A,371.030 { 91}2,Cts/S, 136500,.414.28,.30349,136940.,136450.,136120.

Y2R,371.030 { 91}3,Cts/S, 3858.3,24.586,.63722,3863.2,3831.7,3880.1

[Sample Header]

Method=New TRACE Fast w axial Al(v227)

SampleName=ICV 62173

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/12/2020 9:05:28

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .5877,.0024,.4086, .5881, .5899, .5851,Chk Pass,,

Al,308.215 {109},Y2R,ppm, 29.31,.0664,.2266, 29.36, 29.34, 29.24,Chk Pass,,

Al ax,308.215 {109}2,Y2A,ppm, 29.19,.1564,.5357, 29.23, 29.32, 29.01,Chk Pass,,

As,189.042 {478},Y1,ppm, .6004,.0039,.6437, .6036, .6014, .5961,Chk Pass,,

B,249.773 {135},Y2A,ppm, .5981,.0031,.5252, .5951, .6013, .5979,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .5982,.0089,1.493, .6084, .5920, .5942,Chk Pass,,

Be,313.042 {108},Y2A,ppm, .57437,.00226,.39406, .57498, .57627, .57187,Chk Pass,,

Ca,317.933 {106},Y2R,ppm, 29.12,.0632,.2169, 29.07, 29.09, 29.19,Chk Pass,,

Cd,226.502 {449},Y1,ppm, .5916,.0010,.1678, .5914, .5908, .5927,Chk Pass,,

Co,228.616 {447},Y1,ppm, .5892,.0009,.1568, .5889, .5885, .5903,Chk Pass,,

Cr,267.716 {126},Y2A,ppm, .5895,.0019,.3250, .5885, .5917, .5883,Chk Pass,,

Cu,327.396 {103},Y2A,ppm, .6080,.0032,.5318, .6046, .6111, .6084,Chk Pass,,

Fe,261.187 {129},Y2R,ppm, 28.86,.1440,.4990, 28.91, 28.70, 28.97,Chk Pass,,

K,766.490 { 44},Y2R,ppm, 29.26,.0754,.2578, 29.33, 29.28, 29.18,Chk Pass,,

Li,670.784 { 50},Y2R,ppm, .6165,.0028,.4545, .6159, .6141, .6196,Chk Pass,,

Mg,285.213 {118},Y2R,ppm, 29.13,.0147,.0504, 29.15, 29.12, 29.14,Chk Pass,,

Mn,257.610 {131},Y2A,ppm, .58017,.00220,.37860, .58083, .58196, .57772,Chk Pass,,

Mo,202.030 {467},Y1,ppm, .6002,.0027,.4428, .6031, .5979, .5995,Chk Pass,,

Na,589.592 { 57},Y2R,ppm, 28.64,.0139,.0486, 28.63, 28.65, 28.65,Chk Pass,,

Ni,231.604 {445},Y1,ppm, .5871,.0009,.1612, .5882, .5866, .5865,Chk Pass,,

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P,177.495 {490},Y1,ppm, .6043,.0039,.6387, .6042, .6081, .6004,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .5808,.0036,.6272, .5789, .5784, .5850,Chk Pass,,
 S,182.034 {485},Y1,ppm, 29.80,.0587,.1969, 29.75, 29.78, 29.86,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6171,.0054,.8764, .6211, .6193, .6110,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5811,.0068,1.169, .5877, .5814, .5741,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 29.921,.19756,.66027, 30.013, 29.694, 30.056,None,,
 Sn,189.989 {477},Y1,ppm, .5853,.0046,.7824, .5805, .5896, .5859,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5964,.0031,.5165, .6000, .5945, .5948,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5856,.0393,6.711, .5558, .6302, .5709,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .6091,.0017,.2859, .6087, .6110, .6076,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .5975,.0048,.8001, .6009, .5920, .5995,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .6058,.0014,.2363, .6065, .6067, .6041,Chk Pass,,
 W,207.911 {462},Y1,ppm, .5909,.0021,.3602, .5909, .5889, .5931,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .5865,.0018,.3127, .5846, .5866, .5882,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .6010,.0065,1.082, .6036, .6058, .5936,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 2945.5,3.4750,.11798,2945.4,2949.0,2942.0
 Y2A,371.030 { 91}2,Cts/s, 137410.,320.97,.23359,137060.,137690.,137470.
 Y2R,371.030 { 91}3,Cts/s, 3918.7,18.519,.47259,3922.9,3898.5,3934.8

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=ICB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:08:40
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.0006,.0011,191.3, -.0017, .0004, -.0004,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.0316,.1110,351.4, -.0289, -.1438, .0780,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0221,.0107,48.39, .0340, .0191, .0132,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0027,.0071,259.8, -.0033, .0009, .0105,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0015,.0006,36.39, .0009, .0018, .0019,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0004,.0001,27.29, .0006, .0004, .0003,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00068,.00010,14.054, .00077, .00068, .00058,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, -.0065,.0233,360.9, -.0314, -.0029, .0149,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002,.0001,47.88, .0003, .0001, .0001,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0006,.0007,123.0, .0001, .0014, .0002,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.0001,.0005,377.6, -.0007, .0001, .0002,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0009,.0016,168.8, .0027, -.0003, .0004,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0122,.0210,172.7, .0004, -.0003, .0364,Chk Pass,,
 K,766.490 { 44},Y2R,ppm,F .2539,.0365,14.37, .2282, .2956, .2377,Chk
 Fail, .2500, -.2500
 Li,670.784 { 50},Y2R,ppm,W .0224,.0008,3.748, .0216, .0225, .0233,Chk
 Warn, .0188, -.0188
 Mg,285.213 {118},Y2R,ppm, .0004,.0098,2358., -.0009, -.0087, .0108,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00039,.00013,32.940, .00051, .00042, .00025,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0007,.0003,40.93, .0009, .0009, .0004,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0284,.0179,62.94, .0279, .0108, .0465,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0011,.0007,62.93, .0003, .0014, .0015,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.0026,.0044,171.0, -.0046, .0025, -.0057,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0004,.0016,430.2, .0022, -.0005, -.0006,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0293,.0074,25.34, .0356, .0211, .0312,Chk Pass,,

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Sb,206.833 {463},Y1,ppm, -.0005,.0029,609.2, -.0029, .0027, -.0013,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0024,.0072,306.9, -.0055, .0087, .0039,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .02276,.05146,226.05, -.03571, .04287, .06112,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0060,.0056,93.13, -.0103, .0003, -.0080,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0004,.0001,24.21, .0005, .0004, .0003,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.0317,.0516,162.6, -.0894, -.0157, .0099,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0003,.0003,101.1, .0006, .0003, -.0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0091,.0016,17.11, .0108, .0088, .0078,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0007,.0006,94.07, .0013, .0005, .0001,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.0000,.0010,5274., -.0011, .0010, .0000,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0007,.0002,29.67, .0006, .0006, .0009,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0038,.0088,230.1, .0118, .0054, -.0057,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3003.0,8.9491,.29801,2997.1,2998.5,3013.3
 Y2A,371.030 { 91}2,Cts/S, 140510.,456.79,.32509,140710.,140840.,139990.
 Y2R,371.030 { 91}3,Cts/S, 3881.2,22.635,.58320,3907.2,3870.2,3866.1

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=CRI 078291
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:11:50
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0095,.0009,9.842, .0087, .0092, .0105,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .2183,.0613,28.09, .2892, .1831, .1828,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .2033,.0101,4.945, .2018, .2141, .1941,Chk Pass,,
 As,189.042 {478},Y1,ppm,W .0384,.0086,22.41, .0350, .0321, .0482,Chk
 warn,.0300,20.00%
 B,249.773 {135},Y2A,ppm, .0294,.0011,3.815, .0307, .0292, .0285,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0053,.0000,.4768, .0053, .0053, .0054,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00527,.00004,.81195, .00528, .00530, .00522,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .2029,.0012,.6009, .2039, .2016, .2033,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0055,.0001,2.011, .0054, .0056, .0054,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0057,.0005,8.072, .0062, .0053, .0058,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0145,.0003,2.400, .0148, .0141, .0147,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm,W .0123,.0015,12.20, .0132, .0132, .0106,Chk
 warn,.0200,-20.00%
 Fe,261.187 {129},Y2R,ppm, .2104,.0075,3.570, .2118, .2172, .2023,Chk Pass,,
 K,766.490 { 44},Y2R,ppm,F .5749,.0281,4.882, .5837, .5975, .5435,Chk
 Fail,.3000,50.00%
 Li,670.784 { 50},Y2R,ppm,W .0715,.0019,2.652, .0727, .0724, .0693,Chk
 warn,.0500,20.00%
 Mg,285.213 {118},Y2R,ppm, .0972,.0100,10.30, .0979, .1069, .0869,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .01036,.00001,.12604, .01036, .01037, .01034,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0104,.0002,1.662, .0103, .0106, .0104,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .9965,.0155,1.553, .9791, 1.009, 1.002,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,W .0127,.0008,6.019, .0130, .0132, .0118,Chk
 warn,.0100,20.00%
 P,177.495 {490},Y1,ppm, .0994,.0032,3.235, .0976, .1031, .0975,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0158,.0019,12.07, .0149, .0146, .0180,Chk Pass,,
 S,182.034 {485},Y1,ppm, .5182,.0174,3.356, .5383, .5092, .5072,Chk Pass,,

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Sb,206.833 {463},Y1,ppm, .0522,.0013,2.406, .0508, .0526, .0533,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0468,.0056,11.95, .0493, .0507, .0404,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .51042,.00265,.51957, .51346, .50859, .50921,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0444,.0041,9.152, .0409, .0488, .0434,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0053,.0000,.5363, .0052, .0053, .0053,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .4575,.0658,14.38, .4389, .4030, .5305,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0102,.0000,.1631, .0102, .0102, .0102,Chk Pass,,
 Tl,190.856 {477},Y1,ppm,w .0386,.0005,1.368, .0381, .0392, .0384,Chk
 Warn,.0300,20.00%
 V,292.402 {115},Y2A,ppm, .0113,.0003,2.510, .0113, .0110, .0116,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0301,.0011,3.561, .0309, .0288, .0304,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0229,.0000,.1934, .0229, .0230, .0230,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0526,.0018,3.426, .0516, .0547, .0516,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3035.2,7.9004,.26029,3041.3,3026.3,3038.1
 Y2A,371.030 { 91}2,Cts/S, 142060.,388.19,.27326,141660.,142090.,142430.
 Y2R,371.030 { 91}3,Cts/S, 3901.3,44.011,1.1281,3952.1,3874.3,3877.6

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=ICSA 078287
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:14:58
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0002,.0012,480.2, .0007, -.0011, .0012,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 504.1,6.261,1.242, 510.1, 504.7, 497.6,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 513.6,8.396,1.635, 507.5, 510.1, 523.2,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0195,.0046,23.67, .0231, .0211, .0143,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0036,.0021,58.30, -.0055, -.0042, -.0013,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0020,.0000,.2738, .0020, .0020, .0020,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00025,.00006,24.685, -.00030, -.00026, -.00018,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, 503.6,5.458,1.084, 509.7, 501.5, 499.4,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0023,.0001,4.786, .0024, .0022, .0022,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0032,.0006,17.04, .0034, .0026, .0037,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.0025,.0007,28.19, -.0032, -.0024, -.0018,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0014,.0023,167.2, -.0017, .0011, -.0035,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 201.8,2.223,1.101, 204.4, 200.8, 200.2,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.1035,.0227,21.90, -.1138, -.0775, -.1191,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0095,.0006,6.659, .0098, .0100, .0088,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 530.9,12.92,2.433, 544.1, 530.3, 518.3,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00029,.00023,81.189, .00005, .00030, .00051,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0010,.0002,22.49, -.0008, -.0012, -.0010,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0736,.0042,5.692, .0731, .0780, .0696,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, -.0005,.0009,170.8, -.0014, -.0007, .0005,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0014,.0014,95.19, .0015, .0001, .0028,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0026,.0008,30.26, -.0019, -.0035, -.0025,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0998,.0252,25.21, -.0733, -.1029, -.1233,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0023,.0038,169.5, .0041, .0048, -.0021,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0039,.0029,75.12, .0005, .0056, .0055,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .03654,.03270,89.477, .00750, .03017, .07196,Chk Pass,,

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Sn,189.989 {477},Y1,ppm, -.0100,.0053,52.65, -.0156, -.0052, -.0091,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm,w -.0088,.0001,1.516, -.0090, -.0088, -.0087,Chk
 Warn,-.0050,-.0050
 Th,283.730 {119},Y2R,ppm, .1216,.0575,47.29, .1125, .0692, .1831,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0032,.0002,7.227, -.0030, -.0032, -.0034,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0189,.0027,14.38, .0169, .0179, .0220,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0016,.0012,73.21, -.0021, -.0003, -.0025,Chk Pass,,
 w,207.911 {462},Y1,ppm, .0021,.0050,240.9, -.0029, .0071, .0020,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0127,.0008,6.084, .0123, .0122, .0136,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0062,.0007,11.13, .0055, .0062, .0069,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 2687.4,9.6117,.35765,2686.5,2697.4,2678.3
 Y2A,371.030 { 91}2,Cts/s, 125120.,1318.9,1.0541,124480.,126640.,124240.
 Y2R,371.030 { 91}3,Cts/s, 3690.0,43.184,1.1703,3646.0,3691.6,3732.3

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=ICSAB 070731
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:18:12
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .2117,.0016,.7535, .2107, .2107, .2135,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 522.0,1.920,.3678, 522.1, 520.0, 523.8,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 529.8,3.345,.6313, 526.9, 529.2, 533.5,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0988,.0071,7.175, .0920, .1061, .0983,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0043,.0003,6.151, -.0045, -.0043, -.0040,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5072,.0056,1.102, .5119, .5010, .5085,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .49370,.00071,.14433, .49288, .49419, .49402,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 514.7,2.603,.5058, 512.1, 514.7, 517.3,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .9227,.0040,.4319, .9255, .9244, .9181,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4647,.0036,.7668, .4682, .4646, .4611,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4866,.0013,.2615, .4856, .4862, .4880,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5425,.0018,.3265, .5443, .5426, .5407,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 206.1,1.250,.6068, 204.8, 206.1, 207.3,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.1839,.0472,25.65, -.1753, -.1417, -.2348,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0103,.0033,31.84, .0076, .0092, .0139,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 535.7,3.057,.5707, 534.5, 533.4, 539.1,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .47530,.00145,.30531, .47367, .47574, .47647,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.0020,.0011,57.75, -.0015, -.0032, -.0011,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0942,.0293,31.17, .0604, .1140, .1080,Chk Pass,,
 Ni,231.604 {445},Y1,ppm,w .9000,.0022,.2399, .9016, .8975, .9008,Chk
 Warn,1.100,.9000
 P,177.495 {490},Y1,ppm, -.0141,.0128,90.87, -.0281, -.0032, -.0108,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4990,.0054,1.077, .5003, .5036, .4931,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.1513,.0230,15.22, -.1772, -.1435, -.1331,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6332,.0071,1.118, .6348, .6393, .6254,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5263,.0077,1.459, .5214, .5352, .5225,Chk Pass,,
 Si,251.611 {134},Y2R,ppm,F -.00075,.01489,1981.9, .01478, -.01490, -.00213,Chk
 Fail,1.0000,1.0000
 Sn,189.989 {477},Y1,ppm, .0012,.0062,496.5, -.0029, -.0017, .0083,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm,w -.0090,.0001,.8006, -.0089, -.0091, -.0091,Chk

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Warn, .0050, -.0050
 Th, 283.730 {119}, Y2R, ppm, .1028, .0146, 14.24, .0886, .1020, .1178, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, -.0024, .0002, 8.804, -.0022, -.0025, -.0026, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .1002, .0069, 6.854, .1081, .0965, .0960, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .5098, .0018, .3626, .5110, .5076, .5107, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, F -.0009, .0043, 477.8, .0011, -.0058, .0020, Chk
 Fail, -.0600, -.0600
 Zn, 213.856 {458}, Y1, ppm, 1.004, .0040, .4013, 1.008, 1.004, .9999, Chk Pass,,
 Zr, 339.198 {99}, Y2R, ppm, .0056, .0103, 185.0, .0093, .0135, -.0061, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3
 Y1, 224.306 {450}, Cts/S, 2682.9, 3.4842, .12986, 2683.0, 2686.4, 2679.4
 Y2A, 371.030 {91}2, Cts/S, 125390., 251.73, .20076, 125660., 125350., 125160.
 Y2R, 371.030 {91}3, Cts/S, 3786.2, 37.872, 1.0003, 3825.8, 3782.3, 3750.4

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:21:26
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .4928, .0024, .4819, .4936, .4901, .4946, Chk Pass,,
 Al, 308.215 {109}, Y2R, ppm, 25.12, .0997, .3969, 25.19, 25.01, 25.17, Chk Pass,,
 Al ax, 308.215 {109}2, Y2A, ppm, 24.82, .0510, .2057, 24.76, 24.86, 24.83, Chk Pass,,
 As, 189.042 {478}, Y1, ppm, .5026, .0091, 1.813, .5125, .4946, .5007, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .4848, .0039, .7978, .4808, .4851, .4885, Chk Pass,,
 Ba, 455.403 {74}, Y2A, ppm, .5085, .0018, .3466, .5065, .5098, .5093, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, .48938, .00057, .11560, .48908, .48902, .49003, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 24.72, .0666, .2693, 24.67, 24.80, 24.69, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .5039, .0012, .2436, .5051, .5041, .5026, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .5002, .0003, .0680, .5001, .4999, .5006, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .4980, .0039, .7890, .4944, .4973, .5022, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .5176, .0054, 1.052, .5142, .5147, .5238, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, 24.57, .0807, .3285, 24.49, 24.57, 24.65, Chk Pass,,
 K, 766.490 {44}, Y2R, ppm, 25.01, .0218, .0873, 25.01, 25.04, 24.99, Chk Pass,,
 Li, 670.784 {50}, Y2R, ppm, .5144, .0031, .5938, .5118, .5177, .5136, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 24.70, .1566, .6339, 24.88, 24.66, 24.57, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .49067, .00200, .40757, .48941, .48963, .49298, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .5010, .0013, .2678, .5025, .5005, .5000, Chk Pass,,
 Na, 589.592 {57}, Y2R, ppm, 24.73, .1999, .8084, 24.96, 24.64, 24.59, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .4996, .0006, .1282, .4999, .5001, .4989, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .5036, .0071, 1.414, .5116, .4981, .5011, Chk Pass,,
 Pb, 220.353 {453}, Y1, ppm, .4970, .0030, .6014, .4935, .4986, .4988, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 24.82, .0548, .2208, 24.84, 24.86, 24.76, Chk Pass,,
 Sb, 206.833 {463}, Y1, ppm, .5061, .0041, .8048, .5078, .5090, .5014, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .5069, .0031, .6130, .5039, .5101, .5067, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 24.859, .09787, .39371, 24.939, 24.750, 24.889, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .4922, .0088, 1.788, .4926, .4832, .5008, Chk Pass,,
 Sr, 421.552 {80}, Y2A, ppm, .5057, .0018, .3508, .5037, .5072, .5063, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, W .4560, .0668, 14.65, .5246, .3912, .4523, Chk
 Warn, .5000, -.8.000%
 Ti, 334.941 {101}, Y2A, ppm, .5127, .0010, .1917, .5131, .5116, .5134, Chk Pass,,

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Tl,190.856 {477},Y1,ppm, .5131,.0046,.8966, .5077, .5157, .5157,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5107,.0024,.4780, .5081, .5110, .5129,Chk Pass,,
 W,207.911 {462},Y1,ppm, .4995,.0030,.5974, .5029, .4984, .4972,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .5085,.0007,.1308, .5087, .5077, .5090,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .5218,.0053,1.012, .5262, .5159, .5232,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2964.9,10.945,.36916,2965.1,2953.9,2975.8
 Y2A,371.030 { 91}2,Cts/S, 139130.,1119.7,.80479,140410.,138340.,138630.
 Y2R,371.030 { 91}3,Cts/S, 3964.7,44.142,1.1134,3958.4,3924.1,4011.7

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:24:39
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0001,.0011,1052., .0004, -.0011, .0011,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0086,.0857,990.9, .0690, .0464, -.0894,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0288,.0005,1.747, .0293, .0283, .0289,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0050,.0049,97.28, .0098, .0053, .0000,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0011,.0008,71.59, .0008, .0005, .0020,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0001,.0000,37.41, .0000, .0001, .0001,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00038,.00001,3.3752, .00037, .00037, .00039,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0133,.0093,69.82, .0241, .0083, .0076,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002,.0000,6.901, .0003, .0002, .0002,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0005,.0002,35.21, .0006, .0003, .0006,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.0002,.0003,116.9, -.0004, -.0003, .0001,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0009,.0016,174.8, -.0026, .0005, -.0006,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0137,.0113,82.60, .0151, .0243, .0018,Chk Pass,,
 K,766.490 { 44},Y2R,ppm,F .2909,.0449,15.43, .3422, .2712, .2592,Chk
 Fail,.2500,-.2500
 Li,670.784 { 50},Y2R,ppm,w .0208,.0015,7.417, .0203, .0195, .0225,Chk
 warn,.0188,-.0188
 Mg,285.213 {118},Y2R,ppm, .0251,.0048,18.99, .0232, .0305, .0216,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00011,.00011,97.754, .00023, .00003, .00007,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0002,.0006,288.6, .0009, -.0000, -.0003,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0131,.0028,21.06, .0159, .0131, .0104,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0017,.0016,94.90, .0002, .0014, .0034,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.0009,.0027,296.1, .0015, -.0038, -.0004,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0016,.0010,62.58, -.0009, -.0028, -.0012,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0225,.0064,28.28, .0296, .0173, .0208,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0016,.0045,278.3, .0004, .0015, -.0068,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0039,.0048,122.3, .0048, .0081, -.0013,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .00535,.01980,370.20, .00748, -.01543, .02399,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0108,.0056,51.81, -.0127, -.0152, -.0045,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,12.29, .0001, .0001, .0001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0300,.0286,95.13, .0592, .0022, .0286,Chk Pass,,
 Tl,334.941 {101},Y2A,ppm, .0002,.0002,76.32, .0001, .0001, .0004,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0072,.0026,35.98, .0094, .0077, .0044,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0001,.0002,113.8, -.0003, -.0001, -.0000,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0014,.0008,55.35, .0005, .0021, .0016,Chk Pass,,

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Zn,213.856 {458},Y1,ppm, .0005,.0003,73.87, .0007, .0001, .0005,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0027,.0054,200.5, -.0003, .0089, -.0006,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2992.1,5.4871,.18339,2994.5,2985.8,2996.0
 Y2A,371.030 { 91}2,Cts/S, 140530.,1544.8,1.0993,141620.,141200.,138760.
 Y2R,371.030 { 91}3,Cts/S, 3887.6,42.731,1.0992,3850.0,3878.6,3934.1

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=LRC 083291
 Username=dept 22
 Comment=LRS2
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:27:48
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, 2.472,.0397,1.607, 2.435, 2.467, 2.514,None,,
 Al,308.215 {109},Y2R,ppm, 1.907,.1189,6.238, 2.026, 1.789, 1.905,None,,
 Al ax,308.215 {109}2,Y2A,ppm, 2.145,.0038,.1760, 2.144, 2.149, 2.141,None,,
 As,189.042 {478},Y1,ppm, 20.03,.0449,.2243, 20.08, 20.02, 19.99,None,,
 B,249.773 {135},Y2A,ppm, 4.637,.0264,.5701, 4.614, 4.631, 4.666,None,,
 Ba,455.403 { 74},Y2A,ppm, 4.707,.0388,.8242, 4.678, 4.751, 4.692,None,,
 Be,313.042 {108},Y2A,ppm, 4.6924,.03689,.78623, 4.6519, 4.7012, 4.7241,None,,
 Ca,317.933 {106},Y2R,ppm, -.1110,.0118,10.67, -.1197, -.1157, -.0975,None,,
 Cd,226.502 {449},Y1,ppm, 20.01,.0776,.3878, 20.09, 19.98, 19.95,None,,
 Co,228.616 {447},Y1,ppm, 20.86,.0921,.4417, 20.97, 20.83, 20.79,None,,
 Cr,267.716 {126},Y2A,ppm, 20.01,.0495,.2474, 19.96, 20.05, 20.01,None,,
 Cu,327.396 {103},Y2A,ppm, 20.82,.0156,.0748, 20.83, 20.80, 20.83,None,,
 Fe,261.187 {129},Y2R,ppm, .0093,.0066,71.30, .0170, .0051, .0058,None,,
 K,766.490 { 44},Y2R,ppm, .2105,.0065,3.100, .2167, .2037, .2112,None,,
 Li,670.784 { 50},Y2R,ppm, 19.10,.0732,.3832, 19.18, 19.05, 19.06,None,,
 Mg,285.213 {118},Y2R,ppm, -.0199,.0019,9.653, -.0217, -.0200, -.0179,None,,
 Mn,257.610 {131},Y2A,ppm, 18.302,.12138,.66320, 18.182, 18.425, 18.297,None,,
 Mo,202.030 {467},Y1,ppm, 20.80,.0950,.4569, 20.91, 20.75, 20.75,None,,
 Na,589.592 { 57},Y2R,ppm, .0459,.0234,50.94, .0729, .0307, .0342,None,,
 Ni,231.604 {445},Y1,ppm, 20.72,.0730,.3521, 20.80, 20.68, 20.67,None,,
 P,177.495 {490},Y1,ppm, 20.24,.0784,.3875, 20.32, 20.21, 20.17,None,,
 Pb,220.353 {453},Y1,ppm, 20.56,.0733,.3567, 20.64, 20.50, 20.54,None,,
 S,182.034 {485},Y1,ppm, .4443,.0113,2.553, .4344, .4418, .4567,None,,
 Sb,206.833 {463},Y1,ppm, 21.60,.0394,.1823, 21.63, 21.61, 21.56,None,,
 Se,196.090 {472},Y1,ppm, 20.33,.0835,.4109, 20.41, 20.24, 20.34,None,,
 Si,251.611 {134},Y2R,ppm, 1.1355,.10479,9.2279, 1.0373, 1.1235, 1.2458,None,,
 Sn,189.989 {477},Y1,ppm, 20.49,.0315,.1539, 20.52, 20.50, 20.46,None,,
 Sr,421.552 { 80},Y2A,ppm, 4.674,.0651,1.393, 4.648, 4.749, 4.627,None,,
 Th,283.730 {119},Y2R,ppm, 2.363,.0674,2.854, 2.395, 2.285, 2.407,None,,
 Ti,334.941 {101},Y2A,ppm, 19.61,.1397,.7124, 19.69, 19.69, 19.45,None,,
 Tl,190.856 {477},Y1,ppm, 20.60,.0331,.1606, 20.56, 20.61, 20.63,None,,
 V,292.402 {115},Y2A,ppm, 20.08,.0554,.2761, 20.03, 20.06, 20.14,None,,
 W,207.911 {462},Y1,ppm, 20.73,.0917,.4423, 20.84, 20.70, 20.66,None,,
 Zn,213.856 {458},Y1,ppm, 9.819,.0279,.2839, 9.851, 9.807, 9.799,None,,
 Zr,339.198 { 99},Y2R,ppm, 19.85,.1379,.6950, 20.00, 19.82, 19.73,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

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Y1,224.306 {450},Cts/S, 2838.9,4.2025, .14803,2839.1,2843.1,2834.7
 Y2A,371.030 { 91}2,Cts/S, 141160.,567.73,.40218,141730.,140600.,141160.
 Y2R,371.030 { 91}3,Cts/S, 3981.1,68.732,1.7265,3902.3,4012.3,4028.6

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=LRC 083294
 Username=dept 22
 Comment=LRS4
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:31:16
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0699	.0017	2.368	.0712	.0704	.0680	None,,		
Al	308.215	{109}	Y2R,ppm	521.3	5.914	1.134	528.0	517.0	518.8	None,,		
Al ax	308.215	{109}2	Y2A,ppm	537.0	4.178	.7780	537.2	541.1	532.8	None,,		
As	189.042	{478}	Y1,ppm	-.0011	.0088	816.1	.0087	-.0082	-.0037	None,,		
B	249.773	{135}	Y2A,ppm	-.0163	.0018	11.10	-.0184	-.0156	-.0150	None,,		
Ba	455.403	{ 74}	Y2A,ppm	.0028	.0000	1.540	.0029	.0028	.0028	None,,		
Be	313.042	{108}	Y2A,ppm	.00101	.00003	2.8492	.00104	.00101	.00098	None,,		
Ca	317.933	{106}	Y2R,ppm	511.0	6.363	1.245	518.1	505.8	509.1	None,,		
Cd	226.502	{449}	Y1,ppm	.0053	.0009	17.48	.0054	.0063	.0044	None,,		
Co	228.616	{447}	Y1,ppm	.0078	.0009	11.24	.0081	.0084	.0068	None,,		
Cr	267.716	{126}	Y2A,ppm	-.0019	.0012	66.71	-.0014	-.0009	-.0033	None,,		
Cu	327.396	{103}	Y2A,ppm	-.0676	.0012	1.815	-.0684	-.0662	-.0681	None,,		
Fe	261.187	{129}	Y2R,ppm	327.3	4.468	1.365	332.3	324.0	325.4	None,,		
K	766.490	{ 44}	Y2R,ppm	496.9	6.996	1.408	505.0	493.3	492.5	None,,		
Li	670.784	{ 50}	Y2R,ppm	.0211	.0002	.7769	.0209	.0211	.0213	None,,		
Mg	285.213	{118}	Y2R,ppm	505.1	11.92	2.360	518.8	497.7	498.8	None,,		
Mn	257.610	{131}	Y2A,ppm	-.01250	.00039	3.1238	-.01282	-.01206	-.01260	None,,		
Mo	202.030	{467}	Y1,ppm	.0022	.0005	21.99	.0017	.0026	.0024	None,,		
Na	589.592	{ 57}	Y2R,ppm	466.1	14.53	3.118	482.9	457.6	457.8	None,,		
Ni	231.604	{445}	Y1,ppm	.0037	.0006	15.92	.0034	.0044	.0033	None,,		
P	177.495	{490}	Y1,ppm	.0012	.0140	1212.	-.0094	.0171	-.0042	None,,		
Pb	220.353	{453}	Y1,ppm	-.0173	.0021	12.25	-.0149	-.0178	-.0191	None,,		
S	182.034	{485}	Y1,ppm	207.5	.9437	.4547	208.5	207.5	206.6	None,,		
Sb	206.833	{463}	Y1,ppm	.0164	.0063	38.48	.0098	.0169	.0224	None,,		
Se	196.090	{472}	Y1,ppm	.0157	.0091	57.80	.0152	.0069	.0250	None,,		
Si	251.611	{134}	Y2R,ppm	195.71	1.6912	.86413	197.66	194.75	194.71	None,,		
Sn	189.989	{477}	Y1,ppm	-.0100	.0024	23.77	-.0086	-.0127	-.0087	None,,		
Sr	421.552	{ 80}	Y2A,ppm	.0013	.0001	10.99	.0011	.0014	.0013	None,,		
Th	283.730	{119}	Y2R,ppm	4.096	.0404	.9860	4.134	4.101	4.054	None,,		
Ti	334.941	{101}	Y2A,ppm	.0188	.0002	1.189	.0188	.0190	.0186	None,,		
Tl	190.856	{477}	Y1,ppm	.0313	.0057	18.19	.0247	.0344	.0348	None,,		
V	292.402	{115}	Y2A,ppm	.0058	.0012	21.31	.0063	.0066	.0044	None,,		
W	207.911	{462}	Y1,ppm	.0044	.0035	78.72	.0081	.0040	.0012	None,,		
Zn	213.856	{458}	Y1,ppm	-.0096	.0006	5.963	-.0101	-.0090	-.0098	None,,		
Zr	339.198	{ 99}	Y2R,ppm	-.0052	.0037	71.58	-.0081	-.0010	-.0064	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2509.6	3.8511	.15345	2505.5	2510.3	2513.1
Y2A	371.030	{ 91}2	Cts/S	118080.	468.90	.39711	118450.	117550.	118230.
Y2R	371.030	{ 91}3	Cts/S	3654.5	48.604	1.3300	3600.2	3694.0	3669.2

[Sample Header]

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Method=New TRACE Fast w axial Al(v227)
 SampleName=LRC 083293
 Username=dept 22
 Comment=LRS3
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:34:35
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	2.470	.0033	.1352	2.470	2.474	2.467	None,,		
Al	308.215	{109}	Y2R,ppm	.9914	.1085	10.94	.8886	1.105	.9808	None,,		
Al ax	308.215	{109}2	Y2A,ppm	.5759	.0277	4.811	.5827	.5996	.5454	None,,		
As	189.042	{478}	Y1,ppm	10.20	.0171	.1681	10.22	10.20	10.18	None,,		
Ba	249.773	{135}	Y2A,ppm	2.381	.0067	.2834	2.377	2.389	2.377	None,,		
Ba	455.403	{74}	Y2A,ppm	2.497	.0182	.7275	2.517	2.490	2.483	None,,		
Be	313.042	{108}	Y2A,ppm	2.4314	.00812	.33413	2.4400	2.4304	2.4238	None,,		
Ca	317.933	{106}	Y2R,ppm	-.0297	.0073	24.45	-.0312	-.0360	-.0218	None,,		
Cd	226.502	{449}	Y1,ppm	10.34	.0348	.3368	10.38	10.31	10.34	None,,		
Co	228.616	{447}	Y1,ppm	10.64	.0487	.4573	10.69	10.60	10.64	None,,		
Cr	267.716	{126}	Y2A,ppm	10.19	.0248	.2435	10.21	10.20	10.17	None,,		
Cu	327.396	{103}	Y2A,ppm	10.35	.0212	.2049	10.37	10.37	10.33	None,,		
Fe	261.187	{129}	Y2R,ppm	.0556	.0228	40.96	.0293	.0688	.0688	None,,		
K	766.490	{44}	Y2R,ppm	.5848	.0282	4.830	.6147	.5810	.5586	None,,		
Li	670.784	{50}	Y2R,ppm	9.765	.0888	.9095	9.829	9.802	9.663	None,,		
Mg	285.213	{118}	Y2R,ppm	.0561	.0043	7.723	.0605	.0519	.0560	None,,		
Mn	257.610	{131}	Y2A,ppm	9.8005	.02927	.29866	9.7735	9.8316	9.7964	None,,		
Mo	202.030	{467}	Y1,ppm	10.55	.0924	.8759	10.64	10.46	10.53	None,,		
Na	589.592	{57}	Y2R,ppm	.1573	.0101	6.448	.1682	.1552	.1483	None,,		
Ni	231.604	{445}	Y1,ppm	10.63	.0733	.6890	10.71	10.56	10.63	None,,		
P	177.495	{490}	Y1,ppm	10.23	.0104	.1021	10.22	10.24	10.23	None,,		
Pb	220.353	{453}	Y1,ppm	10.51	.0236	.2242	10.53	10.48	10.50	None,,		
S	182.034	{485}	Y1,ppm	.2296	.0230	10.04	.2441	.2417	.2031	None,,		
Sb	206.833	{463}	Y1,ppm	10.75	.0186	.1727	10.77	10.73	10.74	None,,		
Se	196.090	{472}	Y1,ppm	10.41	.0538	.5162	10.48	10.38	10.38	None,,		
Si	251.611	{134}	Y2R,ppm	1.0389	.05227	5.0314	.98213	1.0495	1.0850	None,,		
Sn	189.989	{477}	Y1,ppm	10.31	.0343	.3330	10.35	10.30	10.28	None,,		
Sr	421.552	{80}	Y2A,ppm	2.514	.0174	.6908	2.510	2.533	2.499	None,,		
Th	283.730	{119}	Y2R,ppm	8.711	.0695	.7976	8.665	8.791	8.677	None,,		
Ti	334.941	{101}	Y2A,ppm	10.03	.0675	.6724	9.967	10.10	10.03	None,,		
Tl	190.856	{477}	Y1,ppm	10.62	.0425	.3999	10.64	10.58	10.65	None,,		
V	292.402	{115}	Y2A,ppm	10.19	.0300	.2948	10.19	10.21	10.15	None,,		
W	207.911	{462}	Y1,ppm	10.48	.0430	.4104	10.53	10.45	10.46	None,,		
Zn	213.856	{458}	Y1,ppm	5.064	.0037	.0728	5.068	5.061	5.062	None,,		
Zr	339.198	{99}	Y2R,ppm	10.04	.0818	.8153	10.05	10.11	9.952	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	2863.6	17.843	.62311	2852.3	2884.2	2854.3
Y2A	371.030	{91}2	Cts/S	140360.	540.14	.38483	140200.	139920.	140960.
Y2R	371.030	{91}3	Cts/S	3962.6	41.570	1.0491	3944.1	3933.5	4010.2

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=LRC 083311
 Username=dept 22
 Comment=LRS5
 Custom ID1=

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Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:38:03
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0092	.0015	16.23	.0107	.0077	.0091	None,,		
Al	308.215	{109}	Y2R,ppm	257.5	1.452	.5640	258.7	255.9	257.7	None,,		
Al	ax,308.215	{109}2	Y2A,ppm	262.2	2.406	.9177	260.5	265.0	261.2	None,,		
As	189.042	{478}	Y1,ppm	.0007	.0081	1197.	.0072	.0032	-.0084	None,,		
B	249.773	{135}	Y2A,ppm	.0050	.0024	47.49	.0022	.0063	.0064	None,,		
Ba	455.403	{74}	Y2A,ppm	.0018	.0000	2.405	.0018	.0018	.0019	None,,		
Be	313.042	{108}	Y2A,ppm	.00099	.00006	6.3137	.00095	.00096	.00106	None,,		
Ca	317.933	{106}	Y2R,ppm	248.5	2.396	.9641	250.7	245.9	249.0	None,,		
Cd	226.502	{449}	Y1,ppm	.0062	.0003	4.138	.0059	.0064	.0063	None,,		
Co	228.616	{447}	Y1,ppm	.0072	.0009	12.23	.0071	.0063	.0080	None,,		
Cr	267.716	{126}	Y2A,ppm	.0012	.0004	33.92	.0017	.0011	.0009	None,,		
Cu	327.396	{103}	Y2A,ppm	.0017	.0013	77.56	.0007	.0012	.0031	None,,		
Fe	261.187	{129}	Y2R,ppm	152.1	1.390	.9142	153.6	151.0	151.6	None,,		
K	766.490	{44}	Y2R,ppm	249.2	2.127	.8536	251.5	247.3	248.7	None,,		
Li	670.784	{50}	Y2R,ppm	.0299	.0022	7.520	.0275	.0302	.0320	None,,		
Mg	285.213	{118}	Y2R,ppm	253.1	1.494	.5902	253.6	251.4	254.2	None,,		
Mn	257.610	{131}	Y2A,ppm	-.00232	.00045	19.402	-.00284	-.00211	-.00202	None,,		
Mo	202.030	{467}	Y1,ppm	.0042	.0003	7.545	.0044	.0043	.0038	None,,		
Na	589.592	{57}	Y2R,ppm	244.7	1.746	.7135	246.5	243.0	244.5	None,,		
Ni	231.604	{445}	Y1,ppm	.0056	.0009	16.23	.0059	.0064	.0046	None,,		
P	177.495	{490}	Y1,ppm	.0032	.0058	182.8	.0085	.0039	-.0029	None,,		
Pb	220.353	{453}	Y1,ppm	-.0016	.0043	261.3	-.0058	.0027	-.0018	None,,		
S	182.034	{485}	Y1,ppm	104.4	.2212	.2120	104.5	104.4	104.1	None,,		
Sb	206.833	{463}	Y1,ppm	.0110	.0015	13.55	.0115	.0122	.0093	None,,		
Se	196.090	{472}	Y1,ppm	.0096	.0072	74.96	.0174	.0080	.0033	None,,		
Si	251.611	{134}	Y2R,ppm	101.53	.45325	.44643	101.99	101.08	101.51	None,,		
Sn	189.989	{477}	Y1,ppm	-.0013	.0037	274.7	-.0052	-.0010	.0022	None,,		
Sr	421.552	{80}	Y2A,ppm	.0016	.0001	7.555	.0015	.0017	.0017	None,,		
Th	283.730	{119}	Y2R,ppm	.1846	.0680	36.82	.2631	.1483	.1426	None,,		
Ti	334.941	{101}	Y2A,ppm	.0141	.0003	2.248	.0140	.0139	.0145	None,,		
Tl	190.856	{477}	Y1,ppm	.0257	.0003	1.171	.0259	.0259	.0254	None,,		
V	292.402	{115}	Y2A,ppm	.0038	.0003	7.740	.0040	.0035	.0040	None,,		
W	207.911	{462}	Y1,ppm	.0054	.0036	66.19	.0062	.0015	.0084	None,,		
Zn	213.856	{458}	Y1,ppm	-.0003	.0002	64.07	-.0006	-.0001	-.0003	None,,		
Zr	339.198	{99}	Y2R,ppm	.0111	.0080	72.34	.0049	.0202	.0082	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/s	2710.3	6.6384	.24493	2715.2	2702.8	2713.1
Y2A	371.030	{91}2	Cts/s	125330	.36289	.28954	124930	125620	125450
Y2R	371.030	{91}3	Cts/s	3753.9	16.594	.44204	3757.8	3768.2	3735.7

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:41:15
 Sample Type=QC
 Mode=CONC

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CorrFactor=1.000

Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.5030	.0022	.4408	.5051	.5031	.5007	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	24.99	.0608	.2433	25.01	24.92	25.03	Chk Pass,,		
Al	ax,308.215	{109}2	Y2A, ppm	24.88	.0727	.2924	24.95	24.87	24.81	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.5149	.0050	.9753	.5177	.5178	.5091	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4961	.0061	1.220	.5010	.4893	.4979	Chk Pass,,		
Ba	455.403	{ 74}	Y2A, ppm	.5077	.0051	1.003	.5128	.5075	.5027	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.49035	.00207	.42156	.49271	.48885	.48950	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	24.90	.1329	.5336	24.86	25.05	24.79	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.5042	.0021	.4126	.5066	.5030	.5030	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.5020	.0014	.2736	.5035	.5015	.5009	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.5032	.0076	1.505	.5106	.4955	.5035	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5205	.0039	.7559	.5239	.5162	.5214	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	24.66	.2247	.9113	24.55	24.91	24.50	Chk Pass,,		
K	766.490	{ 44}	Y2R, ppm	25.35	.0928	.3659	25.34	25.45	25.26	Chk Pass,,		
Li	670.784	{ 50}	Y2R, ppm	.5248	.0021	.4063	.5250	.5267	.5225	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	24.90	.1082	.4345	24.94	24.99	24.78	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.49859	.00342	.68676	.50254	.49673	.49650	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.5085	.0015	.2951	.5083	.5101	.5071	Chk Pass,,		
Na	589.592	{ 57}	Y2R, ppm	24.84	.0887	.3571	24.88	24.90	24.74	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.5034	.0023	.4532	.5057	.5032	.5012	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.5029	.0099	1.965	.5136	.4941	.5011	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.5004	.0061	1.215	.5063	.5005	.4942	Chk Pass,,		
S	182.034	{485}	Y1, ppm	25.01	.1126	.4503	25.14	24.97	24.92	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.5048	.0032	.6438	.5060	.5011	.5073	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.5134	.0042	.8143	.5182	.5108	.5112	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	24.928	.08040	.32253	24.869	25.020	24.895	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4836	.0044	.9166	.4816	.4806	.4887	Chk Pass,,		
Sr	421.552	{ 80}	Y2A, ppm	.5054	.0039	.7633	.5098	.5036	.5028	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.4713	.0608	12.89	.4486	.5401	.4251	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5170	.0015	.2968	.5184	.5154	.5171	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.5183	.0021	.3978	.5206	.5176	.5166	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5175	.0049	.9428	.5213	.5120	.5193	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5045	.0012	.2457	.5056	.5049	.5032	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.5072	.0027	.5319	.5101	.5049	.5065	Chk Pass,,		
Zr	339.198	{ 99}	Y2R, ppm	.5137	.0059	1.151	.5168	.5069	.5175	Chk Pass,,		

[Internal standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	2961.2	1.1026	.03724	2962.4	2960.4
Y2A	371.030	{ 91}2	Cts/S	138540	.754.22	.54442	137670	138880
Y2R	371.030	{ 91}3	Cts/S	3951.3	28.277	.71563	3944.7	3926.9

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
SampleName=CCB 078331
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 9:44:29
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
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Ag,328.068 {103},Y2A,ppm,F .0052,.0022,42.97, .0061, .0026, .0068,Chk
Fail,.0050,-.0050
Al,308.215 {109},Y2R,ppm, .0012,.0750,6216., -.0798, .0682, .0152,Chk Pass,,
Al ax,308.215 {109}2,Y2A,ppm, .0169,.0074,43.71, .0161, .0246, .0099,Chk Pass,,
As,189.042 {478},Y1,ppm, -.0015,.0115,770.3, .0117, -.0070, -.0092,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0037,.0006,16.36, .0031, .0043, .0038,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0001,.0000,17.28, .0001, .0001, .0002,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .00046,.00000,1.0393, .00046, .00046, .00047,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, .0101,.0124,122.8, .0140, .0201, -.0038,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0006,.0000,6.194, .0007, .0006, .0006,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0008,.0009,112.9, .0001, .0017, .0005,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, -.0006,.0009,165.6, -.0014, -.0007, .0004,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0011,.0035,329.8, -.0027, .0030, -.0034,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, -.0023,.0132,585.7, .0084, .0019, -.0170,Chk Pass,,
K,766.490 { 44},Y2R,ppm,F .5065,.0547,10.80, .5641, .4553, .5000,Chk
Fail,.2500,-.2500
Li,670.784 { 50},Y2R,ppm,F .0251,.0021,8.252, .0265, .0261, .0228,Chk
Fail,.0250,-.0250
Mg,285.213 {118},Y2R,ppm, .0188,.0082,43.30, .0237, .0234, .0094,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00042,.00007,16.762, .00038, .00050, .00037,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0015,.0005,31.16, .0013, .0011, .0020,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .0257,.0189,73.66, .0468, .0202, .0101,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0011,.0006,55.50, .0016, .0004, .0012,Chk Pass,,
P,177.495 {490},Y1,ppm, -.0043,.0073,168.0, .0016, -.0021, -.0125,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0020,.0024,122.1, .0018, .0045, -.0003,Chk Pass,,
S,182.034 {485},Y1,ppm, .0298,.0126,42.42, .0216, .0235, .0444,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0045,.0038,85.89, .0000, .0065, .0068,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0043,.0064,147.5, -.0021, .0106, .0044,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .01960,.03434,175.24, .04074, .03808, -.02003,Chk Pass,,
Sn,189.989 {477},Y1,ppm, -.0040,.0021,53.54, -.0031, -.0024, -.0064,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0002,.0000,15.92, .0002, .0001, .0002,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0394,.0940,238.4, .0599, -.0631, .1214,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0004,.0001,22.69, .0003, .0004, .0004,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0085,.0037,43.80, .0072, .0057, .0128,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0013,.0004,29.84, .0018, .0012, .0011,Chk Pass,,
W,207.911 {462},Y1,ppm, .0025,.0015,57.61, .0027, .0039, .0010,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0007,.0001,7.952, .0007, .0006, .0008,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0082,.0120,147.2, .0046, .0216, -.0016,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 3016.5,3.7276,.12357,3020.7,3015.2,3013.6
Y2A,371.030 { 91}2,Cts/S, 142620.,408.80,.28664,142700.,142980.,142170.
Y2R,371.030 { 91}3,Cts/S, 4019.1,44.659,1.1112,3980.7,4008.6,4068.1

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
SampleName=MB 410-11456/1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 9:50:28
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0001179,.0013805,1170.828, -.000766, -.000589,
.0017087,Chk Pass,,

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Al, 308.215 {109}, Y2R, ppm, -.044217, .1949560, 440.9042, -.265667, .1015476,
 .0314677, Chk Pass,,
 Al ax, 308.215 {109}2, Y2A, ppm, .0065138, .0085316, 130.9761, .0139174, .0084405,
 -.002816, Chk Pass,,
 As, 189.042 {478}, Y1, ppm, .0085453, .0073261, 85.73215, .0042895, .0170047,
 .0043418, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .0018325, .0004450, 24.28033, .0021852, .0019798,
 .0013326, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .0000487, .0000158, 32.39187, .0000537, .0000614,
 .0000311, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, .0003712, .0000227, 6.106483, .0003811, .0003873,
 .0003453, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, .0006653, .0051765, 778.0965, .0049872, .0020803,
 -.005072, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0004865, .0001650, 33.90650, .0006123, .0002998,
 .0005475, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0009585, .0003352, 34.97015, .0013365, .0008412,
 .0006977, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, -.000169, .0007789, 459.6396, .0000515, .0004751,
 -.001035, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, -.002158, .0008556, 39.64301, -.001433, -.001940,
 -.003102, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, -.003143, .0450198, 1432.576, -.003286, -.048090,
 .0419490, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, .4298432, .0330990, 7.700257, .4559905, .3926286,
 .4409104, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, .0221613, .0015298, 6.903143, .0238442, .0208548,
 .0217849, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, -.000269, .0039739, 1479.539, -.003034, -.002057,
 .0042854, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0002398, .0000367, 15.32673, .0002737, .0002449,
 .0002007, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0016528, .0000350, 2.119888, .0016243, .0016919,
 .0016422, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, .0032325, .0233965, 723.7991, .0230544, -.022576,
 .0092186, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0011362, .0005379, 47.33936, .0017432, .0009465,
 .0007189, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, -.010420, .0011255, 10.80072, -.010794, -.011311, -.009155, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0004121, .0030919, 750.3379, .0038626, -.002107,
 -.000520, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, .0200980, .0135918, 67.62778, .0053579, .0228007, .0321354, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0015528, .0068639, 442.0414, -.005518, .0081886,
 .0019882, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0000411, .0069883, 17010.49, .0063824, -.007451,
 .0011920, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, -.046965, .0199272, 42.43009, -.025180, -.064274,
 -.051440, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, -.005777, .0046541, 80.56569, -.000618, -.007051,
 -.009661, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .0000678, .0000132, 19.44016, .0000800, .0000696,
 .0000539, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .0315597, .0615951, 195.1703, -.027746, .0272119,
 .0952135, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0002152, .0001143, 53.10687, .0001178, .0003410,
 .0001867, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0059284, .0015543, 26.21770, .0055044, .0046301,
 .0076507, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0005005, .0005141, 102.7093, .0008689, .0007194,
 -.000087, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0013988, .0034927, 249.6953, .0013639, .0049088, -.002076, Chk
 Pass,,

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Pass,,
 Zn,213.856 {458},Y1,ppm, -.000701,.0002650,37.77664, -.001007, -.000552,
 -.000545,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0011699,.0105249,899.6689, .0133229, -.004871,
 -.004943,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3088.256,7.965616,.2579325,3095.590,3089.396,3079.782
 Y2A,371.030 { 91}2,Cts/S, 144720.1,679.4580,.4694979,144817.9,143997.1,145345.4
 Y2R,371.030 { 91}3,Cts/S, 4007.950,18.09477,.4514719,3993.925,4028.375,4001.550

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=LCS 410-11456/2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:53:39
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0200677,.0021125,10.52679, .0187099, .0189917,
 .0225016,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .3035400,.1199429,39.51467, .2146986, .4399753,
 .2559461,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .4151470,.0123942,2.985507, .4263502, .4172580,
 .4018328,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0615695,.0098702,16.03092, .0704684, .0509535,
 .0632867,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0592061,.0002480,.4188533, .0593967, .0589257,
 .0592959,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0105100,.0001719,1.635294, .0106943, .0103541,
 .0104817,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0099813,.0000208,.2083544, .0100017, .0099601,
 .0099821,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .3905957,.0053836,1.378302, .3888206, .3966426,
 .3863237,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0104094,.0000720,.6920934, .0103651, .0103705,
 .0104925,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0110307,.0008509,7.713966, .0100526, .0114386,
 .0116008,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0304564,.0002080,.6830970, .0304255, .0306782,
 .0302655,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0422894,.0044677,10.56453, .0467526, .0422983,
 .0378172,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .4240584,.0358071,8.443903, .4177022, .4626180,
 .3918551,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 5.957610,.1085075,1.821325, 5.995780, 5.835175,
 6.041874,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1228597,.0021978,1.788868, .1253755, .1218902,
 .1213133,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .1910201,.0055279,2.893886, .1956544, .1925043,
 .1849016,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0208626,.0000392,.1880957, .0208924, .0208181,
 .0208771,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0210939,.0009861,4.674815, .0220202, .0200573,

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.0212042,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 1.987976,.0203336,1.022829, 1.984050, 2.009987,
1.969892,Chk Pass,,
Ni,231.604 {445},Y1,ppm, 2.109793,.0069684,.3302904, 2.114062, 2.113565,
2.101752,Chk Pass,,
P,177.495 {490},Y1,ppm, .2070739,.0053284,2.573166, .2118926, .2079777, .2013515,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0312544,.0008491,2.716714, .0309400, .0322159,
.0306074,Chk Pass,,
S,182.034 {485},Y1,ppm, .9854677,.0325391,3.301897, 1.012632, .9494052, .9943658,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .1025268,.0043665,4.258873, .0976414, .1060491,
.1038900,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0988757,.0033662,3.404424, .0988870, .1022363,
.0955040,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 1.002199,.0273592,2.729918, 1.032847, .9935135,
.9802375,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0967617,.0046065,4.760639, .1013950, .0967076,
.0921826,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0104387,.0001258,1.204806, .0105839, .0103670,
.0103652,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0073975,.1130046,1527.612, -.092359, -.015571,
.1301218,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0208683,.0001514,.7253965, .0210132, .0208803,
.0207112,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0730335,.0069089,9.459942, .0698541, .0809597,
.0682866,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0215582,.0007192,3.335972, .0208876, .0214693,
.0223177,Chk Pass,,
W,207.911 {462},Y1,ppm, .0590871,.0019841,3.357903, .0581926, .0613609, .0577077,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .4529837,.0017066,.3767416, .4542192, .4536955,
.4510364,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .1028457,.0124216,12.07795, .1027881, .1152960,
.0904529,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 3074.413,2.999154,.0975521,3074.288,3071.478,3077.472
Y2A,371.030 { 91}2,Cts/S, 144232.8,459.7019,.3187222,144331.8,144634.8,143731.6
Y2R,371.030 { 91}3,Cts/S, 4033.633,8.828234,.2188655,4041.775,4034.875,4024.250

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
SampleName=410-3240-B-17-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 9:56:46
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.000270,.0007008,259.6041, -.000512, -.000817,
.0005199,Chk Pass,,
Al,308.215 {109},Y2R,ppm, -.088238,.1190438,134.9122, .0130891, -.058459,
-.219344,Chk Pass,,
Al ax,308.215 {109}2,Y2A,ppm, .0032057,.0107766,336.1719, .0031047, .0140324,

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-.007520,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0010066,.0150303,1493.218, -.005320, -.009826,
 .0181659,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6510519,.0021182,.3253472, .6526222, .6486428,
 .6518907,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0270913,.0001632,.6024246, .0272175, .0271494,
 .0269070,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002837,.0000158,5.578919, .0002955, .0002657,
 .0002899,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 70.08340,.2583765,.3686700, 69.81957, 70.09469,
 70.33595,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002989,.0001699,56.82164, .0004139, .0001038,
 .0003791,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0044358,.0003316,7.474998, .0041422, .0043697,
 .0047954,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0005647,.0003683,65.22187, .0005266, .0009506,
 .0002169,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0031508,.0027779,88.16328, .0032369, .0058847,
 .0003309,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0210663,.0013543,6.428950, .0225754, .0199564,
 .0206672,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 59.42142,.1880519,.3164715, 59.25475, 59.38422,
 59.62529,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0527560,.0015263,2.893051, .0544724, .0522440,
 .0515516,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 177.3010,.4605801,.2597730, 177.0829, 176.9900,
 177.8301,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2709619,.0002209,.0815063, .2709518, .2707463,
 .2711877,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0029404,.0002961,10.07117, .0030139, .0031929,
 .0026144,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1115.339,14.77825,1.325001, 1131.618, 1111.631,
 1102.768,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0059553,.0012974,21.78612, .0048029, .0057024,
 .0073605,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0649263,.0082539,12.71265, .0676398, .0556573, .0714818,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0017749,.0014697,82.80728, .0034621, .0010900,
 .0007726,Chk Pass,,
 S,182.034 {485},Y1,ppm, 143.9465,.3421979,.2377257, 144.1140, 144.1727, 143.5529,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0042017,.0045752,108.8904, .0045073, -.000519,
 .0086164,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0030043,.0085303,283.9332, .0089199, -.006774,
 .0068671,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.586353,.0348682,2.198010, 1.620163, 1.550515,
 1.588379,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.002311,.0094786,410.2239, -.007970, .0086322,
 -.007594,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.110618,.0024824,.2235190, 1.109126, 1.113483,
 1.109243,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0031027,.0389741,1256.142, -.008217, -.028959,
 .0464836,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0025676,.0001459,5.681080, .0024494, .0025226,
 .0027306,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0096320,.0029904,31.04604, .0110066, .0062015,
 .0116880,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000287,.0007827,272.2882, .0005701, -.000469,
 -.000963,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000959,.0016241,169.4136, -.000296, -.002809, .0002292,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0038784,.0002915,7.516740, .0040166, .0035435,
 .0040752,Chk Pass,,

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Zr,339.198 { 99},Y2R,ppm, .0082422,.0002795,3.391530, .0082999, .0079383,
 .0084884,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2585.638,6.944658,.2685859,2591.671,2587.196,2578.046
 Y2A,371.030 { 91}2,Cts/S, 119610.1,120.2295,.1005179,119591.8,119500.1,119738.5
 Y2R,371.030 { 91}3,Cts/S, 3783.062,21.47529,.5676695,3807.054,3776.495,3765.637

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3240-B-17-A
 Username=dept 22
 Comment=UP
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:00:12
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0193681,.0012309,6.355477, .0179509, .0199829,
 .0201706,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .9171836,.1942086,21.17445, .7776246, 1.138981,
 .8349453,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 1.056179,.0197839,1.873155, 1.071233, 1.033771,
 1.063532,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5651761,.0063952,1.131544, .5589425, .5648642,
 .5717215,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .8311302,.0091753,1.103956, .8417250, .8258267,
 .8258390,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0753086,.0001523,.2021999, .0751774, .0752728,
 .0754756,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0202992,.0002075,1.021972, .0205387, .0201765,
 .0201824,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 69.59946,.2205235,.3168466, 69.35337, 69.77916,
 69.66585,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0494639,.0002782,.5623226, .0496513, .0495961,
 .0491443,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .1022516,.0014678,1.435474, .1024920, .1006784,
 .1035843,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .2045360,.0019255,.9413939, .2067324, .2037371,
 .2031386,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5461706,.0048381,.8858128, .5517086, .5427655,
 .5440376,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .5705541,.0272952,4.783986, .5425762, .5719749,
 .5971112,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 60.70614,.3197061,.5266454, 60.48462, 60.56115,
 61.07265,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, 1.108022,.0012689,.1145208, 1.108324, 1.106629,
 1.109112,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 173.3268,1.034664,.5969442, 172.6765, 174.5199,
 172.7839,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .3218176,.0025329,.7870661, .3244249, .3216614,
 .3193663,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .2105975,.0000493,.0234167, .2106370, .2105422,
 .2106132,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1061.470,17.38255,1.637593, 1076.059, 1066.114,
 1042.237,Chk Fail,450.0000,-1.00000

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Ni,231.604 {445},Y1,ppm, .1510398,.0002446,.1619202, .1508558, .1513173,
 .1509462,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.225910,.0129902,1.059634, 1.236565, 1.211439, 1.229726,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .4753341,.0011769,.2475882, .4740385, .4756267,
 .4763370,Chk Pass,,
 S,182.034 {485},Y1,ppm, 141.4001,.3288139,.2325415, 141.5685, 141.0212, 141.6106,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .4417477,.0021835,.4942911, .4426888, .4433029,
 .4392514,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .8184505,.0091724,1.120706, .8197429, .8087004,
 .8269081,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.623821,.0364363,1.388675, 2.627483, 2.658288,
 2.585692,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .5831787,.0056565,.9699415, .5844341, .5770000,
 .5881020,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.096394,.0112104,1.022482, 1.106091, 1.084119,
 1.098972,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.055888,.0692092,123.8365, -.134703, -.005035,
 -.027925,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1094056,.0007177,.6559949, .1102252, .1091016,
 .1088899,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .8848126,.0060798,.6871227, .8901377, .8861118,
 .8781883,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .1064998,.0008383,.7871311, .1074033, .1057472,
 .1063489,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0025092,.0011596,46.21354, .0030641, .0011764, .0032871,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .1361162,.0005816,.4272864, .1367445, .1355967,
 .1360074,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 1.045654,.0134125,1.282690, 1.061034, 1.036387,
 1.039541,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2603.064,9.219204,.3541675,2608.829,2607.931,2592.431
 Y2A,371.030 { 91}2,Cts/S, 121784.4,1483.161,1.217858,120295.9,121795.0,123262.2
 Y2R,371.030 { 91}3,Cts/S, 3778.078,24.20854,.6407635,3805.796,3761.087,3767.350

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:03:33
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000088,.0009886,1125.654, .0007789, -.001165,
 .0001222,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.066301,.1508826,227.5728, .0865959, -.215085,
 -.070413,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0055325,.0027364,49.46012, .0068568, .0073548,
 .0023859,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.003822,.0065074,170.2534, .0024140, -.003310,
 -.010570,Chk Pass,,

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B,249.773 {135},Y2A,ppm, .6444289,.0020611,.3198368, .6423865, .6443918,
 .6465083,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0270017,.0001048,.3879483, .0270991, .0270152,
 .0268909,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002721,.0000185,6.792789, .0002836, .0002508,
 .0002820,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 69.27796,.4173890,.6024846, 69.25852, 68.87063,
 69.70473,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001434,.0002360,164.5289, .0004084, .0000658,
 -.000044,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0043001,.0010699,24.87976, .0031941, .0043764,
 .0053297,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0007031,.0007065,100.4791, .0002129, .0003836,
 .0015130,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0023663,.0008553,36.14680, .0021481, .0033096,
 .0016411,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0158032,.0094580,59.84880, .0103348, .0267244,
 .0103505,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 59.65817,.2628873,.4406560, 59.48515, 59.52869,
 59.96069,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0524031,.0043121,8.228638, .0477493, .0531968,
 .0562631,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 172.4754,1.712442,.9928618, 172.8303, 170.6133,
 173.9825,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2656296,.0008450,.3181326, .2662902, .2646774,
 .2659213,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0029921,.0002979,9.956081, .0028987, .0027522,
 .0033255,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1066.644,9.285042,.8704916, 1076.609, 1058.235,
 1065.087,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0041061,.0009752,23.75107, .0032878, .0038452,
 .0051852,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0608877,.0037380,6.139161, .0601125, .0575981, .0649525,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0018008,.0030870,171.4180, .0039328, -.001739,
 .0032088,Chk Pass,,
 S,182.034 {485},Y1,ppm, 143.3358,.4314931,.3010366, 143.1730, 143.8250, 143.0094,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0015759,.0013226,83.93008, .0001336, .0018619,
 .0027320,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0054865,.0034950,63.70213, .0015714, .0082920,
 .0065962,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.592610,.0179516,1.127180, 1.607984, 1.572881,
 1.596964,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.006544,.0042937,65.61009, -.008155, -.009800,
 -.001678,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.108664,.0033573,.3028287, 1.108083, 1.112273,
 1.105634,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0105103,.0252534,240.2736, .0221456, -.018463,
 .0278486,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0024155,.0000442,1.832129, .0024609, .0023725,
 .0024131,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0071464,.0011150,15.60203, .0058591, .0078062,
 .0077740,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0003427,.0010196,297.5305, .0010665, -.000823,
 .0007850,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0005942,.0009577,161.1775, .0002679, -.000158, .0016723,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0035160,.0003159,8.985526, .0035919, .0031691,
 .0037871,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0072253,.0044709,61.87829, .0119430, .0066821,
 .0030508,Chk Pass,,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2576.383,15.34121,.5954554,2594.091,2567.948,2567.109
 Y2A,371.030 { 91}2,Cts/S, 121377.5,461.6306,.3803263,121821.3,121411.4,120899.9
 Y2R,371.030 { 91}3,Cts/S, 3888.004,47.22879,1.214731,3886.742,3935.851,3841.419

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3240-B-17-C MS
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:06:57
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0193609,.0025239,13.03620, .0207714, .0208643,
 .0164470,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .3384065,.1010678,29.86581, .2919685, .2689036,
 .4543473,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .3954342,.0090288,2.283274, .3893859, .3911041,
 .4058125,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0633371,.0182482,28.81117, .0836328, .0482843,
 .0580942,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6915486,.0016622,.2403602, .6924252, .6925891,
 .6896316,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0358514,.0000887,.2474828, .0357522, .0359231,
 .0358790,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0096903,.0000965,.9955753, .0097842, .0096953,
 .0095914,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 68.31221,.8506737,1.245273, 69.08555, 68.45004,
 67.40103,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0092659,.0002369,2.556985, .0095371, .0091620,
 .0090987,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0130742,.0005333,4.078747, .0134714, .0124681,
 .0132830,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0286384,.0006008,2.097838, .0291133, .0288390,
 .0279630,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0440516,.0047681,10.82381, .0400111, .0428331,
 .0493107,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .4458537,.0101165,2.269017, .4344154, .4536266,
 .4495192,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 63.78978,.7358893,1.153616, 64.52066, 63.79972,
 63.04898,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1484246,.0011159,.7518260, .1473017, .1484387,
 .1495334,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 169.6148,1.198052,.7063367, 170.9930, 168.8216,
 169.0299,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2800207,.0008687,.3102273, .2797472, .2793217,
 .2809933,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0230970,.0014541,6.295697, .0214217, .0238372,
 .0240321,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1048.898,21.85793,2.083895, 1073.077, 1043.077,
 1030.540,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, 1.821007,.0002858,.0156943, 1.820861, 1.820824,
 1.821337,Chk Pass,,
 P,177.495 {490},Y1,ppm, .2828006,.0075341,2.664117, .2913523, .2771412, .2799083,Chk

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Pass,,
 Pb,220.353 {453},Y1,ppm, .0303687,.0038199,12.57836, .0295011, .0345477,
 .0270572,Chk Pass,,
 S,182.034 {485},Y1,ppm, 142.6588,.1670591,.1171040, 142.7267, 142.4684, 142.7812,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .1104070,.0081523,7.383888, .1067965, .1046833,
 .1197411,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .1071696,.0120823,11.27399, .0995312, .1210994,
 .1008783,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.515961,.0554512,2.203979, 2.527765, 2.564559,
 2.455558,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0844072,.0100738,11.93472, .0746772, .0837517,
 .0947927,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.089902,.0148169,1.359471, 1.095194, 1.073165,
 1.101346,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.014425,.1063941,737.5905, .0470929, .0469113,
 -.137278,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0223767,.0000708,.3164012, .0223411, .0223308,
 .0224582,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0568199,.0088742,15.61801, .0551419, .0664133,
 .0489046,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0200134,.0005925,2.960648, .0206069, .0194218,
 .0200114,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0580444,.0031594,5.443004, .0576792, .0613705, .0550836,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4475298,.0008350,.1865720, .4484623, .4468513,
 .4472758,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1080729,.0144352,13.35691, .1039829, .0961241,
 .1241119,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2602.073,7.034326,.2703354,2609.119,2602.050,2595.051
 Y2A,371.030 { 91}2,Cts/S, 123336.9,1062.255,.8612626,122448.7,124513.6,123048.5
 Y2R,371.030 { 91}3,Cts/S, 3842.581,23.45333,.6103536,3817.636,3845.923,3864.184

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3240-B-17-D MSD
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:10:18
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0216364,.0002117,.9783344, .0214084, .0218267,
 .0216741,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .3319487,.1423716,42.88963, .2154245, .2897804,
 .4906411,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .3863018,.0029885,.7736215, .3897516, .3846516,
 .3845023,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0695941,.0178507,25.64966, .0798779, .0799226,
 .0489820,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6962091,.0023832,.3423174, .6952922, .6944205,
 .6989146,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0359120,.0000711,.1979394, .0359933, .0358618,

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.0358809,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0098084,.0000640,.6524518, .0097617, .0097822,
 .0098813,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 68.31425,.1486712,.2176283, 68.44803, 68.15419,
 68.34054,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0094260,.0001644,1.743923, .0093095, .0093544,
 .0096140,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0135945,.0003570,2.625748, .0139516, .0135940,
 .0132377,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0288462,.0004884,1.693270, .0285415, .0294095,
 .0285875,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0429953,.0008011,1.863277, .0439165, .0426072,
 .0424621,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .4374580,.0387100,8.848855, .4821459, .4142693,
 .4159589,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 64.09739,.2337192,.3646314, 64.22000, 63.82787,
 64.24428,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1500442,.0009615,.6407938, .1500316, .1510120,
 .1490891,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 167.7109,.5221237,.3113236, 167.7947, 168.1860,
 167.1519,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2822642,.0025784,.9134782, .2795193, .2826378,
 .2846354,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0227450,.0012270,5.394469, .0213283, .0234683,
 .0234385,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1044.987,7.320085,.7004957, 1053.064, 1043.105,
 1038.791,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, 1.852484,.0043110,.2327159, 1.853435, 1.847777,
 1.856240,Chk Pass,,
 P,177.495 {490},Y1,ppm, .2898827,.0072273,2.493192, .2912949, .2962997, .2820535,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0283134,.0052440,18.52115, .0222712, .0316788,
 .0309900,Chk Pass,,
 S,182.034 {485},Y1,ppm, 143.5679,.2787063,.1941286, 143.8541, 143.2973, 143.5522,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .1118575,.0061242,5.475013, .1131554, .1172288,
 .1051884,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .1020903,.0067317,6.593893, .1006707, .1094187,
 .0961816,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.556477,.0159170,.6226157, 2.573994, 2.552539,
 2.542899,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0871042,.0023717,2.722879, .0879146, .0844334,
 .0889645,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.106090,.0043343,.3918615, 1.102568, 1.104771,
 1.110930,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0395001,.0155029,39.24783, .0553659, .0387468,
 .0243875,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0230027,.0002777,1.207077, .0227772, .0229182,
 .0233128,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0596363,.0045516,7.632199, .0587932, .0555653,
 .0645505,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0206124,.0006912,3.353228, .0198143, .0210095,
 .0210134,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0592435,.0035184,5.938830, .0631878, .0564281, .0581147,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4520444,.0003055,.0675874, .4523917, .4519246,
 .4518170,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1012108,.0011177,1.104349, .1008540, .1024633,
 .1003150,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2583.868,12.88667,.4987357,2598.035,2580.727,2572.843

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Y2A,371.030 { 91}2,Cts/S, 121071.3,715.9685,.5913610,121895.1,120599.2,120719.6
 Y2R,371.030 { 91}3,Cts/S, 3887.858,5.568263,.1432219,3884.822,3894.285,3884.467

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:13:41
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0011409,.0013445,117.8377, -.000370, .0015885,
 .0022045,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0245623,.1305727,531.5972, -.039104, .1747558,
 -.061965,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0100258,.0053389,53.25114, .0147005, .0042079,
 .0111690,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0056948,.0061355,107.7379, .0009050, .0126105,
 .0035690,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1328836,.0013252,.9972522, .1315839, .1342329,
 .1328340,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0057251,.0000345,.6020164, .0057378, .0057515,
 .0056861,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002794,.0000111,3.982566, .0002889, .0002821,
 .0002672,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 14.01158,.0219087,.1563614, 13.99294, 14.03571,
 14.00608,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000197,.0001732,880.8995, -.000089, -.000072,
 .0002194,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0014271,.0008455,59.24545, .0023550, .0007004,
 .0012258,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.001156,.0001540,13.32066, -.001008, -.001315,
 -.001144,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0023157,.0014969,64.64081, .0039871, .0010987,
 .0018613,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0018943,.0277025,1462.392, .0262305, -.028253,
 .0077052,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 12.09098,.0346579,.2866430, 12.07773, 12.13030,
 12.06490,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0318267,.0020602,6.473235, .0333955, .0325910,
 .0294936,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 35.34459,.3123738,.8837953, 35.48302, 35.56382,
 34.98692,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0543218,.0004409,.8116651, .0545619, .0545907,
 .0538130,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0011160,.0007375,66.07873, .0002894, .0013524,
 .0017063,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 268.2875,3.393416,1.264843, 272.1582, 266.8795,
 265.8247,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0023042,.0005107,22.16454, .0017340, .0024587,
 .0027197,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0073994,.0040600,54.86883, .0055829, .0045649, .0120505,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0047555,.0031228,65.66572, .0067851, .0011596,
 .0063219,Chk Pass,,

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s,182.034 {485},Y1,ppm, 27.50791,.0574414,.2088177, 27.56705, 27.50435, 27.45233,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0028654,.0092988,324.5145, -.006622, .0119633,
 .0032551,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.000451,.0097206,2155.134, .0053015, .0050196,
 -.011674,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .3515139,.0518408,14.74786, .3025715, .3461365,
 .4058339,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.005107,.0063782,124.9007, -.006278, .0017761,
 -.010818,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2286977,.0005306,.2320029, .2292074, .2287373,
 .2281485,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.015710,.0256356,163.1762, -.044190, .0055191,
 -.008460,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0013823,.0000707,5.118193, .0013026, .0014064,
 .0014378,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0070612,.0042145,59.68450, .0106333, .0024130,
 .0081374,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000472,.0007010,148.4670, -.001191, .0002095,
 -.000435,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.002454,.0036861,150.1997, .0001335, -.000821, -.006675,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0017570,.0002799,15.93146, .0017377, .0014873,
 .0020461,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0093870,.0085985,91.59984, .0092755, .0008448,
 .0180406,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2823.124,3.076937,.1089905,2822.808,2826.347,2820.218
 Y2A,371.030 { 91}2,Cts/S, 131810.7,203.9398,.1547217,132017.0,131806.0,131609.2
 Y2R,371.030 { 91}3,Cts/S, 3906.870,38.42408,.9835005,3894.112,3876.447,3950.050

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3348-C-18-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:16:57
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0008962,.0005489,61.24561, .0013217, .0010901,
 .0002767,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.063058,.0980640,155.5136, .0229006, -.169872,
 -.042203,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0042924,.0045172,105.2351, .0037445, .0000743,
 .0090586,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.008808,.0144656,164.2278, -.023798, -.007696,
 .0050690,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0296437,.0002102,.7089714, .0296969, .0294121,
 .0298222,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0592483,.0002485,.4194642, .0594071, .0589619,
 .0593760,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0003790,.0000070,1.837782, .0003848, .0003713,
 .0003809,Chk Pass,,

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Ca, 317.933 {106}, Y2R, ppm, 22.36084, .1116854, .4994688, 22.39043, 22.23734, 22.45475, Chk Pass,,
Cd, 226.502 {449}, Y1, ppm, .0004671, .0001849, 39.58633, .0005990, .0002558, .0005466, Chk Pass,,
Co, 228.616 {447}, Y1, ppm, .0003749, .0003356, 89.51689, .0000011, .0006502, .0004733, Chk Pass,,
Cr, 267.716 {126}, Y2A, ppm, .0005125, .0006493, 126.6769, .0002297, .0000526, .0012553, Chk Pass,,
Cu, 327.396 {103}, Y2A, ppm, .0021813, .0012648, 57.98192, .0007835, .0025139, .0032466, Chk Pass,,
Fe, 261.187 {129}, Y2R, ppm, -.004267, .0270028, 632.8029, -.035338, .0135279, .0090086, Chk Pass,,
K, 766.490 { 44}, Y2R, ppm, 3.761932, .0382551, 1.016901, 3.761150, 3.800573, 3.724074, Chk Pass,,
Li, 670.784 { 50}, Y2R, ppm, .0254195, .0018430, 7.250283, .0237100, .0251766, .0273719, Chk Pass,,
Mg, 285.213 {118}, Y2R, ppm, 15.18217, .1112404, .7327040, 15.09530, 15.14366, 15.30755, Chk Pass,,
Mn, 257.610 {131}, Y2A, ppm, .0349765, .0000417, .1192787, .0349323, .0349819, .0350152, Chk Pass,,
Mo, 202.030 {467}, Y1, ppm, .0006178, .0003863, 62.52816, .0001747, .0008841, .0007945, Chk Pass,,
Na, 589.592 { 57}, Y2R, ppm, 28.09091, .1078221, .3838326, 28.13295, 27.96840, 28.17137, Chk Pass,,
Ni, 231.604 {445}, Y1, ppm, .0121098, .0011117, 9.180357, .0132142, .0121241, .0109909, Chk Pass,,
P, 177.495 {490}, Y1, ppm, .0006836, .0036049, 527.3325, .0047654, -.000651, -.002064, Chk Pass,,
Pb, 220.353 {453}, Y1, ppm, .0026612, .0027816, 104.5259, .0057674, .0004004, .0018157, Chk Pass,,
S, 182.034 {485}, Y1, ppm, 23.93574, .0220521, .0921305, 23.95251, 23.94394, 23.91076, Chk Pass,,
Sb, 206.833 {463}, Y1, ppm, .0054714, .0073439, 134.2219, .0099128, -.003005, .0095068, Chk Pass,,
Se, 196.090 {472}, Y1, ppm, -.003786, .0098066, 258.9897, .0042168, -.014726, -.000851, Chk Pass,,
Si, 251.611 {134}, Y2R, ppm, 5.205363, .0471754, .9062841, 5.235877, 5.151027, 5.229185, Chk Pass,,
Sn, 189.989 {477}, Y1, ppm, -.010792, .0031920, 29.57723, -.011878, -.007199, -.013300, Chk Pass,,
Sr, 421.552 { 80}, Y2A, ppm, .1753417, .0004705, .2683341, .1758788, .1750022, .1751440, Chk Pass,,
Th, 283.730 {119}, Y2R, ppm, .0440554, .0262492, 59.58236, .0688012, .0165248, .0468403, Chk Pass,,
Ti, 334.941 {101}, Y2A, ppm, .0017986, .0000844, 4.691996, .0018854, .0017933, .0017169, Chk Pass,,
Tl, 190.856 {477}, Y1, ppm, .0089165, .0033708, 37.80412, .0061118, .0079816, .0126560, Chk Pass,,
V, 292.402 {115}, Y2A, ppm, .0000337, .0000714, 211.7934, .0000633, .0000854, -.000048, Chk Pass,,
W, 207.911 {462}, Y1, ppm, -.000361, .0007177, 199.0734, -.000723, .0004661, -.000825, Chk Pass,,
Zn, 213.856 {458}, Y1, ppm, .0200110, .0002751, 1.374916, .0199209, .0197922, .0203199, Chk Pass,,
Zr, 339.198 { 99}, Y2R, ppm, -.003582, .0082536, 230.3959, -.012988, .0024501, -.000209, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3
Y1, 224.306 {450}, Cts/S, 2992.254, 3.947093, .1319104, 2987.756, 2995.141, 2993.866
Y2A, 371.030 { 91}2, Cts/S, 141006.3, 428.9748, .3042239, 141214.7, 140512.9, 141291.2
Y2R, 371.030 { 91}3, Cts/S, 3979.451, 18.13161, .4556310, 3961.365, 3997.628, 3979.358

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[Sample Header]
 Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3348-C-15-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:20:06
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	-.001076	.0012771	118.7123	-.000574	-.002528	-.000126	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	.0319692	.1400235	437.9947	.0525423	.1605680	-.117203	Chk Pass,,		
Al	ax,308.215	{109}2	Y2A,ppm	.0611717	.0137331	22.45002	.0519633	.0769562	.0545954	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0049403	.0062429	126.3682	-.001735	.0059201	.0106354	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0057605	.0000705	1.223388	.0056919	.0057568	.0058327	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0223402	.0000793	.3548066	.0224045	.0222516	.0223643	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0007641	.0000253	3.309030	.0007852	.0007361	.0007709	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	6.393326	.0184607	.2887490	6.373459	6.396570	6.409950	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002993	.0001251	41.78066	.0002353	.0002193	.0004435	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0501947	.0009057	1.804311	.0505486	.0508700	.0491655	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0008052	.0006952	86.34158	.0000169	.0013305	.0010681	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0063034	.0013823	21.92947	.0048364	.0075816	.0064924	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.1816399	.0171561	9.445127	.1804062	.1993796	.1651340	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	1.553675	.0319874	2.058821	1.525526	1.547038	1.588460	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0269675	.0012504	4.636591	.0272196	.0256103	.0280726	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	2.478094	.0127747	.5155067	2.485788	2.485146	2.463347	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.2401656	.0013028	.5424542	.2416654	.2393144	.2395170	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0023383	.0014504	62.02744	.0040087	.0016086	.0013977	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	10.37449	.0639181	.6161086	10.40932	10.41344	10.30073	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0236106	.0012191	5.163195	.0232738	.0225955	.0249627	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0196458	.0036879	18.77191	.0156267	.0228742	.0204366	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0032584	.0038267	117.4432	-.000274	.0073239	.0027247	Chk Pass,,		
S	182.034	{485}	Y1,ppm	.8294864	.0110709	1.334670	.8176344	.8395613	.8312634	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0006330	.0077454	1223.670	.0070306	.0028465				

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-.007978,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.003054,.0032752,107.2529, -.006766, -.001822,
 -.000573,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.966680,.0367546,.9265825, 3.982067, 3.924733,
 3.993241,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.009034,.0049994,55.34234, -.014713, -.005297,
 -.007091,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0288646,.0000202,.0700631, .0288452, .0288855,
 .0288632,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.056891,.0728264,128.0110, -.002657, -.139665,
 -.028351,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0014674,.0000520,3.540572, .0015180, .0014142,
 .0014700,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0059089,.0064329,108.8680, -.000521, .0123443,
 .0059039,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0012232,.0006232,50.94528, .0011336, .0018864,
 .0006497,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0014666,.0017521,119.4659, -.000345, .0015926, .0031524,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0658294,.0005485,.8331490, .0663259, .0652407,
 .0659215,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0083940,.0099297,118.2951, .0062698, -.000302,
 .0192140,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3049.058,2.812957,.0922566,3051.640,3046.060,3049.475
 Y2A,371.030 { 91}2,Cts/S, 145394.7,493.3706,.3393318,145743.4,145610.5,144830.2
 Y2R,371.030 { 91}3,Cts/S, 4032.136,10.59366,.2627308,4043.685,4022.870,4029.853

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:23:13
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4952,.0010,.1961, .4963, .4944, .4950,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 25.06,.1964,.7839, 24.93, 24.97, 25.29,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 24.85,.1191,.4794, 24.98, 24.81, 24.76,Chk Pass,,
 As,189.042 {478},Y1,ppm, .4894,.0132,2.698, .4949, .4989, .4743,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4827,.0020,.4224, .4849, .4809, .4824,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5138,.0071,1.390, .5211, .5133, .5068,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .48945,.00178,.36394, .49150, .48840, .48844,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 24.49,.0677,.2765, 24.57, 24.45, 24.45,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5023,.0014,.2706, .5032, .5029, .5007,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4997,.0008,.1522, .5006, .4994, .4992,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4928,.0018,.3591, .4942, .4908, .4934,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5120,.0029,.5569, .5146, .5089, .5125,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 24.16,.1292,.5348, 24.31, 24.07, 24.10,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 25.17,.1101,.4374, 25.29, 25.07, 25.16,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5188,.0007,.1357, .5189, .5180, .5194,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 24.50,.1839,.7505, 24.71, 24.43, 24.36,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49188,.00168,.34115, .49327, .49002, .49236,Chk Pass,,

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Mo,202.030 {467},Y1,ppm, .5008,.0041,.8098, .5053, .4995, .4975,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 24.62,.1780,.7231, 24.82, 24.55, 24.49,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .4970,.0010,.2062, .4966, .4982, .4962,Chk Pass,,
P,177.495 {490},Y1,ppm, .5074,.0084,1.648, .5110, .4978, .5133,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .5004,.0008,.1583, .5011, .4996, .5007,Chk Pass,,
S,182.034 {485},Y1,ppm, 24.90,.0828,.3326, 24.99, 24.82, 24.89,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .5057,.0030,.5942, .5050, .5090, .5031,Chk Pass,,
Se,196.090 {472},Y1,ppm, .4995,.0089,1.785, .5095, .4967, .4923,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 24.552,.17293,.70437, 24.748, 24.421, 24.487,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .4869,.0086,1.760, .4956, .4785, .4864,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .5057,.0029,.5663, .5064, .5026, .5082,Chk Pass,,
Th,283.730 {119},Y2R,ppm,F .4333,.0487,11.25, .4328, .4823, .3848,Chk
Fail, .5000, -10.00%
Ti,334.941 {101},Y2A,ppm, .5137,.0021,.4139, .5160, .5119, .5130,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .5126,.0016,.3133, .5126, .5142, .5110,Chk Pass,,
V,292.402 {115},Y2A,ppm, .5063,.0012,.2388, .5077, .5056, .5055,Chk Pass,,
W,207.911 {462},Y1,ppm, .5018,.0017,.3457, .5036, .5016, .5001,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5083,.0008,.1497, .5092, .5077, .5081,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .5095,.0120,2.363, .5141, .4959, .5186,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 2929.0,4.0987,.13993,2925.0,2928.9,2933.2

Y2A,371.030 { 91}2,Cts/S, 137410.,540.13,.39307,136850.,137920.,137470.

Y2R,371.030 { 91}3,Cts/S, 3908.1,32.698,.83668,3872.3,3915.7,3936.3

[Sample Header]

Method=New TRACE Fast w axial Al(v227)

SampleName=CCB 078331

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/12/2020 10:26:27

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .0005,.0019,367.3, .0014, .0018, -.0016,Chk Pass,,

Al,308.215 {109},Y2R,ppm, -.0402,.2249,559.2, .2131, -.1171, -.2167,Chk Pass,,

Al ax,308.215 {109}2,Y2A,ppm, .0145,.0071,48.74, .0084, .0128, .0222,Chk Pass,,

As,189.042 {478},Y1,ppm, .0097,.0027,27.62, .0068, .0120, .0104,Chk Pass,,

B,249.773 {135},Y2A,ppm, .0020,.0003,15.03, .0017, .0023, .0019,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .0001,.0000,44.05, .0001, .0001, .0000,Chk Pass,,

Be,313.042 {108},Y2A,ppm, .00032,.00002,6.0763, .00031, .00034, .00031,Chk Pass,,

Ca,317.933 {106},Y2R,ppm, -.0044,.0154,348.0, -.0212, .0089, -.0009,Chk Pass,,

Cd,226.502 {449},Y1,ppm, .0004,.0001,14.80, .0004, .0005, .0004,Chk Pass,,

Co,228.616 {447},Y1,ppm, .0004,.0008,211.2, -.0004, .0003, .0012,Chk Pass,,

Cr,267.716 {126},Y2A,ppm, -.0010,.0007,70.91, -.0009, -.0003, -.0017,Chk Pass,,

Cu,327.396 {103},Y2A,ppm, .0019,.0028,144.2, .0003, .0003, .0051,Chk Pass,,

Fe,261.187 {129},Y2R,ppm, .0097,.0154,158.5, -.0023, .0270, .0044,Chk Pass,,

K,766.490 { 44},Y2R,ppm,F .3440,.0138,4.016, .3473, .3560, .3289,Chk

Fail, .2500, -.2500

Li,670.784 { 50},Y2R,ppm,W .0236,.0019,8.098, .0230, .0220, .0257,Chk

Warn, .0188, -.0188

Mg,285.213 {118},Y2R,ppm, .0032,.0057,181.3, .0098, -.0003, -.0000,Chk Pass,,

Mn,257.610 {131},Y2A,ppm, .00014,.00008,53.745, .00015, .00022, .00006,Chk Pass,,

Mo,202.030 {467},Y1,ppm, .0012,.0005,42.03, .0007, .0012, .0017,Chk Pass,,

Na,589.592 { 57},Y2R,ppm, .1173,.0162,13.80, .0997, .1315, .1208,Chk Pass,,

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Ni,231.604 {445},Y1,ppm, .0020,.0006,29.93, .0014, .0020, .0026,Chk Pass,,
P,177.495 {490},Y1,ppm, -.0033,.0071,217.4, -.0102, .0040, -.0036,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0014,.0014,101.9, .0027, .0015, -.0001,Chk Pass,,
S,182.034 {485},Y1,ppm, .0287,.0179,62.55, .0120, .0477, .0264,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0014,.0060,436.5, .0065, .0030, -.0053,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0040,.0087,217.1, .0117, .0059, -.0055,Chk Pass,,
Si,251.611 {134},Y2R,ppm, -.01771,.03296,186.16, -.00519, .00716, -.05510,Chk Pass,,
Sn,189.989 {477},Y1,ppm, -.0078,.0109,140.9, -.0173, .0041, -.0101,Chk Pass,,
Sr,421.552 {80},Y2A,ppm, .0001,.0000,4.893, .0001, .0001, .0001,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.0567,.0822,144.9, -.0346, .0122, -.1476,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, -.0002,.0001,55.69, -.0002, -.0001, -.0002,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0074,.0040,54.26, .0042, .0061, .0119,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.0002,.0009,502.2, .0008, -.0010, -.0003,Chk Pass,,
W,207.911 {462},Y1,ppm, -.0013,.0008,62.67, -.0004, -.0016, -.0019,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0003,.0003,82.28, .0006, .0001, .0002,Chk Pass,,
Zr,339.198 {99},Y2R,ppm, .0038,.0114,304.9, .0033, -.0074, .0154,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 3020.5,9.8810,.32713,3024.8,3027.5,3009.2

Y2A,371.030 { 91}2,Cts/S, 142340.,746.04,.52413,143130.,142250.,141640.

Y2R,371.030 { 91}3,Cts/S, 3897.7,36.790,.94387,3871.6,3881.8,3939.8

[Sample Header]

Method=New TRACE Fast w axial Al(v227)

SampleName=410-3241-C-1-A

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/12/2020 10:29:38

Sample Type=Unk

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .0000057,.0003917,6865.067, -.000316, -.000109,

.0004418,Chk Pass,,

Al,308.215 {109},Y2R,ppm, -.042505,.0299234,70.39971, -.050928, -.067314,

-.009273,Chk Pass,,

Al ax,308.215 {109}2,Y2A,ppm, .0061301,.0047127,76.87926, .0104640, .0068131,

.0011131,Chk Pass,,

As,189.042 {478},Y1,ppm, .0023487,.0075203,320.1835, .0015472, -.004739,

.0102376,Chk Pass,,

B,249.773 {135},Y2A,ppm, .0862232,.0003188,.3697790, .0864399, .0858571,

.0863726,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .0541809,.0001943,.3585993, .0543481, .0542267,

.0539678,Chk Pass,,

Be,313.042 {108},Y2A,ppm, .0000767,.0000143,18.57788, .0000788, .0000899,

.0000616,Chk Pass,,

Ca,317.933 {106},Y2R,ppm, 190.6209,.3553398,.1864118, 190.8315, 190.2106,

190.8205,Chk Pass,,

Cd,226.502 {449},Y1,ppm, -.000084,.0001660,198.6164, .0000585, -.000266,

-.000043,Chk Pass,,

Co,228.616 {447},Y1,ppm, .0013672,.0001345,9.838780, .0014319, .0014571,

.0012125,Chk Pass,,

Cr,267.716 {126},Y2A,ppm, .0045744,.0002421,5.293133, .0047095, .0042949,

.0047188,Chk Pass,,

Cu,327.396 {103},Y2A,ppm, .0039186,.0013426,34.26275, .0031362, .0054689,

.0031507,Chk Pass,,

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Fe, 261.187 {129}, Y2R, ppm, .0118787, .0364185, 306.5869, -.006152, -.012007,
 .0537950, Chk Pass,,
 K, 766.490 {44}, Y2R, ppm, 25.28465, .0315855, .1249195, 25.29577, 25.24900,
 25.30916, Chk Pass,,
 Li, 670.784 {50}, Y2R, ppm, .0306890, .0010460, 3.408298, .0304413, .0297891,
 .0318366, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 22.89369, .0588900, .2572326, 22.87608, 22.84562,
 22.95938, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0003515, .0000739, 21.01142, .0003250, .0004349,
 .0002945, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0403273, .0008115, 2.012200, .0394044, .0409290,
 .0406486, Chk Pass,,
 Na, 589.592 {57}, Y2R, ppm, 220.2962, .7474111, .3392755, 220.8755, 219.4526,
 220.5606, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0047190, .0015813, 33.51020, .0065427, .0038855,
 .0037288, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .0522341, .0027202, 5.207689, .0496386, .0519997, .0550639, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0022214, .0049704, 223.7560, -.002179, .0076126,
 .0012305, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 136.3105, .2600918, .1908083, 136.3554, 136.5453, 136.0309, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0040285, .0096323, 239.1078, .0123832, .0062096,
 -.006507, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0057206, .0069210, 120.9843, .0050624, .0129471,
 -.000848, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 5.350832, .0641678, 1.199213, 5.416189, 5.287923,
 5.348383, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, -.006404, .0030801, 48.09742, -.003063, -.009131,
 -.007017, Chk Pass,,
 Sr, 421.552 {80}, Y2A, ppm, .9027925, .0026212, .2903454, .9056917, .9005900,
 .9020958, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .0223326, .0339003, 151.7971, .0121923, -.005340,
 .0601459, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0013148, .0001389, 10.56293, .0012823, .0014670,
 .0011950, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0090591, .0034759, 38.36910, .0116871, .0103724,
 .0051179, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0011938, .0001646, 13.78893, .0013655, .0010373,
 .0011786, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0001138, .0011428, 1004.069, -.000597, .0014320, -.000493, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0127524, .0004417, 3.463679, .0126089, .0132480,
 .0124002, Chk Pass,,
 Zr, 339.198 {99}, Y2R, ppm, .0027550, .0096117, 348.8786, -.002289, -.003284,
 .0138388, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3
 Y1, 224.306 {450}, Cts/S, 2808.662, 4.845961, .1725363, 2814.219, 2806.459, 2805.309
 Y2A, 371.030 {91}2, Cts/S, 133225.8, 46.86888, .0351800, 133172.0, 133247.1, 133258.2
 Y2R, 371.030 {91}3, Cts/S, 3894.868, 36.05364, .9256704, 3907.639, 3922.797, 3854.167

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3348-C-14-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:32:54
 Sample Type=Unk

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Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000959,.0009633,100.4298, -.001042, .0000430,
 -.001878,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.056170,.1232743,219.4670, -.175769, .0704771,
 -.063217,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0078016,.0076518,98.07921, .0115550, -.001002,
 .0128519,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0061788,.0122956,198.9955, -.005483, .0049973,
 .0190225,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0055093,.0003950,7.170060, .0059082, .0055016,
 .0051182,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0042702,.0000745,1.744560, .0043562, .0042285,
 .0042258,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0004602,.0000105,2.289281, .0004718, .0004513,
 .0004575,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 1.143793,.0060560,.5294666, 1.141380, 1.150684,
 1.139316,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003057,.0002877,94.13363, -.000024, .0005037,
 .0004378,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0055911,.0014455,25.85347, .0055116, .0041870,
 .0070747,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0010575,.0003178,30.05069, .0007779, .0014031,
 .0009915,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0081265,.0014496,17.83769, .0072604, .0073191,
 .0098000,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0850689,.0170404,20.03127, .0866983, .1012359,
 .0672723,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.382248,.0164501,1.190098, 1.400382, 1.368284,
 1.378078,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0265527,.0024633,9.276967, .0237453, .0275602,
 .0283524,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .4744956,.0063097,1.329772, .4750679, .4804996,
 .4679192,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0258677,.0002474,.9564090, .0258878, .0256108,
 .0261044,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0009712,.0002948,30.36066, .0008050, .0007969,
 .0013116,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 10.14136,.0362638,.3575830, 10.14580, 10.17519,
 10.10308,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0126284,.0003125,2.474962, .0123207, .0129455,
 .0126189,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0061395,.0005408,8.808744, .0059420, .0067513, .0057252,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.000504,.0030053,595.7856, .0008074, -.003943,
 .0016219,Chk Pass,,
 S,182.034 {485},Y1,ppm, 1.725822,.0227811,1.320017, 1.750449, 1.721515, 1.705501,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0010549,.0050621,479.8774, .0051949, .0025583,
 -.004589,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0013390,.0043593,325.5736, -.003483, .0050001,
 .0025002,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.355449,.0398227,1.186808, 3.395188, 3.355616,
 3.315544,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.010136,.0101030,99.67672, -.020005, -.010588,
 .0001859,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0118552,.0000153,.1286251, .0118383, .0118681,
 .0118591,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.010647,.0291884,274.1424, -.003573, .0143539,

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-.042723,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0000230,.0000384,167.1321, .0000004, .0000674,
 .0000012,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0074842,.0024038,32.11895, .0095175, .0048312,
 .0081038,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0006038,.0003229,53.48455, .0003185, .0005385,
 .0009544,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000955,.0009699,101.6142, -.000078, -.000790, -.001996,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0352590,.0002391,.6779852, .0351122, .0355349,
 .0351300,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0051460,.0054387,105.6893, .0103143, .0056516,
 -.000528,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3067.390,6.567095,.2140939,3073.498,3068.228,3060.444
 Y2A,371.030 { 91}2,Cts/S, 146649.5,623.0882,.4248826,146342.3,147366.5,146239.6
 Y2R,371.030 { 91}3,Cts/S, 4072.687,19.10991,.4692211,4091.207,4053.037,4073.817

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:36:04
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000283,.0007593,268.1420, -.001157, .0002136,
 .0000941,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 3.902026,.0378232,.9693218, 3.871820, 3.944448,
 3.889811,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 4.080800,.0064957,.1591767, 4.074029, 4.086980,
 4.081393,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0110640,.0056972,51.49262, .0056049, .0169726,
 .0106147,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0196202,.0003622,1.846264, .0194056, .0200384,
 .0194166,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0492139,.0002104,.4274991, .0489853, .0492570,
 .0493995,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0048948,.0000240,.4907298, .0048677, .0049031,
 .0049136,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 19.95529,.1632933,.8182955, 19.98927, 20.09893,
 19.77769,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004405,.0000743,16.87228, .0003607, .0005077,
 .0004532,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0819205,.0006814,.8318144, .0812242, .0825860,
 .0819513,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0031547,.0001503,4.764496, .0033179, .0031245,
 .0030219,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0787486,.0008110,1.029856, .0796850, .0782773,
 .0782834,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 1.187685,.0236940,1.994971, 1.174960, 1.215022,
 1.173071,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 3.052498,.0439653,1.440306, 3.056476, 3.094339,

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3.006679,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0482262,.0015834,3.283296, .0495353, .0486769,
 .0464662,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 35.77086,.4102263,1.146817, 35.79311, 36.16951,
 35.34996,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 2.521551,.0130712,.5183771, 2.515690, 2.512437,
 2.536527,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0009978,.0006105,61.17911, .0015484, .0011038,
 .0003413,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 114.1375,.8092653,.7090267, 113.8561, 115.0499,
 113.5065,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0849232,.0013107,1.543353, .0835567, .0861697,
 .0850433,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.011509,.0033854,29.41407, -.009769, -.015411, -.009348,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0065819,.0018050,27.42366, .0086648, .0056050,
 .0054759,Chk Pass,,
 S,182.034 {485},Y1,ppm, 24.56846,.0672645,.2737841, 24.49884, 24.63309, 24.57345,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.002388,.0088730,371.5554, -.009739, -.004893,
 .0074683,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0054319,.0049921,91.90357, .0030709, .0020582,
 .0111665,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 15.92724,.1761904,1.106221, 15.89827, 16.11612,
 15.76733,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.008139,.0043670,53.65155, -.005373, -.013174,
 -.005871,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2037034,.0006867,.3371072, .2031816, .2034471,
 .2044813,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.006964,.0190886,274.1184, -.027450, -.003763,
 .0103221,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0030309,.0000731,2.411274, .0030845, .0029476,
 .0030605,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0065137,.0015088,23.16437, .0067390, .0049048,
 .0078972,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0003337,.0005825,174.5405, -.000140, .0001576,
 .0009840,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0011216,.0012735,113.5386, .0025058, -.000000, .0008592,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .1941826,.0008760,.4511445, .1938208, .1951816,
 .1935455,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0022936,.0046587,203.1218, .0071919, -.002081,
 .0017702,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3190.081,11.21408,.3515297,3202.720,3181.322,3186.201
 Y2A,371.030 { 91}2,Cts/S, 151014.7,1355.217,.8974078,152182.7,151332.6,149528.8
 Y2R,371.030 { 91}3,Cts/S, 4322.056,30.85438,.7138821,4329.294,4288.226,4348.647

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:39:09
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

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[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A	ppm	-.000741	.0008033	108.3377	-.001623	-.000052	-.000549	Chk Pass,,	
Al	308.215	{109}	Y2R	ppm	-.062033	.1945425	313.6099	-.055662	.1292451	-.259683	Chk Pass,,	
Al	ax,308.215	{109}2	Y2A	ppm	.0118627	.0054694	46.10595	.0180873	.0096750	.0078257	Chk Pass,,	
As	189.042	{478}	Y1	ppm	-.006988	.0098252	140.5993	-.011554	-.013700	.0042892	Chk Pass,,	
B	249.773	{135}	Y2A	ppm	.0011440	.0005423	47.40365	.0011854	.0016644	.0005822	Chk Pass,,	
Ba	455.403	{74}	Y2A	ppm	.0000043	.0000312	731.6166	.0000243	.0000201	-.000032	Chk Pass,,	
Be	313.042	{108}	Y2A	ppm	.0002918	.0000138	4.719536	.0002866	.0003074	.0002813	Chk Pass,,	
Ca	317.933	{106}	Y2R	ppm	-.005036	.0145579	289.0618	.0094452	-.004885	-.019669	Chk Pass,,	
Cd	226.502	{449}	Y1	ppm	.0002295	.0001303	56.75273	.0000823	.0003297	.0002766	Chk Pass,,	
Co	228.616	{447}	Y1	ppm	.0002575	.0003578	138.9352	-.000126	.0005829	.0003152	Chk Pass,,	
Cr	267.716	{126}	Y2A	ppm	-.000714	.0009902	138.7477	-.000638	-.001739	.0002366	Chk Pass,,	
Cu	327.396	{103}	Y2A	ppm	-.000876	.0015613	178.2222	.0003568	-.002632	-.000353	Chk Pass,,	
Fe	261.187	{129}	Y2R	ppm	.0014210	.0111978	788.0162	-.010558	.0031964	.0116251	Chk Pass,,	
K	766.490	{44}	Y2R	ppm	.3819362	.0312666	8.186351	.4150635	.3778040	.3529412	Chk Pass,,	
Li	670.784	{50}	Y2R	ppm	.0221219	.0036578	16.53494	.0223273	.0183656	.0256726	Chk Pass,,	
Mg	285.213	{118}	Y2R	ppm	-.001007	.0057071	566.9935	-.007581	.0018911	.0026704	Chk Pass,,	
Mn	257.610	{131}	Y2A	ppm	.0005918	.0001023	17.28788	.0006249	.0004770	.0006734	Chk Pass,,	
Mo	202.030	{467}	Y1	ppm	.0006531	.0004980	76.24488	.0012281	.0003668	.0003644	Chk Pass,,	
Na	589.592	{57}	Y2R	ppm	.1038136	.0090276	8.695930	.0999492	.0973616	.1141302	Chk Pass,,	
Ni	231.604	{445}	Y1	ppm	.0007353	.0006864	93.35521	-.000055	.0010763	.0011843	Chk Pass,,	
P	177.495	{490}	Y1	ppm	-.003736	.0045340	121.3477	-.006785	.0014739	-.005898	Chk Pass,,	
Pb	220.353	{453}	Y1	ppm	-.000820	.0018776	228.9361	.0003936	.0001287	-.002983	Chk Pass,,	
S	182.034	{485}	Y1	ppm	.0373627	.0144899	38.78180	.0513990	.0224581	.0382311	Chk Pass,,	
Sb	206.833	{463}	Y1	ppm	.0023086	.0007287	31.56530	.0023660	.0015528	.0030069	Chk Pass,,	
Se	196.090	{472}	Y1	ppm	-.001900	.0006053	31.86195	-.001695	-.001424	-.002581	Chk Pass,,	
Si	251.611	{134}	Y2R	ppm	.0133408	.0099471	74.56118	.0033249	.0232175	.0134799	Chk Pass,,	
Sn	189.989	{477}	Y1	ppm	-.011302	.0040257	35.61884	-.006691	-.014114	-.013102	Chk Pass,,	
Sr	421.552	{80}	Y2A	ppm	.0000647	.0000105	16.16310	.0000560	.0000617	.0000763	Chk Pass,,	
Th	283.730	{119}	Y2R	ppm	-.007091	.0453620	639.6806	-.057462	.0305369	.0056508	Chk Pass,,	
Ti	334.941	{101}	Y2A	ppm	-.000070	.0000792	113.3707	-.000102	-.000128	.0000203	Chk Pass,,	

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Tl,190.856 {477},Y1,ppm, .0068079,.0017661,25.94178, .0088255, .0055425,
 .0060556,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0002326,.0001834,78.82945, .0003574, .0003185,
 .0000221,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0003038,.0005803,191.0109, .0006043, -.000365, .0006723,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0000181,.0000365,201.4959, .0000467, -.000023,
 .0000306,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0075763,.0083265,109.9022, .0130677, -.002004,
 .0116652,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3034.503,3.965314,.1306742,3038.231,3034.942,3030.337
 Y2A,371.030 { 91}2,Cts/S, 143760.0,919.6895,.6397394,143969.7,142753.6,144556.8
 Y2R,371.030 { 91}3,Cts/S, 3971.900,26.70177,.6722669,3962.525,4002.025,3951.150

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:42:19
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.001075,.0005447,50.68491, -.000762, -.001704,
 -.000759,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0391838,.1620940,413.6755, .2080810, -.115120,
 .0245908,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0079954,.0052398,65.53567, .0107386, .0112941,
 .0019535,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.001440,.0012704,88.21007, -.002710, -.000169,
 -.001442,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0227211,.0011660,5.131586, .0235976, .0231679,
 .0213979,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0317532,.0002201,.6930325, .0315741, .0316865,
 .0319988,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002740,.0000099,3.627050, .0002636, .0002834,
 .0002748,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 19.33508,.0614072,.3175945, 19.37147, 19.26419,
 19.36960,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001799,.0000697,38.73010, .0002192, .0002209,
 .0000994,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0033974,.0001712,5.039022, .0034196, .0032162,
 .0035564,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0008518,.0002335,27.41235, .0009811, .0005823,
 .0009921,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0016708,.0002662,15.93051, .0015681, .0019730,
 .0014712,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0565179,.0056271,9.956370, .0616010, .0574815,
 .0504712,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 3.472077,.0163524,.4709682, 3.453197, 3.481241,
 3.481791,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0263245,.0014668,5.572100, .0252201, .0257645,
 .0279888,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 19.46288,.1697808,.8723313, 19.35134, 19.37904,
 19.65828,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 1.757997,.0080190,.4561420, 1.763619, 1.748814,
 1.761558,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0001961,.0009870,503.3915, .0013042, -.000127,
 -.000589,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 97.16120,.4407258,.4536027, 96.66018, 97.33439,
 97.48902,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0054890,.0006511,11.86100, .0050499, .0062370,
 .0051801,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.008910,.0060147,67.50795, -.008917, -.014921, -.002891,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0030232,.0036083,119.3534, .0019906, .0000438,
 .0070352,Chk Pass,,
 S,182.034 {485},Y1,ppm, 54.29798,.0563367,.1037547, 54.35278, 54.24023, 54.30094,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0007792,.0049615,636.7624, .0065073, -.002171,
 -.001999,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.000268,.0051832,1932.607, -.001863, .0055250,
 -.004467,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 7.881149,.0669560,.8495710, 7.860989, 7.826590,
 7.955869,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.009787,.0058763,60.04348, -.003448, -.010859,
 -.015053,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .1450951,.0001621,.1117457, .1449173, .1451334,
 .1452347,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.031149,.0278654,89.45823, -.000970, -.036574,
 -.055903,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0016652,.0000608,3.650247, .0015957, .0017085,
 .0016915,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0030593,.0048113,157.2710, -.000987, .0017859,
 .0083792,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0008943,.0002991,33.44638, .0007880, .0006629,
 .0012320,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0009158,.0014967,163.4170, .0020981, .0014164, -.000767,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0041824,.0001207,2.886826, .0040488, .0042147,
 .0042838,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0040043,.0069245,172.9279, .0096424, -.003725,
 .0060951,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2943.949,1.486091,.0504795,2945.371,2944.071,2942.406
 Y2A,371.030 { 91}2,Cts/S, 137456.4,781.0746,.5682344,137052.0,138356.8,136960.5
 Y2R,371.030 { 91}3,Cts/S, 3892.303,29.07082,.7468796,3922.087,3890.819,3864.002

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:45:26
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
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Ag,328.068 {103},Y2A,ppm, -.000705,.0012498,177.3086, -.001042, -.001751,
 .0006790,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.080539,.1658191,205.8861, -.242329, -.088324,
 .0890352,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, -.013620,.0147903,108.5945, .0001476, -.011751,
 -.029256,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.007664,.0023142,30.19638, -.005191, -.008023,
 -.009777,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .3882285,.0007806,.2010683, .3879337, .3891135,
 .3876382,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 1.021772,.0079674,.7797660, 1.029497, 1.013582,
 1.022237,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000086,.0000064,7.439649, -.000091, -.000079,
 -.000089,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 371.0901,2.438498,.6571176, 368.5546, 373.4184,
 371.2973,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0018864,.0001630,8.638665, .0018321, .0020696,
 .0017575,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0297591,.0002294,.7709062, .0300034, .0295482,
 .0297258,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.001394,.0007499,53.79862, -.001202, -.000759,
 -.002221,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0042152,.0024582,58.31711, .0053869, .0058684,
 .0013904,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 67.61264,.0730006,.1079689, 67.52934, 67.64314,
 67.66545,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 46.29800,.2039070,.4404230, 46.06255, 46.41432,
 46.41711,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0521492,.0006069,1.163774, .0517109, .0518948,
 .0528419,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 195.7884,1.496091,.7641368, 194.1527, 197.0876,
 196.1247,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 3.937704,.0106898,.2714738, 3.931743, 3.950045,
 3.931324,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.000171,.0021997,1284.627, .0013887, .0007847,
 -.002687,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1353.029,18.89167,1.396250, 1359.865, 1367.551,
 1331.671,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0177327,.0010453,5.894684, .0187244, .0166410,
 .0178325,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1733163,.0053959,3.113321, .1685886, .1721656, .1791947,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.007195,.0037450,52.04908, -.003684, -.011137,
 -.006765,Chk Pass,,
 S,182.034 {485},Y1,ppm, 54.36715,.2172241,.3995503, 54.43084, 54.54540, 54.12520,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0020564,.0036160,175.8444, .0059743, -.001153,
 .0013475,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0067502,.0051959,76.97417, .0124497, .0022773,
 .0055237,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 19.54366,.0935704,.4787764, 19.43630, 19.60783,
 19.58686,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.011003,.0046035,41.83877, -.009601, -.007263,
 -.016144,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 2.534512,.0091825,.3622997, 2.542612, 2.524537,
 2.536386,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0204838,.0498216,243.2248, -.000276, -.015601,
 .0773284,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.001436,.0000991,6.899827, -.001361, -.001399,
 -.001548,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0066606,.0028884,43.36600, .0079479, .0086816,
 .0033523,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000330,.0006628,200.6740, -.000579, -.000832,

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.0004210,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0002714,.0021895,806.7145, -.000305, .0026914, -.001573,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4660420,.0008534,.1831194, .4664387, .4666249,
 .4650625,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0023911,.0099978,418.1230, -.001328, .0137153,
 -.005214,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2436.876,8.273049,.3394940,2445.331,2436.501,2428.797
 Y2A,371.030 { 91}2,Cts/S, 115366.8,423.7166,.3672776,115160.0,115854.3,115086.3
 Y2R,371.030 { 91}3,Cts/S, 3763.887,40.12566,1.066070,3807.011,3727.652,3756.997

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3241-C-11-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:48:56
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000838,.0004173,49.78308, -.000553, -.001317,
 -.000645,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.104725,.0651564,62.21643, -.071421, -.062952,
 -.179802,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, -.022119,.0036139,16.33852, -.025997, -.018845,
 -.021515,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.008358,.0148146,177.2530, -.025464, .0001749,
 .0002158,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 1.576321,.0082006,.5202339, 1.577036, 1.584141,
 1.567787,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1134952,.0004119,.3629441, .1130329, .1138231,
 .1136298,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0001678,.0000144,8.556713, .0001802, .0001712,
 .0001521,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 176.2307,1.081802,.6138556, 175.5989, 177.4798,
 175.6133,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, -.000100,.0001160,115.7854, -.000081, -.000225,
 .0000049,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0048988,.0003606,7.360110, .0053151, .0046924,
 .0046888,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0003145,.0004073,129.5010, .0002715, .0007415,
 -.000070,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0031346,.0011203,35.74077, .0024133, .0044253,
 .0025652,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0657099,.0386067,58.75318, .0865970, .0893731,
 .0211596,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 147.4667,.6947807,.4711442, 146.8932, 148.2393,
 147.2676,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0788939,.0015333,1.943542, .0771566, .0794667,
 .0800583,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 406.8133,4.915655,1.208332, 404.3944, 412.4697,
 403.5758,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .1526607,.0014472,.9479853, .1528623, .1539966,

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.1511233,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0009641,.0009386,97.35148, .0019254, .0000500,
 .0009169,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1615.854,39.84051,2.465602, 1641.579, 1636.020,
 1569.962,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0033475,.0006850,20.46234, .0041110, .0031449,
 .0027867,Chk Pass,,
 P,177.495 {490},Y1,ppm, .8113346,.0112062,1.381201, .8218103, .7995185, .8126750,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0040789,.0018749,45.96545, .0039949, .0059944,
 .0022474,Chk Pass,,
 S,182.034 {485},Y1,ppm,F 379.2162,1.998906,.5271153, 381.2708, 379.0997,
 377.2781,Chk Fail,180.0000,-.500000
 Sb,206.833 {463},Y1,ppm, .0086005,.0050801,59.06814, .0092372, .0032320,
 .0133322,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0324592,.0201337,62.02779, .0137842, .0298049,
 .0537883,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.632050,.0015231,.0578683, 2.633351, 2.630375,
 2.632424,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.007043,.0031723,45.04201, -.003688, -.007448,
 -.009994,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 2.812505,.0240126,.8537811, 2.800674, 2.840137,
 2.796703,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.019520,.0237029,121.4313, .0073528, -.037454,
 -.028458,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0016397,.0002467,15.04637, .0016490, .0013885,
 .0018817,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0054784,.0039123,71.41385, .0099475, .0038156,
 .0026721,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000103,.0008209,793.2065, -.000396, .0008236,
 -.000738,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0002092,.0010331,493.6979, .0010027, .0005840, -.000959,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0006358,.0001891,29.74343, .0005441, .0008533,
 .0005100,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000573,.0048968,854.3961, .0021826, .0023249,
 -.006227,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2332.864,4.768372,.2043999,2330.990,2329.317,2338.285
 Y2A,371.030 { 91}2,Cts/S, 109255.1,1262.587,1.155632,109040.3,108113.7,110611.3
 Y2R,371.030 { 91}3,Cts/S, 3596.505,32.91601,.9152223,3623.752,3559.932,3605.829

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:52:21
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000602,.0008014,133.2384, -.000925, -.001191,
 .0003111,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.093395,.0500390,53.57789, -.150374, -.073206,

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-.056604,Chk Pass,,
 Al,308.215 {109}2,Y2A,ppm, .0003804,.0044659,1173.968, -.002986, .0054467,
 -.001320,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.000020,.0159851,79860.96, .0121415, .0059241,
 -.018126,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .6591063,.0024045,.3648085, .6608735, .6563682,
 .6600772,Chk Pass,,
 Ba,455.403 {74},Y2A,ppm, .0272144,.0001721,.6323028, .0271707, .0270684,
 .0274041,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002718,.0000036,1.315246, .0002759, .0002703,
 .0002692,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 70.49025,.5624041,.7978466, 70.27925, 70.06386,
 71.12764,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, -.000063,.0001602,252.2630, -.000246, .0000003,
 .0000549,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0033539,.0006182,18.43299, .0026617, .0038511,
 .0035488,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.000260,.0006757,260.2248, -.001037, .0001844,
 .0000739,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0040706,.0025097,61.65385, .0041771, .0065253,
 .0015094,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0510593,.0178062,34.87365, .0584129, .0640109,
 .0307540,Chk Pass,,
 K,766.490 {44},Y2R,ppm, 61.14106,.2926459,.4786406, 60.92097, 61.02903,
 61.47316,Chk Pass,,
 Li,670.784 {50},Y2R,ppm, .0488141,.0022460,4.601184, .0469839, .0513206,
 .0481379,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 172.7364,2.420239,1.401117, 171.6109, 171.0840,
 175.5145,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2756540,.0011848,.4298138, .2767822, .2744198,
 .2757601,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0034831,.0008320,23.88704, .0042514, .0025994,
 .0035986,Chk Pass,,
 Na,589.592 {57},Y2R,ppm,F 1042.471,8.136893,.7805393, 1050.108, 1033.913,
 1043.391,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .0029330,.0021758,74.18231, .0033576, .0005763,
 .0048653,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0710210,.0043843,6.173284, .0662414, .0719656, .0748560,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0004225,.0013245,313.4718, -.000265, .0019495,
 -.000417,Chk Pass,,
 S,182.034 {485},Y1,ppm, 144.7896,.5851310,.4041250, 144.4645, 145.4651, 144.4392,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0024985,.0016457,65.86596, .0006064, .0032921,
 .0035969,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0116967,.0088481,75.64659, .0165106, .0170942,
 .0014853,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.578015,.0298022,1.888592, 1.545057, 1.585918,
 1.603069,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.007863,.0060518,76.96920, -.007132, -.014247,
 -.002209,Chk Pass,,
 Sr,421.552 {80},Y2A,ppm, 1.115372,.0031527,.2826616, 1.118414, 1.112119,
 1.115585,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.028391,.0378335,133.2571, -.029077, -.065877,
 .0097804,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0023982,.0002088,8.707717, .0024769, .0021615,
 .0025563,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0054091,.0037651,69.60747, .0011711, .0066879,
 .0083682,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0003118,.0006447,206.7815, .0001731, -.000252,
 .0010145,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0013227,.0009707,73.38484, .0002122, .0020094, .0017464,Chk
 Pass,,

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Zn,213.856 {458},Y1,ppm, .0029472,.0001080,3.664732, .0028241, .0030260,
 .0029916,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0064276,.0067805,105.4905, .0096590, .0109881,
 -.001364,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2567.580,9.608774,.3742347,2578.607,2561.004,2563.129
 Y2A,371.030 { 91}2,Cts/S, 119274.0,199.9879,.1676711,119276.5,119472.6,119072.7
 Y2R,371.030 { 91}3,Cts/S, 3731.374,49.64215,1.330399,3763.664,3756.245,3674.212

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:55:44
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000901,.0004204,46.64346, -.001383, -.000607,
 -.000714,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.059311,.0155827,26.27293, -.069707, -.041394,
 -.066832,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0046450,.0017684,38.07145, .0050676, .0027036,
 .0061639,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0017448,.0115480,661.8557, -.009195, .0138172,
 .0006125,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .5183078,.0039520,.7624851, .5226072, .5148334,
 .5174827,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0622938,.0002758,.4427102, .0625944, .0622347,
 .0620524,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002615,.0000178,6.800534, .0002418, .0002664,
 .0002763,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 91.41214,.0972829,.1064223, 91.42778, 91.30798,
 91.50065,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, -.000066,.0002383,362.1362, -.000004, -.000329,
 .0001356,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0032376,.0007732,23.88248, .0038275, .0023622,
 .0035230,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0006392,.0004525,70.79437, .0001667, .0006822,
 .0010687,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0056180,.0010133,18.03694, .0067009, .0046928,
 .0054604,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0168499,.0229478,136.1893, .0332579, .0266649,
 -.009373,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 45.51658,.1401603,.3079325, 45.40441, 45.67370,
 45.47163,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0411467,.0021725,5.279815, .0387533, .0429940,
 .0416928,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 132.0519,.7957029,.6025685, 132.1838, 131.1984,
 132.7733,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0475896,.0004776,1.003550, .0480008, .0470658,
 .0477022,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0045316,.0012285,27.10901, .0058409, .0034044,
 .0043494,Chk Pass,,

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Na,589.592 { 57},Y2R,ppm,F 852.9289,5.980013,.7011150, 856.8883, 855.8485,
846.0499,Chk Fail,450.0000,-1.00000
Ni,231.604 {445},Y1,ppm, .0041995,.0024728,58.88345, .0048366, .0014705,
.0062914,Chk Pass,,
P,177.495 {490},Y1,ppm, .0809977,.0030435,3.757485, .0845110, .0791697, .0793123,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, -.000528,.0029235,553.2198, -.000441, -.003495,
.0023505,Chk Pass,,
S,182.034 {485},Y1,ppm, 124.5899,.4393999,.3526770, 125.0162, 124.6151, 124.1384,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0064947,.0036635,56.40667, .0077122, .0023775,
.0093944,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0020368,.0041762,205.0389, .0057553, .0028364,
-.002481,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 2.589647,.0112972,.4362451, 2.583461, 2.602686,
2.582792,Chk Pass,,
Sn,189.989 {477},Y1,ppm, -.006570,.0045806,69.71959, -.006160, -.011342,
-.002208,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .8845685,.0049047,.5544732, .8897136, .8799460,
.8840459,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.024742,.0138044,55.79387, -.040666, -.016174,
-.017385,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0023814,.0001373,5.766724, .0022414, .0023870,
.0025159,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0062884,.0008954,14.23874, .0059600, .0056036,
.0073016,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0005567,.0003247,58.32446, .0008551, .0002109,
.0006040,Chk Pass,,
W,207.911 {462},Y1,ppm, -.001365,.0024062,176.3302, -.003825, .0009834, -.001252,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .0043032,.0002310,5.367235, .0045693, .0041558,
.0041843,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0093303,.0010998,11.78741, .0089726, .0084538,
.0105644,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 2616.538,9.323101,.3563143,2606.299,2618.778,2624.537
Y2A,371.030 { 91}2,Cts/S, 121961.8,612.9772,.5025976,121977.1,122567.0,121341.3
Y2R,371.030 { 91}3,Cts/S, 3804.923,20.38427,.5357342,3826.262,3802.858,3785.650

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
SampleName=410-3311-G-1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 10:59:07
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, -.001221,.0004742,38.84872, -.001145, -.000789,
-.001728,Chk Pass,,
Al,308.215 {109},Y2R,ppm, .0171712,.0613329,357.1849, .0872312, -.008892,
-.026826,Chk Pass,,
Al ax,308.215 {109}2,Y2A,ppm, .0047116,.0061561,130.6585, .0102779, -.001900,
.0057574,Chk Pass,,

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As, 189.042 {478}, Y1, ppm, .0032473, .0112479, 346.3810, .0005918, .0155853,
 -.006435, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .0497190, .0001459, .2933985, .0495650, .0498551,
 .0497368, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .0939263, .0006949, .7398412, .0932620, .0946482,
 .0938688, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, .0002347, .0000116, 4.927995, .0002269, .0002292,
 .0002480, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 51.33612, .3289325, .6407428, 51.14336, 51.14907,
 51.71592, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0002135, .0001576, 73.80846, .0001584, .0000908,
 .0003912, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, -.000387, .0001753, 45.33234, -.000557, -.000395,
 -.000207, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0009761, .0003533, 36.19589, .0006752, .0013651,
 .0008879, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0019130, .0004453, 23.27849, .0022011, .0014001,
 .0021378, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, -.007276, .0005368, 7.377246, -.006681, -.007424,
 -.007723, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, 3.209825, .0492485, 1.534305, 3.153151, 3.242226,
 3.234097, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, .0377886, .0018686, 4.944884, .0386568, .0356438,
 .0390651, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 7.161275, .0427790, .5973662, 7.127368, 7.147119,
 7.209338, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0002088, .0000339, 16.23375, .0001707, .0002203,
 .0002355, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0033193, .0008173, 24.62286, .0031367, .0042124,
 .0026087, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, 26.26925, .3047170, 1.159976, 25.97169, 26.25542,
 26.58065, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0018890, .0009448, 50.01317, .0018362, .0009718,
 .0028591, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .0025237, .0049134, 194.6871, .0061693, .0044658, -.003064, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0024947, .0025626, 102.7215, .0038318, -.000460,
 .0041121, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 20.84046, .0917115, .4400645, 20.91833, 20.86366, 20.73937, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0044779, .0036406, 81.30114, .0004605, .0054147,
 .0075586, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0068371, .0036102, 52.80343, .0096378, .0081108,
 .0027627, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 14.26226, .0989831, .6940214, 14.14803, 14.32284,
 14.31590, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, -.006797, .0015476, 22.77055, -.006717, -.008382,
 -.005290, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .3368009, .0014774, .4386615, .3351136, .3374261,
 .3378629, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, -.031193, .0150448, 48.23070, -.036893, -.014131,
 -.042555, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0023227, .0001189, 5.117439, .0024584, .0022372,
 .0022724, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0100988, .0018684, 18.50160, .0082761, .0120098,
 .0100105, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0056466, .0007215, 12.77674, .0060323, .0060933,
 .0048143, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0013090, .0006498, 49.64113, .0019525, .0006531, .0013214, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0062132, .0001646, 2.650044, .0062321, .0063676,
 .0060399, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, .0088372, .0017035, 19.27675, .0079823, .0077304,

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.0107989,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/s, 2988.130,2.528059,.0846034,2989.021,2985.276,2990.091
 Y2A,371.030 { 91}2,Cts/s, 140362.3,1231.688,.8775064,141375.0,140720.7,138991.2
 Y2R,371.030 { 91}3,Cts/s, 3905.599,46.17170,1.182193,3944.871,3917.190,3854.737

[Sample Header]

Method=New TRACE Fast w axial Al(v227)

SampleName=CCV 095153

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/12/2020 11:02:14

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .4979,.0013,.2690, .4964, .4990, .4982,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 24.85,.2164,.8709, 24.85, 25.06, 24.63,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 24.74,.0985,.3980, 24.68, 24.68, 24.85,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5091,.0098,1.924, .5199, .5065, .5009,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4862,.0009,.1851, .4854, .4860, .4872,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5085,.0016,.3205, .5071, .5082, .5103,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .48981,.00089,.18128, .48919, .48942, .49083,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 24.65,.1633,.6625, 24.58, 24.53, 24.84,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5028,.0010,.1997, .5039, .5024, .5020,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .5018,.0018,.3501, .5033, .5021, .4999,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4968,.0020,.4035, .4946, .4972, .4986,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5134,.0013,.2500, .5145, .5120, .5137,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 24.20,.1033,.4270, 24.21, 24.09, 24.30,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 25.64,.1410,.5497, 25.63, 25.51, 25.79,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5317,.0054,1.023, .5341, .5255, .5355,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 24.87,.1566,.6299, 24.69, 24.97, 24.95,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49748,.00131,.26403, .49737, .49623, .49885,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .5062,.0034,.6696, .5101, .5038, .5047,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 25.04,.1480,.5908, 24.91, 25.21, 25.02,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .5036,.0015,.2972, .5040, .5049, .5019,Chk Pass,,
 P,177.495 {490},Y1,ppm, .5070,.0021,.4091, .5067, .5092, .5051,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4960,.0047,.9504, .4931, .4934, .5014,Chk Pass,,
 S,182.034 {485},Y1,ppm, 24.99,.1154,.4619, 25.12, 24.90, 24.96,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .5058,.0031,.6074, .5071, .5023, .5080,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5089,.0053,1.033, .5116, .5029, .5123,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 24.313,.08343,.34315, 24.269, 24.261, 24.409,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .4894,.0036,.7276, .4898, .4927, .4856,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5033,.0028,.5516, .5064, .5010, .5026,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .4654,.0242,5.191, .4433, .4912, .4617,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5157,.0010,.1966, .5158, .5147, .5167,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .5086,.0028,.5445, .5105, .5054, .5098,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5112,.0019,.3770, .5090, .5121, .5125,Chk Pass,,
 W,207.911 {462},Y1,ppm, .5040,.0013,.2518, .5044, .5026, .5051,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .5041,.0009,.1868, .5039, .5033, .5051,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .5169,.0082,1.586, .5194, .5077, .5235,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/s, 2927.6,6.2224,.21255,2925.0,2934.6,2923.0

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Y2A,371.030 { 91}2,Cts/S, 138560.,292.12,.21083,138860.,138540.,138280.
 Y2R,371.030 { 91}3,Cts/S, 3912.8,28.102,.71820,3913.1,3940.7,3884.5

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:05:28
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0012	.0007	58.72	.0010	.0020	.0006	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	-.0495	.0840	169.9	.0189	-.1433	-.0240	Chk Pass,,		
Al	ax,308.215	{109}2	Y2A,ppm	.0083	.0045	54.22	.0033	.0121	.0094	Chk Pass,,		
As	189.042	{478}	Y1,ppm	-.0012	.0038	317.1	-.0009	-.0051	.0025	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0022	.0004	18.24	.0023	.0026	.0018	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	.0003	.0002	70.33	.0001	.0005	.0002	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.00051	.00016	31.573	.00035	.00067	.00050	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	.0064	.0097	152.0	-.0041	.0150	.0083	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0003	.0001	18.16	.0004	.0003	.0003	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0005	.0005	92.84	.0002	.0011	.0003	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	-.0004	.0004	103.8	-.0004	.0000	-.0007	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	-.0000	.0008	2199.	.0000	-.0008	.0007	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0197	.0231	116.8	.0398	-.0054	.0248	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm,F	.3681	.0476	12.94	.3478	.4225	.3340	Chk Fail, .2500, -.2500		
Li	670.784	{ 50}	Y2R,ppm,F	.0256	.0035	13.64	.0224	.0250	.0293	Chk Fail, .0250, -.0250		
Mg	285.213	{118}	Y2R,ppm	.0054	.0047	88.42	.0028	.0108	.0024	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.00032	.00015	48.101	.00017	.00048	.00030	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0010	.0001	7.456	.0010	.0009	.0009	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	.2632	.0076	2.906	.2565	.2715	.2615	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0011	.0007	68.45	.0019	.0009	.0005	Chk Pass,,		
P	177.495	{490}	Y1,ppm	-.0022	.0023	100.8	-.0005	-.0048	-.0014	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0025	.0013	53.24	.0040	.0015	.0019	Chk Pass,,		
S	182.034	{485}	Y1,ppm	.0576	.0142	24.72	.0614	.0419	.0696	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0036	.0022	62.69	.0041	.0011	.0055	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	.0011	.0023	203.8	-.0012	.0013	.0033	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	.00173	.02293	1324.4	.02296	.00482	-.02259	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	-.0072	.0032	43.81	-.0036	-.0084	-.0097	Chk Pass,,		
Sr	421.552	{ 80}	Y2A,ppm	.0004	.0002	45.79	.0002	.0005	.0003	Chk Pass,,		
Th	283.730	{119}	Y2R,ppm	.0064	.0221	347.9	-.0174	.0264	.0100	Chk Pass,,		
Ti	334.941	{101}	Y2A,ppm	.0001	.0002	114.2	.0001	.0003	.0000	Chk Pass,,		
Tl	190.856	{477}	Y1,ppm	.0073	.0022	30.09	.0080	.0049	.0091	Chk Pass,,		
V	292.402	{115}	Y2A,ppm	.0007	.0002	29.27	.0009	.0008	.0005	Chk Pass,,		
W	207.911	{462}	Y1,ppm	-.0002	.0007	287.7	-.0009	.0005	-.0003	Chk Pass,,		
Zn	213.856	{458}	Y1,ppm	.0004	.0002	47.74	.0006	.0003	.0002	Chk Pass,,		
Zr	339.198	{ 99}	Y2R,ppm	.0047	.0064	136.1	.0016	.0004	.0122	Chk Pass,,		

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 3003.9,2.8532,.09498,3000.9,3006.6,3004.2
 Y2A,371.030 { 91}2,Cts/S, 142770.,916.51,.64194,142720.,143720.,141890.
 Y2R,371.030 { 91}3,Cts/S, 3933.9,10.410,.26462,3941.0,3938.8,3922.0

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[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3311-G-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:08:37
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0001845	.0010267	556.5471	-.000644	-.000136	.0013332	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	-.029953	.1614059	538.8647	-.040972	.1366802	-.185567	Chk Pass,,		
Al	ax,308.215	{109}2	Y2A,ppm	-.000304	.0106852	3513.654	-.007376	.0119877	-.005524	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0060974	.0149438	245.0841	-.007809	.0042030	.0218981	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0486113	.0005372	1.105168	.0488966	.0479916	.0489456	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0936603	.0002889	.3084026	.0939128	.0937228	.0933454	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0002585	.0000180	6.951799	.0002629	.0002388	.0002739	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	50.71813	.1400704	.2761743	50.80407	50.55650	50.79383	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002127	.0000771	36.25490	.0002831	.0002248	.0001303	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0002443	.0003903	159.7484	-.000147	.0002455	.0006340	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0007581	.0008447	111.4317	.0003530	.0017290	.0001921	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	-.000422	.0004221	100.0507	-.000061	-.000886	-.000319	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0151663	.0107271	70.73007	.0235450	.0188774	.0030764	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	3.095031	.0433064	1.399222	3.143402	3.059861	3.081831	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0371106	.0008677	2.338109	.0377861	.0361320	.0374138	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	7.063866	.0350495	.4961801	7.030325	7.061022	7.100251	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0001260	.0000288	22.85816	.0001148	.0001045	.0001587	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0029016	.0004540	15.64689	.0033327	.0029445	.0024277	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	26.21965	.0783881	.2989669	26.13659	26.23001	26.29234	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0011303	.0017033	150.6965	.0010447	-.000529	.0028748	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0036716	.0035276	96.07613	.0076143	.0008142	.0025864	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0001695	.0006821	402.5402	-.000200	.0009566	-.000248	Chk Pass,,		
S	182.034	{485}	Y1,ppm	20.56164	.0359452	.1748169	20.54818	20.60237	20.53437	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0032668	.0016861	51.61414	.0048108	.0035219				

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.0014676,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0012817,.0109590,854.9992, -.010193, .0023991,
 .0116392,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 14.22071,.0504245,.3545853, 14.16710, 14.26720,
 14.22781,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.005556,.0049365,88.85132, -.002824, -.002590,
 -.011254,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3354181,.0002136,.0636697, .3354401, .3351944,
 .3356198,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0297914,.0219741,73.75987, .0154978, .0187824,
 .0550939,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0022073,.0001361,6.167213, .0023643, .0021355,
 .0021220,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0050866,.0010809,21.24953, .0040474, .0062048,
 .0050076,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0057470,.0004113,7.156139, .0053994, .0056407,
 .0062010,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000613,.0000367,5.996061, -.000622, -.000572, -.000644,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0061431,.0000845,1.374875, .0062268, .0060579,
 .0061445,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0002980,.0043451,1458.267, -.000533, .0049985,
 -.003572,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2979.150,15.59097,.5233361,2987.216,2989.056,2961.179
 Y2A,371.030 { 91}2,Cts/S, 140866.6,480.3088,.3409671,141031.1,141243.0,140325.6
 Y2R,371.030 { 91}3,Cts/S, 3910.923,7.043285,.1800927,3902.964,3913.454,3916.350

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3311-G-3-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:11:43
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0004388,.0010557,240.6258, -.000673, .0005620,
 .0014274,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.014055,.1156541,822.8626, -.132729, -.007758,
 .0983217,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0025155,.0055105,219.0579, .0074841, .0034737,
 -.003411,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0042654,.0136144,319.1786, -.009750, .0174398,
 .0051065,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0495691,.0011032,2.225534, .0482967, .0502571,
 .0501535,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0992224,.0002213,.2229994, .0992209, .0990019,
 .0994444,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002553,.0000430,16.82532, .0002484, .0002163,
 .0003014,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 51.31529,.4109664,.8008654, 51.09448, 51.06194,
 51.78946,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001504,.0001481,98.45719, -.000020, .0002408,

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.0002309,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0010437,.0007887,75.56902, .0008941, .0018965,
 .0003405,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0007131,.0002887,40.48349, .0008714, .0003799,
 .0008881,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.000087,.0009955,1147.537, .0009881, -.000977,
 -.000271,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0033012,.0167939,508.7256, .0226891, -.006053,
 -.006732,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 3.091372,.0089985,.2910858, 3.084855, 3.101640,
 3.087623,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0360132,.0013608,3.778687, .0363416, .0345183,
 .0371799,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 7.136007,.0385293,.5399278, 7.180189, 7.118438,
 7.109394,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0001601,.0000193,12.01917, .0001402, .0001615,
 .0001787,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0032095,.0007464,23.25446, .0029433, .0026328,
 .0040525,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 26.20714,.0381612,.1456139, 26.17052, 26.20423,
 26.24667,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0019863,.0013902,69.99027, .0017933, .0007027,
 .0034629,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0049446,.0039228,79.33442, .0087493, .0051708, .0009136,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0016535,.0013044,78.88846, .0002928, .0028932,
 .0017745,Chk Pass,,
 S,182.034 {485},Y1,ppm, 20.68825,.0135019,.0652636, 20.68829, 20.70173, 20.67473,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0015796,.0054782,346.8173, .0005091, -.003284,
 .0075140,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0011906,.0037661,316.3173, -.003028, .0023849,
 .0042148,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 14.10507,.0440814,.3125213, 14.15126, 14.06345,
 14.10051,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.007302,.0046980,64.34205, -.011892, -.007509,
 -.002503,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3394228,.0002896,.0853178, .3394408, .3397030,
 .3391246,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0242997,.0447188,184.0303, -.013888, .0132924,
 .0734944,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0023885,.0000657,2.750072, .0023291, .0024590,
 .0023773,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0087096,.0050788,58.31237, .0028800, .0110709,
 .0121778,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0056513,.0003051,5.398843, .0053110, .0057425,
 .0059004,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000061,.0012142,1984.967, -.001370, .0010293, .0001567,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0139358,.0001299,.9323581, .0139073, .0140776,
 .0138225,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0026262,.0037225,141.7459, -.000607, .0066960,
 .0017892,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2979.574,11.98145,.4021197,2965.743,2986.801,2986.176
 Y2A,371.030 { 91}2,Cts/S, 140974.0,193.0189,.1369181,141191.6,140907.1,140823.4
 Y2R,371.030 { 91}3,Cts/S, 3943.908,20.79312,.5272213,3966.557,3939.484,3925.682

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3311-G-4-A

T2016401T74

Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 11:14:50
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A	ppm	-.000219	.0008220	375.6036	.0005883	-.000190	-.001055	Chk Pass,,	
Al	308.215	{109}	Y2R	ppm	-.077011	.1329469	172.6327	.0748787	-.172242	-.133671	Chk Pass,,	
Al	ax,308.215	{109}2	Y2A	ppm	-.002622	.0056545	215.6232	-.007940	-.003245	.0033176	Chk Pass,,	
As	189.042	{478}	Y1	ppm	-.001165	.0274474	2356.348	-.000507	.0259480	-.028935	Chk Pass,,	
B	249.773	{135}	Y2A	ppm	.0500914	.0018287	3.650647	.0520780	.0497180	.0484783	Chk Pass,,	
Ba	455.403	{ 74}	Y2A	ppm	.1158344	.0006174	.5330152	.1155631	.1165410	.1153991	Chk Pass,,	
Be	313.042	{108}	Y2A	ppm	.0002267	.0000307	13.52507	.0002619	.0002123	.0002059	Chk Pass,,	
Ca	317.933	{106}	Y2R	ppm	50.83786	.2753517	.5416271	50.72499	50.63689	51.15172	Chk Pass,,	
Cd	226.502	{449}	Y1	ppm	.0002011	.0000827	41.14757	.0001333	.0001767	.0002933	Chk Pass,,	
Co	228.616	{447}	Y1	ppm	-.000226	.0007676	339.1121	-.000835	-.000480	.0006360	Chk Pass,,	
Cr	267.716	{126}	Y2A	ppm	.0009373	.0006367	67.92775	.0002555	.0010400	.0015164	Chk Pass,,	
Cu	327.396	{103}	Y2A	ppm	.0004466	.0009740	218.1232	-.000576	.0013635	.0005522	Chk Pass,,	
Fe	261.187	{129}	Y2R	ppm	.0335421	.0102184	30.46448	.0360747	.0422560	.0222955	Chk Pass,,	
K	766.490	{ 44}	Y2R	ppm	3.029406	.0524271	1.730606	3.016474	2.984654	3.087088	Chk Pass,,	
Li	670.784	{ 50}	Y2R	ppm	.0364297	.0013141	3.607283	.0379112	.0359732	.0354047	Chk Pass,,	
Mg	285.213	{118}	Y2R	ppm	7.000120	.0456446	.6520550	7.003263	6.952985	7.044111	Chk Pass,,	
Mn	257.610	{131}	Y2A	ppm	.0120876	.0001855	1.534700	.0122575	.0121157	.0118897	Chk Pass,,	
Mo	202.030	{467}	Y1	ppm	.0029609	.0003622	12.23311	.0028046	.0033750	.0027031	Chk Pass,,	
Na	589.592	{ 57}	Y2R	ppm	25.84533	.1738700	.6727328	25.69276	25.80860	26.03463	Chk Pass,,	
Ni	231.604	{445}	Y1	ppm	.0016447	.0009717	59.07744	.0023365	.0005338	.0020639	Chk Pass,,	
P	177.495	{490}	Y1	ppm	.0055027	.0039412	71.62342	.0039917	.0099758	.0025406	Chk Pass,,	
Pb	220.353	{453}	Y1	ppm	.0034855	.0030787	88.32804	.0052745	-.000069	.0052514	Chk Pass,,	
S	182.034	{485}	Y1	ppm	20.60164	.0175589	.0852306	20.61135	20.61219	20.58137	chk Pass,,	
Sb	206.833	{463}	Y1	ppm	.0043377	.0031439	72.47661	.0042928	.0012166	.0075038	Chk Pass,,	
Se	196.090	{472}	Y1	ppm	.0056468	.0052835	93.56761	.0006774	.0111965	.0050664	Chk Pass,,	

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Si,251.611 {134},Y2R,ppm, 14.13560,.0561123,.3969574, 14.08865, 14.12041,
 14.19774,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.006919,.0077401,111.8626, -.015434, -.000309,
 -.005015,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3389177,.0009799,.2891227, .3390106, .3398479,
 .3378947,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0041719,.0404201,968.8719, .0477077, -.003027,
 -.032165,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0021212,.0001829,8.619922, .0019501, .0020997,
 .0023139,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0073877,.0036499,49.40558, .0112376, .0039777,
 .0069477,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0053991,.0004724,8.748675, .0055104, .0058059,
 .0048810,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000046,.0012106,2614.140, .0013141, -.001005, -.000448,chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0129208,.0001455,1.125846, .0127534, .0130165,
 .0129924,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0039866,.0079838,200.2660, -.004206, .0044225,
 .0117435,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2986.785,16.66893,.5580896,2997.180,2995.615,2967.558
 Y2A,371.030 { 91}2,Cts/S, 141709.0,861.3997,.6078650,141562.0,140930.6,142634.5
 Y2R,371.030 { 91}3,Cts/S, 3948.320,58.59352,1.484011,4001.796,3957.477,3885.687

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3311-G-7-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:17:57
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.001218,.0022017,180.7109, -.002615, .0013197,
 -.002360,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0988983,.1230806,124.4517, .0861924, .2278389,
 -.017337,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0018220,.0165224,906.8145, .0129960, -.017157,
 .0096270,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0029042,.0155079,533.9808, .0109819, -.014975,
 .0127058,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0494892,.0007031,1.420719, .0487899, .0501960,
 .0494815,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1034572,.0004203,.4062770, .1038473, .1030121,
 .1035123,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002091,.0000148,7.069631, .0002128, .0002217,
 .0001928,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 37.49046,.2142881,.5715804, 37.73688, 37.34784,
 37.38667,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002292,.0001255,54.77214, .0001271, .0003693,
 .0001912,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0000848,.0004893,577.0691, -.000414, .0005641,
 .0001042,Chk Pass,,

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Cr,267.716 {126},Y2A,ppm, .0009362,.0007291,77.87918, .0000943, .0013615,
.0013528,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0010536,.0029394,278.9930, .0030199, -.002325,
.0024663,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0093435,.0453728,485.6068, .0024661, .0577624,
-.032198,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 2.585592,.0550822,2.130351, 2.636384, 2.527042,
2.593349,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0337011,.0013637,4.046298, .0350557, .0323286,
.0337192,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 5.328328,.0595147,1.116949, 5.397025, 5.292414,
5.295544,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .0000842,.0000649,77.02842, .0000121, .0001026,
.0001379,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0041097,.0011972,29.13003, .0031214, .0037669,
.0054409,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 24.27441,.1550032,.6385457, 24.45093, 24.16053,
24.21179,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0014882,.0006375,42.84031, .0008938, .0014093,
.0021615,Chk Pass,,
P,177.495 {490},Y1,ppm, .0084432,.0129142,152.9544, .0219250, .0072211, -.003817,chk
Pass,,
Pb,220.353 {453},Y1,ppm, -.003057,.0002573,8.415666, -.003184, -.003227,
-.002761,Chk Pass,,
S,182.034 {485},Y1,ppm, 11.38429,.0223547,.1963642, 11.35848, 11.39722, 11.39717,chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0008496,.0038005,447.3200, .0048320, -.002738,
.0004551,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0019752,.0039611,200.5416, .0065340, -.000625,
.0000169,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 13.73442,.1122058,.8169679, 13.78792, 13.60548,
13.80986,Chk Pass,,
Sn,189.989 {477},Y1,ppm, -.006796,.0045339,66.71447, -.003373, -.005077,
-.011938,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .2556675,.0005303,.2074102, .2557575, .2550980,
.2561470,Chk Pass,,
Th,283.730 {119},Y2R,ppm, -.027234,.0934387,343.1014, -.110090, .0740436,
-.045654,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0020115,.0002098,10.43107, .0020167, .0017991,
.0022187,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0092939,.0084883,91.33255, .0077811, .0016636,
.0184369,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0056563,.0005151,9.107044, .0055679, .0051911,
.0062099,Chk Pass,,
W,207.911 {462},Y1,ppm, .0006515,.0013329,204.6035, .0016602, .0011538, -.000860,chk
Pass,,
Zn,213.856 {458},Y1,ppm, .0146309,.0003169,2.166161, .0143091, .0146409,
.0149427,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0129431,.0071539,55.27181, .0172385, .0046847,
.0169059,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 3013.854,7.747909,.2570765,3020.703,3005.445,3015.413

Y2A,371.030 { 91}2,Cts/S, 141868.4,565.4629,.3985828,142133.6,141219.1,142252.5

Y2R,371.030 { 91}3,Cts/S, 3951.582,12.88144,.3259819,3944.039,3966.456,3944.250

[Sample Header]

Method=New TRACE Fast w axial Al(v227)

SampleName=410-3144-L-5-A

Username=dept 22

Comment=

Custom ID1=

T2016401T74

Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:21:05
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	-.000729	.0003717	50.99366	-.000866	-.001013	-.000308	Chk Pass,,		
Al	308.215	{109}	Y2R,ppm	-.102474	.0894466	87.28676	-.193563	-.014766	-.099095	Chk Pass,,		
Al	ax,308.215	{109}2	Y2A,ppm	.0065258	.0028558	43.76162	.0071395	.0090250	.0034131	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0140399	.0118776	84.59920	.0261514	.0135574	.0024109	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0508188	.0031952	6.287457	.0486647	.0544899	.0493018	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.1207227	.0082583	6.840713	.1161361	.1302563	.1157758	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0002275	.0000161	7.053914	.0002399	.0002332	.0002094	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	37.12817	.2058061	.5543126	37.35213	36.94736	37.08501	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0001258	.0000336	26.69031	.0001619	.0001199	.0000956	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	-.000237	.0005645	238.6439	-.000716	-.000379	.0003855	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0011286	.0003759	33.30963	.0013570	.0006947	.0013341	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0007737	.0005537	71.56896	.0004317	.0014125	.0004769	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0094000	.0354985	377.6443	.0012701	.0482582	-.021328	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	2.560986	.0132632	.5178943	2.554954	2.576193	2.551811	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0353392	.0020459	5.789354	.0371936	.0356796	.0331445	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	5.267838	.0649959	1.233825	5.303454	5.192819	5.307241	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0041111	.0002314	5.628274	.0039926	.0043778	.0039631	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0040823	.0006703	16.41856	.0039656	.0034781	.0048033	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	24.03087	.1571750	.6540548	24.15120	23.85304	24.08836	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0021905	.0000761	3.474782	.0022186	.0021043	.0022486	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0064581	.0027820	43.07787	.0033450	.0087010	.0073284	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0011361	.0034835	306.6126	.0034918	.0027819	-.002865	Chk Pass,,		
S	182.034	{485}	Y1,ppm	11.31450	.0478139	.4225892	11.29701	11.36860	11.27790	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0066065	.0048548	73.48526	.0040334	.0122062	.0035798	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	.0068788	.0067098	97.54283	-.000848	.0112382	.0102459	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	13.75504	.1056681	.7682134	13.81393	13.63305	13.81815	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	-.007194	.0047565	66.11779	-.011401	-.002033				

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-.008148,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2648773,.0180018,6.796288, .2550356, .2856544,
 .2539419,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.009641,.0147928,153.4350, -.003927, -.026439,
 .0014428,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0022280,.0001078,4.836708, .0021334, .0023453,
 .0022052,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0081743,.0012808,15.66889, .0067353, .0091894,
 .0085984,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0058395,.0002730,4.675602, .0056505, .0061525,
 .0057155,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0007254,.0027236,375.4615, -.000398, -.001257, .0038310,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0059193,.0002430,4.105476, .0061821, .0058730,
 .0057028,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0095615,.0063967,66.90044, .0091925, .0161348,
 .0033573,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2989.748,2.597977,.0868962,2987.981,2988.531,2992.731
 Y2A,371.030 { 91}2,Cts/S, 139096.6,7280.657,5.234243,143885.7,130718.3,142686.0
 Y2R,371.030 { 91}3,Cts/S, 3998.348,7.691795,.1923743,3993.374,4007.208,3994.463

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3144-L-5-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:24:13
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000641,.0004987,77.76741, -.001148, -.000626,
 -.000151,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.124137,.1605405,129.3256, -.302666, -.078100,
 .0083562,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0034503,.0058394,169.2428, .0083604, .0049973,
 -.003007,Chk Pass,,
 As,189.042 {478},Y1,ppm, -.001841,.0071927,390.6699, .0026168, .0019988,
 -.010139,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0229511,.0000788,.3434156, .0229841, .0230081,
 .0228612,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1394611,.0004228,.3031946, .1398459, .1395289,
 .1390084,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002095,.0000381,18.19375, .0001657, .0002348,
 .0002280,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 38.78204,.0532653,.1373453, 38.78940, 38.83124,
 38.72548,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0000040,.0001762,4363.063, -.000199, .0001177,
 .0000933,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0006558,.0003971,60.55162, .0001975, .0008726,
 .0008973,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0018033,.0005085,28.19763, .0016045, .0023812,
 .0014243,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0008639,.0003357,38.86047, .0009608, .0004904,

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.0011405,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.010554,.0108543,102.8463, -.018008, .0018992,
 -.015553,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 2.583602,.0187940,.7274355, 2.572688, 2.605304,
 2.572815,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0357563,.0022166,6.199264, .0334950, .0379254,
 .0358485,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 5.186355,.0354004,.6825674, 5.225880, 5.157564,
 5.175621,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0000858,.0000620,72.28225, .0001178, .0001254,
 .0000143,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0007870,.0002306,29.30147, .0005209, .0009278,
 .0009123,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 21.51082,.1853402,.8616138, 21.71711, 21.35834,
 21.45701,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0004239,.0009085,214.3205, .0010023, .0008926,
 -.000623,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0129508,.0095363,73.63454, .0138332, .0030040, .0220153,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.000129,.0002915,225.7058, -.000187, .0001869,
 -.000388,Chk Pass,,
 S,182.034 {485},Y1,ppm, 10.20773,.0592235,.5801833, 10.24333, 10.24049, 10.13936,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0040040,.0090762,226.6817, .0041166, .0130233,
 -.005128,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0072080,.0140576,195.0287, .0071074, .0213156,
 -.006799,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 11.56965,.0468087,.4045813, 11.62282, 11.53467,
 11.55146,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.008718,.0090694,104.0302, -.017950, .0001801,
 -.008385,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2364192,.0002399,.1014626, .2362329, .2366899,
 .2363347,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.013571,.0340939,251.2213, -.051119, -.005044,
 .0154499,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0021531,.0000550,2.554668, .0022039, .0020947,
 .0021606,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0102964,.0016815,16.33084, .0083724, .0110323,
 .0114846,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0062774,.0001333,2.122990, .0062765, .0061446,
 .0064111,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0000867,.0023659,2728.298, .0023218, .0003296, -.002391,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0005188,.0001140,21.97822, .0003925, .0005499,
 .0006140,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0068333,.0075132,109.9499, .0152891, .0042854,
 .0009253,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2995.019,7.471990,.2494806,3003.595,2991.551,2989.911
 Y2A,371.030 { 91}2,Cts/S, 143443.9,304.2018,.2120703,143454.3,143134.6,143742.7
 Y2R,371.030 { 91}3,Cts/S, 3992.046,12.69252,.3179453,4006.656,3983.737,3985.746

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
 SampleName=410-3144-L-4-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:27:21

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Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0002458,.0013831,562.6806, -.000417, .0018356,
 -.000681,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, .0036939,.0713944,1932.780, -.074555, .0203469,
 .0652899,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, -.003955,.0053381,134.9782, -.000676, -.010114,
 -.001074,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0243083,.0077730,31.97664, .0247761, .0318369,
 .0163120,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1154981,.0015143,1.311095, .1138266, .1167783,
 .1158896,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .1550127,.0003613,.2331007, .1546232, .1550777,
 .1553370,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0002274,.0000154,6.751614, .0002444, .0002234,
 .0002145,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 43.16178,.0427098,.0989529, 43.18639, 43.11246,
 43.18647,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001259,.0001253,99.45881, .0000048, .0001180,
 .0002550,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004066,.0006021,148.0610, .0003395, .0010395,
 -.000159,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.000187,.0008360,447.4282, -.000423, .0007418,
 -.000880,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.000826,.0034084,412.4538, -.000141, -.004526,
 .0021870,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0219907,.0720037,327.4280, .0892112, .0307548,
 -.053994,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 3.839165,.0314853,.8201088, 3.852216, 3.803253,
 3.862026,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0578002,.0016042,2.775420, .0595187, .0575399,
 .0563421,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 5.005213,.0278175,.5557710, 5.032712, 4.977087,
 5.005839,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0062278,.0000521,.8362054, .0062116, .0061858,
 .0062861,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0067306,.0005352,7.951774, .0070138, .0061133,
 .0070648,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 26.90828,.1109053,.4121603, 26.98303, 26.78085,
 26.96095,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0020754,.0008785,42.33175, .0016236, .0015147,
 .0030879,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0029939,.0045534,152.0905, .0000165, .0082355, .0007296,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0014528,.0036986,254.5738, -.002748, .0042196,
 .0028869,Chk Pass,,
 S,182.034 {485},Y1,ppm, 10.59495,.0640397,.6044362, 10.66868, 10.55324, 10.56292,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0024582,.0082756,336.6496, .0112711, -.005147,
 .0012510,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0019703,.0071428,362.5173, .0030205, -.005639,
 .0085299,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 17.83851,.0310148,.1738645, 17.80988, 17.87146,
 17.83419,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.013237,.0037911,28.64031, -.015501, -.015350,
 -.008860,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .4919470,.0043733,.8889673, .4965107, .4877930,
 .4915372,Chk Pass,,

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Th,283.730 {119},Y2R,ppm, .0282540,.0564326,199.7329, -.001698, .0933478,
 -.006888,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0021939,.0000691,3.150394, .0021234, .0022615,
 .0021969,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0039208,.0035497,90.53506, -.000165, .0062426,
 .0056852,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0000861,.0003251,377.4691, .0004316, -.000214,
 .0000408,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.001960,.0016079,82.04550, -.001006, -.001057, -.003816,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0053680,.0002672,4.977666, .0051122, .0056453,
 .0053465,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000115,.0026352,2282.062, .0018304, .0009375,
 -.003114,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2997.265,7.741194,.2582753,3003.600,2999.560,2988.636
 Y2A,371.030 { 91}2,Cts/S, 144057.8,238.9568,.1658756,143867.8,144326.1,143979.6
 Y2R,371.030 { 91}3,Cts/S, 4040.208,18.83418,.4661686,4021.840,4039.309,4059.476

[Sample Header]

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 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:30:37
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4891,.0012,.2404, .4879, .4903, .4892,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, 24.94,.1988,.7971, 25.12, 24.97, 24.73,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, 24.50,.0690,.2815, 24.50, 24.57, 24.43,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5065,.0119,2.340, .5153, .5111, .4930,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4726,.0023,.4926, .4717, .4753, .4709,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5046,.0014,.2753, .5060, .5032, .5045,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .48630,.00227,.46768, .48530, .48890, .48470,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 24.03,.1078,.4488, 23.92, 24.13, 24.03,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5047,.0009,.1811, .5043, .5041, .5058,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4998,.0001,.0282, .4997, .4999, .4997,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4896,.0030,.6187, .4891, .4929, .4869,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5121,.0033,.6478, .5121, .5155, .5088,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 24.02,.0859,.3577, 23.93, 24.11, 24.03,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 25.71,.1847,.7185, 25.53, 25.89, 25.71,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5275,.0004,.0772, .5272, .5274, .5280,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 24.43,.0567,.2320, 24.49, 24.38, 24.41,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .48364,.00386,.79762, .48174, .48808, .48110,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .5033,.0012,.2438, .5034, .5020, .5044,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 25.15,.0669,.2659, 25.20, 25.07, 25.16,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .4987,.0033,.6519, .5022, .4958, .4981,Chk Pass,,
 P,177.495 {490},Y1,ppm, .5114,.0040,.7879, .5153, .5073, .5116,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .5017,.0079,1.568, .5071, .4927, .5053,Chk Pass,,
 S,182.034 {485},Y1,ppm, 25.01,.1013,.4050, 25.12, 25.00, 24.92,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .5116,.0003,.0562, .5117, .5118, .5113,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5017,.0104,2.064, .5088, .5065, .4899,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 24.423,.05264,.21553, 24.453, 24.454, 24.362,Chk Pass,,

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Sn,189.989 {477},Y1,ppm, .4909,.0027,.5489, .4904, .4939, .4885,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5080,.0061,1.210, .5056, .5150, .5035,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5180,.0101,1.952, .5279, .5077, .5184,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5121,.0029,.5602, .5110, .5153, .5099,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .5170,.0056,1.085, .5224, .5112, .5173,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5011,.0028,.5571, .4996, .5043, .4994,Chk Pass,,
 W,207.911 {462},Y1,ppm, .4989,.0019,.3899, .4999, .4966, .5001,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .5142,.0007,.1340, .5138, .5150, .5138,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .5017,.0046,.9216, .5026, .4967, .5058,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 2952.7,15.763,.53386,2965.3,2957.8,2935.1
 Y2A,371.030 { 91}2,Cts/S, 142270.,996.12,.70017,143040.,141140.,142630.
 Y2R,371.030 { 91}3,Cts/S, 3883.8,26.409,.67999,3913.4,3862.7,3875.2

[Sample Header]

Method=New TRACE Fast w axial Al(v227)
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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 11:33:51
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0011,.0014,135.6, .0017, .0021, -.0006,Chk Pass,,
 Al,308.215 {109},Y2R,ppm, -.0113,.0057,50.55, -.0067, -.0094, -.0177,Chk Pass,,
 Al ax,308.215 {109}2,Y2A,ppm, .0064,.0055,85.41, .0031, .0034, .0128,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0017,.0064,366.6, -.0036, -.0000, .0088,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0013,.0005,34.68, .0014, .0018, .0009,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0001,.0000,42.07, .0001, .0001, .0000,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00034,.00001,3.6735, .00036, .00034, .00033,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, -.0115,.0063,54.32, -.0102, -.0183, -.0060,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004,.0001,14.65, .0003, .0004, .0004,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0001,.0004,261.8, -.0001, -.0000, .0006,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.0006,.0001,13.45, -.0005, -.0006, -.0005,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0004,.0019,437.3, -.0026, .0001, .0012,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0163,.0031,18.80, .0196, .0156, .0136,Chk Pass,,
 K,766.490 { 44},Y2R,ppm,F .3380,.0453,13.41, .3688, .3593, .2859,Chk
 Fail,.2500,-.2500
 Li,670.784 { 50},Y2R,ppm,W .0242,.0023,9.622, .0218, .0244, .0265,Chk
 warn,.0188,-.0188
 Mg,285.213 {118},Y2R,ppm, -.0029,.0061,211.0, .0032, -.0029, -.0089,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00013,.00004,32.099, .00016, .00015, .00008,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0009,.0012,135.3, -.0005, .0018, .0013,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0825,.0127,15.38, .0812, .0958, .0705,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0011,.0011,100.6, .0013, .0022, -.0001,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0002,.0038,2245., .0045, -.0026, -.0014,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0006,.0012,198.7, .0008, -.0014, -.0013,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0204,.0053,25.82, .0263, .0161, .0189,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0002,.0019,1089., -.0011, .0024, -.0007,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0010,.0059,568.1, .0055, .0032, -.0057,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, -.00787,.02280,289.89, .01268, -.00388, -.03240,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0071,.0025,35.00, -.0082, -.0043, -.0090,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,8.841, .0001, .0001, .0001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0265,.0460,173.5, .0676, .0351, -.0232,Chk Pass,,

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Ti,334.941 {101},Y2A,ppm, -.0001,.0001,85.40, -.0002, -.0002, -.0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0043,.0014,32.36, .0055, .0046, .0028,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0000,.0003,698.1, .0002, -.0004, .0001,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0004,.0005,129.0, -.0002, .0008, .0006,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0003,.0001,34.88, .0003, .0003, .0002,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0042,.0080,189.6, .0032, -.0032, .0127,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 3016.5,10.080, .33415,3021.8,3004.9,3023.0

Y2A,371.030 { 91}2,Cts/S, 143210.,583.35, .40734,142550.,143460.,143630.

Y2R,371.030 { 91}3,Cts/S, 3913.2,30.658, .78347,3890.7,3948.1,3900.7

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[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=Matrix_Rinse
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:03:25
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0007	.0001	18.11	.0008	.0007	.0006	None,,		
Al	308.215	{109}	Y2A, ppm	-.0056	.0008	13.58	-.0053	-.0050	-.0064	None,,		
Al	308.215	{109}	Y2R, ppm	-.0153	.0264	171.8	-.0408	-.0171	.0119	None,,		
As	189.042	{478}	Y1, ppm	.0063	.0012	19.69	.0073	.0066	.0049	None,,		
B	249.773	{135}	Y2A, ppm	-.0011	.0005	45.42	-.0014	-.0014	-.0005	None,,		
Ba	455.403	{ 74}	Y2A, ppm	.0001	.0000	17.67	.0001	.0001	.0001	None,,		
Be	313.042	{108}	Y2A, ppm	-.00006	.00002	34.235	-.00004	-.00005	-.00007	None,,		
Ca	317.933	{106}	Y2R, ppm	.0045	.0024	53.92	.0051	.0018	.0066	None,,		
Cd	226.502	{449}	Y1, ppm	.0003	.0001	53.24	.0004	.0003	.0001	None,,		
Co	228.616	{447}	Y1, ppm	-.0004	.0001	16.82	-.0004	-.0003	-.0004	None,,		
Cr	267.716	{126}	Y2A, ppm	-.0002	.0003	184.6	-.0005	-.0001	.0001	None,,		
Cu	327.396	{103}	Y2A, ppm	-.0003	.0003	130.4	-.0000	-.0001	-.0006	None,,		
Fe	261.187	{129}	Y2R, ppm	-.0043	.0041	97.10	-.0013	-.0090	-.0025	None,,		
K	766.490	{ 44}	Y2R, ppm	.0030	.0658	2217.	.0163	.0611	-.0685	None,,		
Li	670.784	{ 50}	Y2R, ppm	.0005	.0014	289.3	-.0008	.0003	.0020	None,,		
Mg	285.213	{118}	Y2R, ppm	-.0026	.0007	28.63	-.0021	-.0023	-.0035	None,,		
Mn	257.610	{131}	Y2A, ppm	.00007	.00009	118.27	.00016	-.00001	.00006	None,,		
Mo	202.030	{467}	Y1, ppm	.0003	.0002	77.21	.0004	.0000	.0004	None,,		
Na	589.592	{ 57}	Y2R, ppm	.0088	.0014	16.20	.0072	.0094	.0098	None,,		
Ni	231.604	{445}	Y1, ppm	.0001	.0002	228.7	.0001	.0003	-.0001	None,,		
P	177.495	{490}	Y1, ppm	-.0009	.0023	251.4	.0010	-.0034	-.0003	None,,		
Pb	220.353	{453}	Y1, ppm	-.0008	.0009	120.0	-.0017	-.0008	.0002	None,,		
S	182.034	{485}	Y1, ppm	.0070	.0020	28.78	.0076	.0048	.0086	None,,		
Sb	206.833	{463}	Y1, ppm	.0011	.0008	70.22	.0020	.0005	.0009	None,,		
Se	196.090	{472}	Y1, ppm	.0028	.0051	182.7	.0050	.0065	-.0030	None,,		
Si	251.611	{134}	Y2R, ppm	-.03484	.00844	24.225	-.04354	-.02669	-.03427	None,,		
Sn	189.989	{477}	Y1, ppm	.0018	.0003	18.37	.0017	.0015	.0022	None,,		
Sr	421.552	{ 80}	Y2A, ppm	.0001	.0000	9.373	.0001	.0001	.0001	None,,		
Th	283.730	{119}	Y2R, ppm	.0193	.0192	99.16	-.0023	.0262	.0341	None,,		
Ti	334.941	{101}	Y2A, ppm	.0001	.0001	115.1	.0002	.0000	.0000	None,,		
Tl	190.856	{477}	Y1, ppm	-.0011	.0007	64.22	-.0016	-.0003	-.0013	None,,		
V	292.402	{115}	Y2A, ppm	-.0005	.0003	62.46	-.0009	-.0003	-.0004	None,,		
W	207.911	{462}	Y1, ppm	.0006	.0003	50.06	.0007	.0008	.0003	None,,		
Zn	213.856	{458}	Y1, ppm	.0008	.0000	3.653	.0007	.0008	.0008	None,,		
Zr	339.198	{ 99}	Y2R, ppm	-.0006	.0008	124.0	.0003	-.0012	-.0010	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	9160.1	22.926	.25028	9184.0	9158.1
Y2A	371.030	{ 91}	Cts/S	284310.	1443.4	.50770	285860.	284060.
Y2R	371.030	{ 91}	Cts/S	18982.	134.96	.71097	19100.	19012.

[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=S0
 Username=dept 22

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Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:06:34
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Ag	328.068	{103}	Y2A,Cts/S	-.0025	.0011	44.81	-.0024	-.0014	-.0036
Alum Ax	308.215	{109}	Y2A,Cts/S	.0560	.0006	1.076	.0554	.0560	.0566
Al	308.215	{109}2	Y2R,Cts/S	.0432	.0038	8.879	.0455	.0454	.0388
As	189.042	{478}	Y1,Cts/S	.0004	.0018	403.1	.0007	-.0014	.0021
B	249.773	{135}	Y2A,Cts/S	.0000	.0000	12.80	.0000	.0000	.0000
Ba	455.403	{ 74}	Y2A,Cts/S	-.0001	.0000	71.79	-.0001	-.0000	-.0001
Be	313.042	{108}	Y2A,Cts/S	-.02285	.00216	9.4669	-.02440	-.02038	-.02379
Cd	317.933	{106}	Y2R,Cts/S	.0045	.0001	2.237	.0044	.0045	.0046
Cd	226.502	{449}	Y1,Cts/S	-.0072	.0075	103.4	.0004	-.0145	-.0075
Co	228.616	{447}	Y1,Cts/S	-.0034	.0060	174.9	-.0047	.0031	-.0087
Cr	267.716	{126}	Y2A,Cts/S	-.0000	.0000	99.23	-.0000	-.0000	-.0000
Cu	327.396	{103}	Y2A,Cts/S	.0074	.0007	9.661	.0066	.0079	.0076
Fe	261.187	{129}	Y2R,Cts/S	.0003	.0001	34.24	.0002	.0003	.0003
K	766.490	{ 44}	Y2R,Cts/S	.1613	.0114	7.043	.1683	.1482	.1673
Li	670.784	{ 50}	Y2R,Cts/S	.0008	.0004	50.17	.0007	.0013	.0005
Mg	285.213	{118}	Y2R,Cts/S	.0002	.0001	32.40	.0002	.0002	.0001
Mn	257.610	{131}	Y2A,Cts/S	.00120	.00084	69.888	.00085	.00059	.00216
Mo	202.030	{467}	Y1,Cts/S	.0124	.0062	49.53	.0186	.0062	.0125
Na	589.592	{ 57}	Y2R,Cts/S	.0012	.0011	95.75	.0007	.0004	.0025
Ni	231.604	{445}	Y1,Cts/S	.0243	.0080	32.91	.0334	.0183	.0212
P	177.495	{490}	Y1,Cts/S	-.0000	.0000	3968.	-.0000	.0000	-.0000
Pb	220.353	{453}	Y1,Cts/S	-.0228	.0012	5.409	-.0240	-.0215	-.0230
S	182.034	{485}	Y1,Cts/S	-.0001	.0000	48.35	-.0001	-.0001	-.0000
Sb	206.833	{463}	Y1,Cts/S	-.0001	.0001	138.8	-.0001	-.0002	.0000
Se	196.090	{472}	Y1,Cts/S	.0040	.0036	88.18	.0069	.0051	.0001
Si	251.611	{134}	Y2R,Cts/S	.00028	.00001	2.2043	.00029	.00029	.00028
Sn	189.989	{477}	Y1,Cts/S	.0051	.0075	147.6	-.0009	.0134	.0027
Sr	421.552	{ 80}	Y2A,Cts/S	-.0005	.0000	5.832	-.0004	-.0005	-.0005
Th	283.730	{119}	Y2R,Cts/S	-.0002	.0002	98.15	-.0001	-.0001	-.0004
Ti	334.941	{101}	Y2A,Cts/S	.0069	.0005	7.034	.0070	.0074	.0064
Tl	190.856	{477}	Y1,Cts/S	.0009	.0033	348.2	.0038	-.0026	.0016
V	292.402	{115}	Y2A,Cts/S	-.0070	.0001	1.971	-.0068	-.0071	-.0070
W	207.911	{462}	Y1,Cts/S	.0000	.0001	412.9	-.0000	.0002	-.0001
Zn	213.856	{458}	Y1,Cts/S	.0302	.0028	9.158	.0328	.0303	.0273
Zr	339.198	{ 99}	Y2R,Cts/S	.0003	.0003	111.1	.0004	.0005	-.0001

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	9142.9	21.618	.23644	9140.5	9165.7	9122.6
Y2A	371.030	{ 91}2	Cts/S	283380.	983.42	.34703	283970.	283920.	282240.
Y2R	371.030	{ 91}3	Cts/S	18854.	41.539	.22032	18895.	18812.	18855.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=S1
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:09:47

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Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Alum Ax,308.215 {109},Y2A,Cts/S, 26.91,.0045,.0166, 26.90, 26.91, 26.91
 Al,308.215 {109}2,Y2R,Cts/S, 22.72,.1407,.6193, 22.87, 22.69, 22.59
 Ca,317.933 {106},Y2R,Cts/S, 3.525,.0254,.7208, 3.554, 3.506, 3.515
 Fe,261.187 {129},Y2R,Cts/S, .8358,.0042,.5078, .8405, .8324, .8344
 K,766.490 { 44},Y2R,Cts/S, 60.54,.4478,.7397, 61.05, 60.22, 60.34
 Mg,285.213 {118},Y2R,Cts/S, 6.281,.0656,1.045, 6.356, 6.234, 6.253
 Na,589.592 { 57},Y2R,Cts/S, 3.623,.0092,.2527, 3.633, 3.619, 3.616
 S,182.034 {485},Y1,Cts/S, .7959,.0303,3.812, .8310, .7796, .7772
 Si,251.611 {134},Y2R,Cts/S, .70051,.00447,.63882, .70564, .69850, .69739

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8746.9,268.94,3.0746,8436.5,8895.4,8909.0
 Y2A,371.030 { 91}2,Cts/S, 274420.,1742.6,.63502,275520.,272410.,275320.
 Y2R,371.030 { 91}3,Cts/S, 19054.,78.649,.41278,18969.,19125.,19067.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=S2
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:12:51
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Ag,328.068 {103},Y2A,Cts/S, 3.380,.0016,.0488, 3.379, 3.382, 3.378
 As,189.042 {478},Y1,Cts/S, 1.443,.0040,.2785, 1.441, 1.447, 1.440
 B,249.773 {135},Y2A,Cts/S, .0327,.0001,.1962, .0327, .0327, .0326
 Ba,455.403 { 74},Y2A,Cts/S, 2.985,.0136,.4545, 2.971, 2.987, 2.998
 Be,313.042 {108},Y2A,Cts/S, 80.952,.36195,.44711, 80.687, 81.364, 80.804
 Cd,226.502 {449},Y1,Cts/S, 55.04,.0936,.1701, 55.15, 54.99, 54.99
 Co,228.616 {447},Y1,Cts/S, 31.50,.0539,.1712, 31.55, 31.45, 31.49
 Cu,327.396 {103},Y2A,Cts/S, 2.830,.0103,.3653, 2.833, 2.839, 2.819
 Li,670.784 { 50},Y2R,Cts/S, .4527,.0004,.0991, .4532, .4524, .4525
 Mn,257.610 {131},Y2A,Cts/S, 11.293,.05751,.50920, 11.284, 11.355, 11.241
 Ni,231.604 {445},Y1,Cts/S, 20.61,.0035,.0167, 20.61, 20.61, 20.62
 P,177.495 {490},Y1,Cts/S, .0290,.0002,.5737, .0289, .0292, .0289
 Pb,220.353 {453},Y1,Cts/S, 4.508,.0251,.5561, 4.532, 4.482, 4.510
 Se,196.090 {472},Y1,Cts/S, 1.136,.0061,.5369, 1.132, 1.143, 1.133
 Sr,421.552 { 80},Y2A,Cts/S, 3.316,.0124,.3733, 3.324, 3.322, 3.302
 Th,283.730 {119},Y2R,Cts/S, .0096,.0002,1.768, .0096, .0097, .0094
 Tl,190.856 {477},Y1,Cts/S, 1.544,.0024,.1574, 1.546, 1.542, 1.543
 W,207.911 {462},Y1,Cts/S, .1062,.0007,.6483, .1070, .1059, .1058
 Zn,213.856 {458},Y1,Cts/S, 37.85,.0319,.0843, 37.88, 37.82, 37.83

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 9010.6,1.5522,.01723,9012.2,9009.0,9010.6
 Y2A,371.030 { 91}2,Cts/S, 276540.,1034.6,.37412,277570.,275500.,276570.

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Y2R,371.030 { 91}3,Cts/S, 19195.,42.656,.22222,19235.,19200.,19151.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=S3
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:16:12
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Cr,267.716 {126},Y2A,Cts/S, .0435,.0002,.5479, .0437, .0435, .0432
 Mo,202.030 {467},Y1,Cts/S, 10.68,.0389,.3645, 10.72, 10.67, 10.65
 Sb,206.833 {463},Y1,Cts/S, .0491,.0001,.2557, .0492, .0490, .0492
 Sn,189.989 {477},Y1,Cts/S, 3.815,.0053,.1389, 3.819, 3.818, 3.809
 Ti,334.941 {101},Y2A,Cts/S, 10.56,.0673,.6378, 10.62, 10.56, 10.49
 V,292.402 {115},Y2A,Cts/S, 3.014,.0043,.1420, 3.019, 3.015, 3.010
 Zr,339.198 { 99},Y2R,Cts/S, .1850,.0023,1.238, .1876, .1842, .1833

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 9137.5,6.6461,.07273,9141.7,9129.8,9140.9
 Y2A,371.030 { 91}2,Cts/S, 283570.,1751.4,.61763,282120.,283070.,285510.
 Y2R,371.030 { 91}3,Cts/S, 19187.,172.67,.89993,19107.,19385.,19068.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICV 62173
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:19:23
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .5966,.0017,.2865, .5958, .5985, .5954,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 28.91,.0194,.0670, 28.93, 28.89, 28.90,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 29.26,.0492,.1681, 29.25, 29.21, 29.31,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5934,.0040,.6783, .5914, .5981, .5909,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .5917,.0017,.2907, .5910, .5904, .5937,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5845,.0019,.3278, .5854, .5858, .5823,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .57248,.00193,.33737, .57377, .57026, .57341,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 29.10,.0784,.2695, 29.08, 29.19, 29.03,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5927,.0019,.3220, .5916, .5949, .5916,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .5887,.0027,.4559, .5871, .5918, .5872,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .5809,.0012,.1996, .5822, .5804, .5801,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5904,.0019,.3255, .5921, .5883, .5907,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 28.95,.0401,.1384, 28.98, 28.91, 28.91,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 29.05,.1162,.3998, 29.08, 29.16, 28.93,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5989,.0031,.5212, .5982, .6023, .5962,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 28.84,.0571,.1981, 28.86, 28.88, 28.77,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .57520,.00278,.48308, .57782, .57229, .57550,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .6117,.0028,.4497, .6100, .6149, .6102,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 28.75,.0238,.0828, 28.77, 28.75, 28.72,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .5878,.0015,.2542, .5866, .5895, .5872,Chk Pass,,
P,177.495 {490},Y1,ppm, .6051,.0037,.6158, .6022, .6093, .6038,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .5798,.0029,.5013, .5776, .5786, .5831,Chk Pass,,
S,182.034 {485},Y1,ppm, 28.97,.0835,.2882, 28.93, 29.07, 28.93,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .6103,.0021,.3362, .6102, .6083, .6124,Chk Pass,,
Se,196.090 {472},Y1,ppm, .5722,.0046,.8011, .5670, .5755, .5742,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 29.700,.06533,.21996, 29.710, 29.760, 29.631, None,,
Sn,189.989 {477},Y1,ppm, .5855,.0035,.5902, .5836, .5894, .5833,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .5914,.0020,.3382, .5918, .5892, .5931,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .6010,.0121,2.020, .6147, .5917, .5965,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .5942,.0026,.4306, .5965, .5915, .5947,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .5792,.0028,.4880, .5775, .5776, .5825,Chk Pass,,
V,292.402 {115},Y2A,ppm, .5950,.0006,.1046, .5943, .5954, .5953,Chk Pass,,
W,207.911 {462},Y1,ppm, .6032,.0006,.1003, .6029, .6039, .6028,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5789,.0022,.3752, .5766, .5809, .5791,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm,w .6497,.0068,1.054, .6418, .6534, .6538,Chk
warn,.6000,5.000%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 8950.1,40.611,.45375,8988.8,8907.8,8953.7
Y2A,371.030 { 91}2,Cts/S, 277130.,1126.3,.40641,276050.,278300.,277040.
Y2R,371.030 { 91}3,Cts/S, 19234.,55.392,.28799,19224.,19184.,19294.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=ICB 078331
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 14:22:31
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0007,.0005,70.30, .0011, .0002, .0006,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, .0032,.0023,71.35, .0008, .0053, .0034,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, -.0186,.0213,114.4, -.0395, -.0194, .0031,Chk Pass,,
As,189.042 {478},Y1,ppm, .0031,.0019,61.69, .0034, .0010, .0048,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0016,.0004,23.26, .0015, .0013, .0021,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0001,.0000,11.86, .0001, .0001, .0001,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.00007,.00002,23.049, -.00005, -.00008, -.00006,Chk
Pass,,
Ca,317.933 {106},Y2R,ppm, -.0007,.0030,410.4, -.0023, -.0026, .0027,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0002,.0001,51.49, .0002, .0003, .0001,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0000,.0002,706.2, -.0001, -.0000, .0002,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0003,.0004,118.7, .0000, .0002, .0007,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0002,.0006,293.8, -.0009, -.0002, .0004,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0018,.0027,147.3, -.0009, .0019, .0044,Chk Pass,,
K,766.490 { 44},Y2R,ppm, -.0058,.0107,185.7, -.0182, -.0002, .0010,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0003,.0013,492.0, .0017, -.0003, -.0006,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, -.0007,.0016,244.8, .0012, -.0015, -.0017,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00005,.00006,129.32, .00011, -.00001, .00005,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0037,.0005,14.01, .0032, .0036, .0042,Chk Pass,,

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Na, 589.592 { 57}, Y2R, ppm, -.0029, .0097, 337.9, -.0109, .0079, -.0057, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, -.0005, .0004, 81.81, -.0001, -.0005, -.0009, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .0014, .0011, 76.79, .0018, .0002, .0022, Chk Pass,,
 Pb, 220.353 {453}, Y1, ppm, -.0003, .0025, 1008., -.0029, .0022, -.0001, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, .0037, .0038, 102.5, .0042, -.0003, .0071, Chk Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0025, .0032, 126.4, .0060, .0017, -.0002, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0049, .0048, 98.62, .0046, .0098, .0002, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, .00313, .00148, 47.277, .00235, .00483, .00220, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .0000, .0016, 7005., .0012, .0006, -.0017, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .0001, .0000, 23.21, .0001, .0001, .0001, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, -.0008, .0078, 1015., .0081, -.0067, -.0036, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0002, .0001, 38.04, .0004, .0002, .0002, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, -.0008, .0009, 102.5, -.0006, -.0018, -.0001, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, -.0010, .0001, 6.718, -.0010, -.0010, -.0011, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0026, .0015, 60.39, .0011, .0024, .0042, Chk Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0000, .0001, 7970., -.0001, .0000, .0001, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, -.0005, .0015, 300.6, -.0020, -.0005, .0010, Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1, 224.306 {450}, Cts/S, 9151.4, 6.1202, .06688, 9147.7, 9148.0, 9158.4

Y2A, 371.030 { 91} 2, Cts/S, 283060., 3713.7, 1.3120, 284030., 278950., 286180.

Y2R, 371.030 { 91} 3, Cts/S, 19309., 178.90, .92652, 19507., 19261., 19159.

[Sample Header]

Method=New TRACE Fast(v1493)

SampleName=CRI 058707

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/9/2020 14:25:48

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag, 328.068 {103}, Y2A, ppm, .0103, .0003, 3.086, .0101, .0101, .0106, Chk Pass,,

Alum Ax, 308.215 {109}, Y2A, ppm, .1980, .0022, 1.100, .1971, .2005, .1965, Chk Pass,,

Al, 308.215 {109} 2, Y2R, ppm, .1915, .0057, 2.951, .1973, .1912, .1860, Chk Pass,,

As, 189.042 {478}, Y1, ppm, .0351, .0038, 10.69, .0320, .0393, .0341, Chk Pass,,

B, 249.773 {135}, Y2A, ppm, .0311, .0005, 1.711, .0318, .0308, .0309, Chk Pass,,

Ba, 455.403 { 74}, Y2A, ppm, .0054, .0000, .6416, .0054, .0054, .0054, Chk Pass,,

Be, 313.042 {108}, Y2A, ppm, .00507, .00000, .05334, .00507, .00507, .00507, Chk Pass,,

Ca, 317.933 {106}, Y2R, ppm, .2090, .0089, 4.260, .2032, .2192, .2045, Chk Pass,,

Cd, 226.502 {449}, Y1, ppm, .0056, .0001, 2.443, .0058, .0056, .0055, Chk Pass,,

Co, 228.616 {447}, Y1, ppm, .0049, .0004, 7.826, .0053, .0045, .0050, Chk Pass,,

Cr, 267.716 {126}, Y2A, ppm, .0156, .0003, 1.797, .0156, .0159, .0154, Chk Pass,,

Cu, 327.396 {103}, Y2A, ppm, .0236, .0001, 2.793, .0236, .0235, .0236, Chk Pass,,

Fe, 261.187 {129}, Y2R, ppm, .1972, .0020, 1.027, .1962, .1996, .1959, Chk Pass,,

K, 766.490 { 44}, Y2R, ppm, .2738, .0390, 14.26, .2456, .2575, .3184, Chk Pass,,

Li, 670.784 { 50}, Y2R, ppm, .0518, .0027, 5.257, .0515, .0546, .0492, Chk Pass,,

Mg, 285.213 {118}, Y2R, ppm, .1012, .0011, 1.089, .1019, .1017, .0999, Chk Pass,,

Mn, 257.610 {131}, Y2A, ppm, .01051, .00005, .48415, .01057, .01050, .01047, Chk Pass,,

Mo, 202.030 {467}, Y1, ppm, .0109, .0004, 3.764, .0114, .0106, .0108, Chk Pass,,

Na, 589.592 { 57}, Y2R, ppm, 1.007, .0135, 1.337, .9976, 1.023, 1.002, Chk Pass,,

Ni, 231.604 {445}, Y1, ppm, .0107, .0007, 6.191, .0100, .0108, .0114, Chk Pass,,

P, 177.495 {490}, Y1, ppm, .1019, .0027, 2.623, .1005, .1049, .1002, Chk Pass,,

Pb, 220.353 {453}, Y1, ppm, .0130, .0012, 8.989, .0129, .0142, .0119, Chk Pass,,

S, 182.034 {485}, Y1, ppm, .5021, .0035, .6886, .5029, .5051, .4983, Chk Pass,,

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Sb,206.833 {463},Y1,ppm, .0556,.0037,6.671, .0592, .0518, .0557,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0539,.0021,3.903, .0519, .0536, .0561,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .52515,.00470,.89429, .52390, .53034, .52120,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0518,.0012,2.297, .0530, .0519, .0506,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0053,.0000,.1889, .0053, .0053, .0053,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .4875,.0071,1.463, .4929, .4901, .4794,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0103,.0001,.7041, .0104, .0103, .0103,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0309,.0022,7.152, .0304, .0334, .0291,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0103,.0003,2.455, .0106, .0101, .0103,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0320,.0004,1.367, .0322, .0315, .0323,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0208,.0001,.6107, .0207, .0209, .0207,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm,w .0259,.0009,3.534, .0255, .0253, .0270,chk
 Warn,.0500,-20.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 9107.0,11.981, .13156,9120.9,9099.7,9100.5
 Y2A,371.030 { 91}2,Cts/s, 281740.,626.19, .22226,281360.,281400.,282470.
 Y2R,371.030 { 91}3,Cts/s, 19150.,162.66, .84940,19271.,18965.,19213.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICSA 52462
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:29:05
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0013,.0005,41.76, .0011, .0018, .0008,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, 484.9,2.114, .4359,483.9,483.5,487.4,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 493.1, .3908, .0793,493.4,493.1,492.7,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0092,.0042,45.88, .0077, .0060, .0140,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0476,.0007,1.556, -.0476, -.0483, -.0468,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0022,.0000,1.479, .0022, .0021, .0022,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00025,.00000,1.1399, -.00025, -.00025, -.00025,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, 507.5,1.766, .3480, 509.3, 507.2, 505.8,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, -.0012,.0001,10.00, -.0013, -.0011, -.0011,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004,.0003,84.40, .0004, .0007, .0000,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0021,.0009,42.47, .0011, .0023, .0028,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0044,.0003,6.510, -.0041, -.0045, -.0047,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 193.6, .1893, .0978, 193.7, 193.7, 193.4,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0384,.0482,125.3, -.0919, -.0250, .0015,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0100,.0008,7.875, .0105, .0091, .0104,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 464.6,1.105, .2377, 464.2, 465.9, 463.8,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00115,.00004,3.6331, .00118, .00110, .00116,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0009,.0011,116.3, .0007, -.0000, .0021,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0647,.0036,5.517, .0612, .0683, .0646,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0015,.0004,26.01, .0013, .0013, .0019,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0072,.0068,94.06, .0137, .0076, .0002,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0059,.0038,64.25, -.0058, -.0098, -.0022,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0138, .0175,126.7, -.0325, .0023, -.0113,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0041,.0071,175.8, .0117, .0030, -.0025,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0036,.0094,258.7, -.0071, .0106, .0074,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .01750,.00085,4.8792, .01669, .01839, .01743,Chk Pass,,

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Sn,189.989 {477},Y1,ppm, .0069,.0012,17.06, .0067, .0058, .0081,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0048,.0000,.1557, .0048, .0048, .0048,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .1519,.0043,2.806, .1475, .1522, .1560,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0078,.0002,2.757, -.0079, -.0081, -.0076,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0061,.0040,65.11, .0016, .0077, .0091,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0040,.0002,4.685, -.0041, -.0038, -.0042,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0015,.0022,146.8, .0034, -.0010, .0021,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0171,.0003,1.509, -.0173, -.0172, -.0168,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0068,.0022,32.81, -.0055, -.0056, -.0094,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8128.7,16.190, .19917,8138.2,8110.0,8137.9
 Y2A,371.030 { 91}2,Cts/S, 247010.,320.83, .12989,246910.,247360.,246740.
 Y2R,371.030 { 91}3,Cts/S, 18386.,39.000, .21211,18428.,18380.,18351.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICSAB 070731
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:32:36
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .2176,.0018,.8355, .2190, .2156, .2183,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 478.9,2.375, .4959, 476.9, 478.4, 481.5,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 489.8,3.038, .6203, 493.3, 488.1, 487.9,Chk Pass,,
 As,189.042 {478},Y1,ppm, .1083,.0064,5.903, .1087, .1018, .1145,Chk Pass,,
 B,249.773 {135},Y2A,ppm,W -.0506,.0025,4.882, -.0533, -.0484, -.0502,Chk
 warn, .0500, -.0500
 Ba,455.403 { 74},Y2A,ppm, .5151,.0025,.4922, .5130, .5145, .5179,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .49603,.00086,.17270, .49630, .49672, .49507,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 507.3,3.451, .6803, 511.2, 505.5, 505.1,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .9202,.0010,.1123, .9191, .9210, .9206,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4578,.0010,.2147, .4588, .4576, .4569,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4823,.0008,.1719, .4832, .4824, .4815,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5338,.0006,.1161, .5339, .5343, .5331,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 191.9,1.242, .6472, 193.3, 191.2, 191.2,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .0115,.0366,317.8, -.0110, -.0082, .0537,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0090,.0013,14.35, .0092, .0103, .0077,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 462.7,6.880,1.487, 470.3, 456.9, 460.9,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .48545,.00039,.08104, .48561, .48573, .48500,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0016,.0007,44.66, .0013, .0011, .0024,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0613,.0044,7.136, .0592, .0663, .0583,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .9078,.0021,.2333, .9101, .9071, .9061,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0054,.0054,100.1, .0004, .0046, .0112,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4946,.0060,1.216, .5000, .4957, .4881,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0176,.0156,88.89, .0002, -.0238, -.0292,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6294,.0023,.3605, .6320, .6285, .6277,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5102,.0089,1.740, .5008, .5115, .5184,Chk Pass,,
 Si,251.611 {134},Y2R,ppm,F .01303,.01551,119.08, .00944, .03001, -.00038,Chk
 Fail,1.0000,1.0000
 Sn,189.989 {477},Y1,ppm, .0098,.0038,38.44, .0057, .0107, .0131,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0047,.0000,.1629, .0047, .0047, .0047,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .1282,.0093,7.287, .1387, .1209, .1249,Chk Pass,,

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Ti, 334.941 {101}, Y2A, ppm, -.0074, .0002, 2.052, -.0073, -.0075, -.0073, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0876, .0021, 2.411, .0889, .0852, .0888, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .5063, .0014, .2778, .5074, .5068, .5047, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, F .0004, .0009, 216.6, -.0002, .0015, -.0001, Chk
 Fail, -.0600, -.0600
 Zn, 213.856 {458}, Y1, ppm, .9585, .0016, .1674, .9569, .9601, .9585, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, -.0050, .0009, 17.48, -.0058, -.0041, -.0050, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3
 Y1, 224.306 {450}, Cts/s, 8177.7, 10.168, .12434, 8178.6, 8187.4, 8167.1
 Y2A, 371.030 { 91}2, Cts/s, 248740., 436.02, .17529, 249190., 248700., 248320.
 Y2R, 371.030 { 91}3, Cts/s, 18475., 75.769, .41013, 18435., 18562., 18427.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:36:05
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .4985, .0025, .5022, .4959, .5009, .4988, Chk Pass,,
 Al, 308.215 {109}, Y2A, ppm, 24.13, .0577, .2392, 24.16, 24.18, 24.07, Chk Pass,,
 Al, 308.215 {109}2, Y2R, ppm, 24.56, .2746, 1.118, 24.31, 24.85, 24.52, Chk Pass,,
 As, 189.042 {478}, Y1, ppm, .5093, .0022, .4366, .5102, .5068, .5110, Chk Pass,,
 B, 249.773 {135}, Y2A, ppm, .4864, .0011, .2308, .4868, .4873, .4851, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .5094, .0006, .1187, .5087, .5098, .5098, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, .49248, .00203, .41275, .49025, .49422, .49299, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 25.12, .1661, .6612, 24.94, 25.26, 25.15, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .5022, .0014, .2854, .5008, .5037, .5020, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .4885, .0010, .1971, .4887, .4874, .4893, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .4943, .0022, .4488, .4918, .4961, .4949, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .5086, .0029, .5676, .5053, .5106, .5099, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, 24.39, .2399, .9835, 24.18, 24.65, 24.33, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, 24.82, .1697, .6837, 24.67, 25.01, 24.79, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, .5086, .0048, .9489, .5031, .5123, .5104, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 24.36, .1169, .4797, 24.23, 24.46, 24.38, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .49837, .00150, .30029, .49665, .49937, .49908, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .4960, .0029, .5784, .4993, .4940, .4947, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, 24.80, .2255, .9092, 24.60, 25.05, 24.75, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .4930, .0009, .1871, .4927, .4941, .4923, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .5085, .0016, .3164, .5091, .5067, .5097, Chk Pass,,
 Pb, 220.353 {453}, Y1, ppm, .4823, .0056, 1.161, .4884, .4809, .4775, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 24.46, .0006, .0025, 24.46, 24.46, 24.46, Chk Pass,,
 Sb, 206.833 {463}, Y1, ppm, .4960, .0028, .5638, .4934, .4955, .4989, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .5001, .0041, .8200, .5007, .4957, .5039, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 25.150, .16542, .65774, 25.005, 25.330, 25.115, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .4874, .0009, .1921, .4873, .4866, .4884, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .5163, .0049, .9468, .5125, .5219, .5147, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .5344, .0097, 1.808, .5242, .5354, .5434, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .5082, .0020, .3990, .5059, .5097, .5091, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .4948, .0039, .7835, .4992, .4924, .4926, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .5044, .0032, .6401, .5029, .5081, .5021, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .5107, .0023, .4507, .5133, .5100, .5089, Chk Pass,,

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Zn,213.856 {458},Y1,ppm, .5044,.0011,.2170, .5044, .5055, .5034,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .5020,.0063,1.255, .4970, .5090, .4998,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8947.6,2.7944,.03123,8950.4,8947.6,8944.8
 Y2A,371.030 { 91}2,Cts/S, 275280.,924.37,.33579,276340.,274900.,274610.
 Y2R,371.030 { 91}3,Cts/S, 19168.,114.27,.59615,19292.,19067.,19146.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:39:20
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007,.0002,32.29, .0007, .0005, .0009,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, .0563,.0410,72.79, .0169, .0988, .0534,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0129,.0107,82.48, .0013, .0152, .0223,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0049,.0002,3.548, .0048, .0051, .0048,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0011,.0001,9.125, .0010, .0012, .0011,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0002,.0001,32.07, .0001, .0003, .0002,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00000,.00005,7229.6, -.00005, .00005, -.00001,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0316,.0073,23.27, .0278, .0400, .0269,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004,.0001,34.47, .0003, .0005, .0004,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0000,.0002,418.7, .0003, .0000, -.0001,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0000,.0006,1201., .0004, -.0006, .0004,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0008,.0005,55.50, -.0006, -.0005, -.0013,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0088,.0005,5.620, .0084, .0085, .0093,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0325,.0048,14.82, -.0374, -.0278, -.0322,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0018,.0008,44.56, -.0013, -.0027, -.0013,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0298,.0036,11.94, .0263, .0334, .0296,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00008,.00009,116.78, -.00001, .00017, .00007,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0020,.0002,7.765, .0021, .0018, .0020,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, -.0013,.0088,697.9, -.0113, .0030, .0046,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0003,.0001,42.49, .0003, .0004, .0002,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.0011,.0017,160.3, .0007, -.0028, -.0011,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0013,.0016,125.1, .0031, .0000, .0007,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0006,.0014,221.9, -.0022, -.0003, .0005,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0010,.0010,103.8, .0002, -.0015, -.0017,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0018,.0024,129.9, .0044, .0013, -.0002,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, -.00050,.00232,467.09, .00046, .00120, -.00314,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0010,.0004,42.86, .0009, .0007, .0015,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,35.80, .0001, .0001, .0001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0128,.0176,138.0, -.0011, .0068, .0326,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0002,.0001,48.33, .0001, .0001, .0003,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0016,.0017,105.0, .0000, .0014, .0034,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0007,.0004,61.89, -.0011, -.0002, -.0009,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0011,.0008,73.91, .0002, .0018, .0013,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0001,.0000,9.921, -.0001, -.0001, -.0001,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0016,.0022,141.5, .0004, -.0011, -.0040,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

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Y1,224.306 {450},Cts/S, 9172.9,9.3166,,10157,9183.3,9170.1,9165.3
 Y2A,371.030 { 91}2,Cts/S, 280620.,583.88,,20807,280080.,281240.,280530.
 Y2R,371.030 { 91}3,Cts/S, 19168.,93.447,.48751,19060.,19223.,19221.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=LRC 083291
 Username=dept 22
 Comment=LRS2
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:42:37
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm,F 2.789,.0165,.5905, 2.780, 2.808, 2.780,Chk
 Fail,5.000,-10.00%
 Al,um Ax,308.215 {109},Y2A,ppm, .0261,.0114,43.53, .0289, .0359, .0136,None,,
 Al,308.215 {109}2,Y2R,ppm, .1979,.0348,17.57, .1970, .2331, .1636,None,,
 As,189.042 {478},Y1,ppm, 19.92,.1309,.6568, 20.02, 19.97, 19.78,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 4.952,.0257,.5190, 4.942, 4.982, 4.933,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 5.021,.0227,.4515, 4.997, 5.042, 5.023,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, 4.9138,.01967,.40024, 4.8940, 4.9333, 4.9141,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0956,.0004,.4490, .0955, .0961, .0953,None,,
 Cd,226.502 {449},Y1,ppm, 20.01,.1390,.6950, 20.13, 20.04, 19.85,Chk Pass,,
 Co,228.616 {447},Y1,ppm, 20.42,.1507,.7379, 20.56, 20.44, 20.26,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 20.18,.1392,.6898, 20.18, 20.31, 20.03,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, 21.03,.1929,.9173, 21.04, 21.21, 20.83,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0698,.0061,8.775, -.0669, -.0656, -.0768,None,,
 K,766.490 { 44},Y2R,ppm, .0162,.0047,28.80, .0127, .0215, .0145,None,,
 Li,670.784 { 50},Y2R,ppm, 20.99,.2675,1.274, 20.83, 20.85, 21.30,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0153,.0012,8.149, .0164, .0139, .0155,None,,
 Mn,257.610 {131},Y2A,ppm, 19.252,.13763,.71489, 19.254, 19.389, 19.114,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, 20.43,.1775,.8690, 20.58, 20.46, 20.23,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0845,.0011,1.345, .0847, .0856, .0833,None,,
 Ni,231.604 {445},Y1,ppm, 20.53,.1573,.7664, 20.67, 20.56, 20.36,Chk Pass,,
 P,177.495 {490},Y1,ppm, 20.22,.1072,.5301, 20.29, 20.27, 20.09,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, 19.96,.1240,.6212, 20.08, 19.98, 19.83,Chk Pass,,
 S,182.034 {485},Y1,ppm, .2669,.0068,2.544, .2730, .2682, .2596,None,,
 Sb,206.833 {463},Y1,ppm, 21.13,.1523,.7207, 21.27, 21.16, 20.97,Chk Pass,,
 Se,196.090 {472},Y1,ppm, 19.53,.1243,.6363, 19.61, 19.60, 19.39,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.4968,.11932,7.9716, 1.3739, 1.5043, 1.6121,None,,
 Sn,189.989 {477},Y1,ppm, 20.09,.1238,.6161, 20.19, 20.12, 19.95,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 4.946,.0377,.7615, 4.912, 4.987, 4.938,Chk Pass,,
 Th,283.730 {119},Y2R,ppm,F 2.997,.0351,1.172, 2.994, 2.964, 3.034,Chk
 Fail,20.00,-10.00%
 Ti,334.941 {101},Y2A,ppm, 20.23,.2235,1.105, 20.02, 20.46, 20.19,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 20.57,.0726,.3529, 20.61, 20.62, 20.49,Chk Pass,,
 V,292.402 {115},Y2A,ppm, 21.05,.1454,.6906, 20.93, 21.01, 21.21,Chk Pass,,
 W,207.911 {462},Y1,ppm, 21.14,.1580,.7476, 21.27, 21.19, 20.96,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, 9.618,.0651,.6774, 9.668, 9.641, 9.544,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 21.38,.2105,.9844, 21.27, 21.24, 21.62,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8759.9,18.521,.21143,8747.1,8751.6,8781.1
 Y2A,371.030 { 91}2,Cts/S, 274460.,1017.6,.37077,274990.,273290.,275110.
 Y2R,371.030 { 91}3,Cts/S, 19088.,153.08,.80197,19223.,19120.,18922.

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[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=LRC 083294
 Username=dept 22
 Comment=LRS4
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:46:22
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0054	.0005	8.911	.0059	.0051	.0051	None,,		
Al	308.215	{109}	Y2A, ppm	489.8	2.660	.5430	492.7	487.4	489.5	Chk Pass,,		
Al	308.215	{109}	Y2R, ppm	497.7	2.246	.4513	496.3	500.3	496.5	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.0152	.0050	33.18	.0097	.0165	.0195	None,,		
B	249.773	{135}	Y2A, ppm	-.0769	.0023	2.930	-.0757	-.0795	-.0756	None,,		
Ba	455.403	{74}	Y2A, ppm	.0022	.0001	2.483	.0022	.0022	.0021	None,,		
Be	313.042	{108}	Y2A, ppm	-.00003	.00004	133.85	.00001	-.00002	-.00007	None,,		
Ca	317.933	{106}	Y2R, ppm	509.4	5.727	1.124	507.1	515.9	505.2	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	-.0010	.0003	32.96	-.0007	-.0011	-.0013	None,,		
Co	228.616	{447}	Y1, ppm	.0004	.0003	58.70	.0002	.0003	.0007	None,,		
Cr	267.716	{126}	Y2A, ppm	.0020	.0006	27.76	.0019	.0026	.0015	None,,		
Cu	327.396	{103}	Y2A, ppm	-.0095	.0001	1.008	-.0096	-.0094	-.0094	None,,		
Fe	261.187	{129}	Y2R, ppm	294.6	1.757	.5962	293.6	296.7	293.7	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	516.5	1.921	.3719	516.1	518.6	514.8	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.0156	.0028	17.81	.0176	.0168	.0124	None,,		
Mg	285.213	{118}	Y2R, ppm	F 446.5	5.229	1.171	441.4	451.9	446.1	Chk		
Fail	500.0											
Mn	257.610	{131}	Y2A, ppm	-.01244	.00034	2.7163	-.01208	-.01275	-.01248	None,,		
Mo	202.030	{467}	Y1, ppm	.1503	.0029	1.922	.1519	.1520	.1470	None,,		
Na	589.592	{57}	Y2R, ppm	489.0	6.917	1.415	490.0	495.4	481.6	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	-.0015	.0005	33.96	-.0013	-.0011	-.0020	None,,		
P	177.495	{490}	Y1, ppm	.0057	.0062	108.0	.0010	.0034	.0127	None,,		
Pb	220.353	{453}	Y1, ppm	.0058	.0002	3.435	.0057	.0058	.0061	None,,		
S	182.034	{485}	Y1, ppm	202.2	1.357	.6713	202.8	203.2	200.6	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.0099	.0007	6.718	.0094	.0106	.0096	None,,		
Se	196.090	{472}	Y1, ppm	.0085	.0025	28.76	.0110	.0061	.0085	None,,		
Si	251.611	{134}	Y2R, ppm	199.69	1.0831	.54237	198.89	200.93	199.26	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0135	.0018	13.04	.0121	.0155	.0130	None,,		
Sr	421.552	{80}	Y2A, ppm	.0147	.0001	.6465	.0148	.0147	.0146	None,,		
Th	283.730	{119}	Y2R, ppm	.2122	.0146	6.874	.2188	.2222	.1954	None,,		
Ti	334.941	{101}	Y2A, ppm	.0135	.0002	1.767	.0137	.0132	.0135	None,,		
Tl	190.856	{477}	Y1, ppm	.0039	.0005	12.02	.0035	.0045	.0039	None,,		
V	292.402	{115}	Y2A, ppm	-.0026	.0001	2.760	-.0025	-.0026	-.0026	None,,		
W	207.911	{462}	Y1, ppm	.0537	.0006	1.098	.0534	.0534	.0544	None,,		
Zn	213.856	{458}	Y1, ppm	-.0548	.0002	.3811	-.0547	-.0550	-.0547	None,,		
Zr	339.198	{99}	Y2R, ppm	.0079	.0022	27.77	.0059	.0075	.0103	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/s	7873.4	28.123	.35718	7855.8	7858.6
Y2A	371.030	{91}	2,Cts/s	237870.	781.36	.32849	237040.	238590.
Y2R	371.030	{91}	3,Cts/s	18014.	150.11	.83330	18136.	17846.

[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=LRC 083293

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Username=dept 22
 Comment=LRS3
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:49:59
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	2.592	.0052	.1998	2.592	2.587	2.598	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A, ppm	.0333	.0039	11.59	.0366	.0342	.0290	None,,		
Al	308.215	{109}2	Y2R, ppm	.2687	.0688	25.60	.2005	.3381	.2675	None,,		
As	189.042	{478}	Y1, ppm	10.25	.0250	.2436	10.27	10.25	10.22	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	2.511	.0057	.2273	2.514	2.504	2.515	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	2.640	.0118	.4470	2.627	2.644	2.650	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	2.5610	.00414	.16175	2.5586	2.5587	2.5658	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	.2269	.0556	24.51	.1795	.2881	.2130	None,,		
Cd	226.502	{449}	Y1, ppm	10.49	.0215	.2047	10.51	10.47	10.47	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	10.54	.0519	.4927	10.57	10.56	10.48	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	10.35	.0223	.2158	10.38	10.34	10.34	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	10.62	.0213	.2006	10.64	10.61	10.60	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	.0346	.0306	88.67	.0071	.0676	.0289	None,,		
K	766.490	{44}	Y2R, ppm	.4265	.0664	15.57	.3943	.5028	.3823	None,,		
Li	670.784	{50}	Y2R, ppm	10.53	.0661	.6278	10.51	10.61	10.48	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	.0734	.0545	74.21	.0282	.1339	.0581	None,,		
Mn	257.610	{131}	Y2A, ppm	10.231	.03031	.29631	10.200	10.231	10.261	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	10.36	.0740	.7144	10.42	10.40	10.28	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	.2526	.0316	12.52	.2357	.2890	.2330	None,,		
Ni	231.604	{445}	Y1, ppm	10.60	.0384	.3620	10.63	10.61	10.56	Chk Pass,,		
P	177.495	{490}	Y1, ppm	10.45	.0363	.3472	10.48	10.44	10.41	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	10.33	.0617	.5978	10.35	10.37	10.26	Chk Pass,,		
S	182.034	{485}	Y1, ppm	.1463	.0024	1.649	.1490	.1444	.1454	None,,		
Sb	206.833	{463}	Y1, ppm	10.76	.0338	.3138	10.80	10.74	10.74	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	10.26	.0519	.5061	10.28	10.29	10.20	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	1.6227	.03846	2.3701	1.5787	1.6398	1.6497	None,,		
Sn	189.989	{477}	Y1, ppm	10.40	.0571	.5489	10.43	10.44	10.34	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	2.589	.0115	.4440	2.602	2.580	2.585	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	9.611	.0934	.9718	9.509	9.692	9.631	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	10.39	.0601	.5788	10.43	10.32	10.41	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	10.67	.0274	.2571	10.70	10.67	10.64	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	10.73	.0300	.2795	10.75	10.69	10.74	Chk Pass,,		
W	207.911	{462}	Y1, ppm	10.64	.0278	.2613	10.67	10.64	10.62	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	5.106	.0137	.2680	5.121	5.100	5.096	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	10.33	.1008	.9753	10.26	10.45	10.28	Chk Pass,,		

[Internal standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	8774.5	18.224	.20769	8795.2	8767.7
Y2A	371.030	{91}2	Cts/S	275220	.624.95	.22707	275140	275880
Y2R	371.030	{91}3	Cts/S	19032	.120.44	.63284	19095	18893

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=LRC 083311
 Username=dept 22
 Comment=LRS5
 Custom ID1=
 Custom ID2=
 Custom ID3=

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Run Time=6/9/2020 14:53:35
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0013	.0002	12.60	.0014	.0011	.0014	None,,		
Alum Ax	308.215	{109}	Y2A, ppm	254.3	.9483	.3729	253.4	254.2	255.3	Chk Pass,,		
Al	308.215	{109}2	Y2R, ppm	254.1	1.924	.7571	256.3	252.6	253.6	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.0105	.0038	36.26	.0098	.0147	.0071	None,,		
B	249.773	{135}	Y2A, ppm	-.0306	.0019	6.257	-.0328	-.0300	-.0292	None,,		
Ba	455.403	{74}	Y2A, ppm	.0012	.0000	.5030	.0012	.0012	.0012	None,,		
Be	313.042	{108}	Y2A, ppm	-.00000	.00002	1112.0	.00000	.00002	-.00003	None,,		
Ca	317.933	{106}	Y2R, ppm	260.1	2.239	.8608	262.5	258.0	259.8	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	-.0003	.0003	109.8	-.0002	.0000	-.0005	None,,		
Co	228.616	{447}	Y1, ppm	.0006	.0001	19.20	.0005	.0007	.0006	None,,		
Cr	267.716	{126}	Y2A, ppm	.0019	.0001	7.305	.0021	.0020	.0018	None,,		
Cu	327.396	{103}	Y2A, ppm	-.0043	.0001	2.596	-.0042	-.0044	-.0043	None,,		
Fe	261.187	{129}	Y2R, ppm	148.9	1.386	.9305	150.4	147.7	148.7	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	259.8	2.647	1.019	262.6	257.4	259.4	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.0097	.0008	8.263	.0099	.0088	.0103	None,,		
Mg	285.213	{118}	Y2R, ppm	243.2	2.323	.9552	245.8	242.6	241.3	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	-.00579	.00013	2.1702	-.00594	-.00570	-.00575	None,,		
Mo	202.030	{467}	Y1, ppm	.1082	.0016	1.467	.1097	.1083	.1065	None,,		
Na	589.592	{57}	Y2R, ppm	249.9	1.723	.6897	250.5	247.9	251.2	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	-.0018	.0008	42.10	-.0016	-.0011	-.0026	None,,		
P	177.495	{490}	Y1, ppm	.0047	.0009	18.70	.0051	.0053	.0037	None,,		
Pb	220.353	{453}	Y1, ppm	.0035	.0048	138.4	.0012	.0002	.0090	None,,		
S	182.034	{485}	Y1, ppm	103.4	.1515	.1465	103.6	103.4	103.3	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.0103	.0040	38.65	.0072	.0088	.0148	None,,		
Se	196.090	{472}	Y1, ppm	.0113	.0052	46.02	.0117	.0163	.0059	None,,		
Si	251.611	{134}	Y2R, ppm	104.35	.93608	.89704	105.37	103.53	104.16	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0082	.0014	16.72	.0098	.0074	.0075	None,,		
Sr	421.552	{80}	Y2A, ppm	.0076	.0000	.3840	.0076	.0076	.0076	None,,		
Th	283.730	{119}	Y2R, ppm	.1225	.0107	8.733	.1116	.1330	.1230	None,,		
Ti	334.941	{101}	Y2A, ppm	.0089	.0001	.6264	.0088	.0089	.0089	None,,		
Tl	190.856	{477}	Y1, ppm	.0034	.0026	77.00	.0047	.0050	.0004	None,,		
V	292.402	{115}	Y2A, ppm	-.0020	.0005	24.72	-.0021	-.0014	-.0024	None,,		
W	207.911	{462}	Y1, ppm	.0452	.0011	2.384	.0446	.0465	.0447	None,,		
Zn	213.856	{458}	Y1, ppm	-.0282	.0001	.4249	-.0282	-.0280	-.0282	None,,		
Zr	339.198	{99}	Y2R, ppm	.0145	.0009	6.133	.0138	.0141	.0155	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	8315.6	7.7387	.09306	8322.3	8307.1	8317.4
Y2A	371.030	{91}2	Cts/S	250710.	716.50	.28579	251060.	251190.	249890.
Y2R	371.030	{91}3	Cts/S	18284.	90.314	.49396	18227.	18388.	18236.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCS
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 14:59:06
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

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[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0010	.0002	21.18	.0012	.0008	.0009	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A, ppm	.0172	.0041	23.98	.0149	.0148	.0220	Chk Pass,,		
Al	308.215	{109}2	Y2R, ppm	.0124	.0197	159.9	.0311	.0143	-.0083	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.0023	.0011	47.18	.0021	.0035	.0013	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.0038	.0007	19.52	.0044	.0030	.0041	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.0002	.0000	3.875	.0003	.0002	.0002	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.00005	.00002	47.185	.00005	.00007	.00002	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	.0188	.0038	20.25	.0223	.0195	.0147	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.0005	.0000	9.280	.0005	.0005	.0006	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.0006	.0003	50.74	.0008	.0007	.0003	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.0004	.0001	24.22	.0003	.0004	.0005	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.0001	.0005	371.6	-.0000	-.0003	.0007	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	.0080	.0112	140.2	-.0040	.0099	.0182	Chk Pass,,		
K	766.490	{44}	Y2R, ppm, W	.1880	.0116	6.185	.1757	.1989	.1893	Chk		
Warn	.1875											
Li	670.784	{50}	Y2R, ppm	.0001	.0016	1351.	-.0016	.0016	.0004	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	.0188	.0036	18.88	.0219	.0197	.0149	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.00043	.00003	7.6287	.00045	.00039	.00043	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm, F	.0100	.0011	10.55	.0089	.0100	.0110	chk		
Fail	.0050											
Na	589.592	{57}	Y2R, ppm	.0554	.0074	13.30	.0577	.0614	.0472	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.0005	.0003	51.82	.0003	.0008	.0005	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.0001	.0008	640.9	.0011	-.0004	-.0003	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	-.0015	.0035	229.6	-.0033	-.0038	.0025	Chk Pass,,		
S	182.034	{485}	Y1, ppm	.0113	.0038	33.34	.0156	.0094	.0088	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.0022	.0019	85.82	.0020	.0004	.0041	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.0005	.0019	400.2	-.0012	.0025	.0000	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	.03028	.00290	9.5847	.03165	.02694	.03224	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0017	.0004	24.70	.0017	.0012	.0021	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.0002	.0000	7.162	.0002	.0001	.0002	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	-.0012	.0103	854.4	-.0023	.0096	-.0109	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.0006	.0001	19.65	.0006	.0005	.0007	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	-.0009	.0032	346.9	.0022	-.0042	-.0008	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	-.0006	.0003	54.10	-.0004	-.0004	-.0009	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.0048	.0007	15.03	.0041	.0050	.0055	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.0002	.0002	78.92	.0004	.0001	.0002	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	.0021	.0020	93.60	.0037	-.0001	.0027	Chk Pass,,		

[Internal standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	9168.0	7.8379	.08549	9177.0	9164.0
Y2A	371.030	{91}2	Cts/S	281300.	2912.8	1.0355	284300.	281100.
Y2R	371.030	{91}3	Cts/S	19023.	84.280	.44303	19114.	19009.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=CCV 078332
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 15:02:24
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
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Ag,328.068 {103},Y2A,ppm, .5019,.0055,1.098, .4970, .5008, .5079,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 24.27,.1686,.6945, 24.13, 24.23, 24.46,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 24.63,.1176,.4774, 24.50, 24.66, 24.73,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5023,.0050,.9888, .5022, .4974, .5073,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4943,.0047,.9542, .4906, .4928, .4996,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5116,.0070,1.373, .5060, .5092, .5195,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .49804,.00388,.77895, .49468, .49716, .50229,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 25.44,.2018,.7933, 25.24, 25.65, 25.44,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .4983,.0014,.2854, .4998, .4982, .4970,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4872,.0004,.0829, .4876, .4870, .4869,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4985,.0046,.9197, .4956, .4962, .5038,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5116,.0027,.5263, .5093, .5108, .5145,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 24.58,.0768,.3126, 24.50, 24.59, 24.65,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 25.16,.1868,.7423, 24.95, 25.30, 25.23,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5115,.0049,.9495, .5064, .5160, .5121,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 24.64,.1834,.7442, 24.43, 24.76, 24.73,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .50387,.00260,.51507, .50255, .50219, .50686,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .4982,.0012,.2462, .4973, .4996, .4977,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 24.88,.1105,.4439, 24.77, 24.99, 24.90,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .4905,.0008,.1629, .4907, .4896, .4912,Chk Pass,,
 P,177.495 {490},Y1,ppm, .4978,.0050,.9968, .4933, .4970, .5031,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4773,.0022,.4644, .4756, .4765, .4798,Chk Pass,,
 S,182.034 {485},Y1,ppm, 24.08,.0153,.0637, 24.06, 24.08, 24.09,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .4901,.0026,.5340, .4903, .4873, .4926,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4869,.0014,.2926, .4874, .4854, .4881,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 25.412,.13348,.52529, 25.296, 25.558, 25.381,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .4867,.0023,.4816, .4841, .4884, .4877,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5181,.0058,1.122, .5144, .5151, .5248,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5343,.0086,1.615, .5399, .5243, .5386,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5138,.0029,.5608, .5115, .5130, .5170,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .4896,.0056,1.139, .4935, .4920, .4832,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5081,.0053,1.048, .5030, .5078, .5136,Chk Pass,,
 W,207.911 {462},Y1,ppm, .5084,.0034,.6641, .5113, .5093, .5047,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .4962,.0010,.2021, .4967, .4968, .4950,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .4964,.0060,1.214, .4895, .5005, .4993,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 9073.9,26.220,.28896,9103.6,9064.1,9054.0
 Y2A,371.030 { 91}2,Cts/S, 272860.,2173.7,.79663,274460.,273730.,270390.
 Y2R,371.030 { 91}3,Cts/S, 18965.,242.89,1.2808,19244.,18801.,18849.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:05:41
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0010,.0007,66.14, .0014, .0002, .0014,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0097,.0011,10.96, .0107, .0086, .0096,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.0052,.0170,327.5, -.0141, .0144, -.0158,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0052,.0022,42.93, .0026, .0067, .0062,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0028,.0003,10.07, .0025, .0031, .0027,Chk Pass,,

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Ba,455.403 { 74},Y2A,ppm, .0002,.0000,3.953, .0002, .0002, .0002,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00001,.00001,129.45, -.00002, -.00002, .00000,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0080,.0062,77.47, .0015, .0086, .0138,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0009,.0003,30.76, .0008, .0007, .0012,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004,.0004,114.8, .0003, -.0000, .0008,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0007,.0005,66.02, .0009, .0002, .0010,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0002,.0005,275.5, .0004, .0006, -.0004,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0045,.0123,275.3, -.0092, .0081, .0145,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .1192,.0344,28.85, .1158, .0866, .1551,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0010,.0017,169.0, .0001, -.0002, -.0030,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0099,.0042,42.27, .0066, .0085, .0147,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00027,.00006,20.734, .00034, .00023, .00025,Chk Pass,,
 Mo,202.030 {467},Y1,ppm,F .0053,.0005,10.29, .0049, .0051, .0059,Chk
 Fail,.0050,-.0050
 Na,589.592 { 57},Y2R,ppm, .0272,.0103,37.97, .0180, .0252, .0384,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0006,.0003,55.45, .0003, .0005, .0009,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0017,.0025,146.7, .0004, .0046, .0001,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0024,.0028,117.1, -.0023, -.0053, .0004,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0100,.0117,116.9, .0020, .0046, .0235,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0002,.0021,900.8, .0010, .0018, -.0021,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0013,.0012,92.01, .0026, .0002, .0012,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .01754,.00275,15.674, .01970, .01444, .01847,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0022,.0012,51.95, .0016, .0015, .0036,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,4.293, .0001, .0001, .0001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0111,.0116,103.9, .0185, -.0022, .0171,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0004,.0001,13.26, .0004, .0005, .0004,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0003,.0010,362.4, .0013, -.0007, .0003,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0009,.0002,23.67, -.0012, -.0008, -.0008,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0036,.0009,25.07, .0028, .0034, .0045,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0002,.0003,170.3, .0000, -.0000, .0004,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0011,.0014,126.3, -.0002, -.0004, -.0027,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 9164.3,17.917,.19551,9144.7,9179.8,9168.3
 Y2A,371.030 { 91}2,Cts/S, 280640.,2294.4,.81757,279790.,283230.,278880.
 Y2R,371.030 { 91}3,Cts/S, 19003.,29.902,.15736,19025.,19014.,18969.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=MB 410-11479/1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:09:01
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007158,.0002611,36.47979, .0008854, .0008468,
 .0004151,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0061999,.0031464,50.74958, .0083965, .0025954,
 .0076078,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0075580,.0212454,281.0989, .0300841, -.012119,
 .0047089,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0046417,.0027388,59.00522, .0058311, .0065847,
 .0015092,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0017701,.0003259,18.41005, .0020645, .0014199,

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.0018260,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0001711,.0000199,11.62586, .0001656, .0001545,
.0001931,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.000028,.0000014,5.039536, -.000030, -.000027,
-.000028,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, -.001187,.0036468,307.2401, .0025287, -.001329,
-.004761,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0005102,.0001999,39.18564, .0005422, .0006922,
.0002962,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0002647,.0001097,41.44167, .0003891, .0002228,
.0001820,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0002914,.0001492,51.20222, .0003223, .0004227,
.0001292,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.000126,.0005106,404.7163, .0004504, -.000521,
-.000308,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, -.003430,.0074633,217.6088, .0019720, -.011946,
-.000315,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .0470306,.0533518,113.4406, .0507080, .0984486,
-.008065,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.000943,.0027831,295.1705, .0012474, -.000001,
-.004075,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, .0061067,.0004036,6.609673, .0064376, .0062256,
.0056570,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .0001585,.0000274,17.31792, .0001891, .0001363,
.0001500,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0015645,.0001524,9.740159, .0013885, .0016516,
.0016533,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .0038840,.0045214,116.4107, .0068982, -.001315,
.0060687,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0001413,.0004181,295.8660, .0000655, -.000234,
.0005921,Chk Pass,,
P,177.495 {490},Y1,ppm, -.000234,.0012193,522.0258, -.000642, -.001196, .0011376,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0004621,.0021570,466.7506, -.001459, .0027956,
.0000496,Chk Pass,,
S,182.034 {485},Y1,ppm, .0004355,.0048678,1117.706, .0051884, .0006576, -.004540,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, -.000170,.0033973,2002.618, .0037094, -.002615,
-.001603,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0015928,.0020625,129.4862, -.000607, .0034824,
.0019035,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .0095376,.0070368,73.77907, .0040333, .0174660,
.0071136,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0002929,.0009598,327.6647, .0004561, .0011607,
-.000738,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0000873,.0000105,11.99726, .0000864, .0000773,
.0000982,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0133693,.0106173,79.41549, .0045034, .0251353,
.0104692,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0002156,.0000927,42.99826, .0003165, .0001341,
.0001962,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0039944,.0013405,33.56047, .0047271, .0048089,
.0024472,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.000775,.0002197,28.33816, -.001023, -.000701,
-.000603,Chk Pass,,
W,207.911 {462},Y1,ppm, .0009408,.0003586,38.11238, .0013525, .0006964, .0007736,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, -.000207,.0001140,55.11875, -.000112, -.000175,
-.000333,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.000825,.0006898,83.59929, -.000045, -.001353,
-.001078,Chk Pass,,

[Internal Standards]

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Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 9307.872,4.687846,.0503643,9312.894,9307.111,9303.612,None,
 Y2A,371.030 { 91}2,Cts/S,
 285734.2,1692.335,.5922759,283960.4,285911.1,287331.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19243.34,90.91581,.4724535,19293.58,19298.05,19138.39,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=LCS 410-11479/2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:12:22
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0212976,.0002897,1.360417, .0214113, .0209683,
 .0215132,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .3963911,.0018165,.4582538, .3953406, .3953440,
 .3984886,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .3898384,.0056605,1.452002, .3935282, .3926657,
 .3833213,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0668189,.0019902,2.978563, .0689052, .0666104,
 .0649411,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0601698,.0006294,1.045968, .0594899, .0602875,
 .0607320,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0107946,.0000643,.5959381, .0107546, .0107605,
 .0108688,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0101222,.0000679,.6708837, .0101260, .0100525,
 .0101882,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .4227983,.0033915,.8021621, .4256987, .4236270,
 .4190692,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0110235,.0001735,1.574007, .0110711, .0108311,
 .0111682,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0109818,.0000926,.8430194, .0109379, .0109193,
 .0110882,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0316305,.0002438,.7708910, .0317902, .0317514,
 .0313498,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0413567,.0010505,2.540214, .0410086, .0405244,
 .0425371,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .4078396,.0118097,2.895679, .4136057, .3942545,
 .4156586,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 5.753939,.0160604,.2791207, 5.762967, 5.763453,
 5.735396,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1043781,.0008403,.8050129, .1035266, .1052067,
 .1044011,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .2140087,.0012623,.5898436, .2130124, .2154282,
 .2135853,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0213948,.0001925,.8997274, .0213863, .0212067,
 .0215914,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0203914,.0003797,1.862202, .0205388, .0206753,
 .0199601,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 2.032337,.0175653,.8642918, 2.023636, 2.020822,
 2.052555,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, 2.121989,.0024580,.1158331, 2.121039, 2.124780,
 2.120148,Chk Pass,,

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P,177.495 {490},Y1,ppm, .2073860,.0019630,.9465461, .2093460, .2073922, .2054200,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0307621,.0019266,6.262890, .0313691, .0286051, .0323120,Chk Pass,,
S,182.034 {485},Y1,ppm, 1.006741,.0095315,.9467722, 1.017707, 1.000445, 1.002071,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0992240,.0012844,1.294404, .0997095, .0977677, .1001949,Chk Pass,,
Se,196.090 {472},Y1,ppm, .1007859,.0029787,2.955441, .1037982, .0978420, .1007175,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 1.043881,.0057087,.5468676, 1.040916, 1.040265, 1.050462,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .1028239,.0016317,1.586931, .1028598, .1044374, .1011745,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0108053,.0000568,.5258749, .0107797, .0107659, .0108705,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0221398,.0050563,22.83786, .0272850, .0219570, .0171774,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0213589,.0001093,.5115004, .0213464, .0212564, .0214739,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0615642,.0021410,3.477631, .0606006, .0640177, .0600744,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0199926,.0006166,3.084104, .0206325, .0194023, .0199428,Chk Pass,,
W,207.911 {462},Y1,ppm, .0602301,.0016843,2.796477, .0621494, .0589983, .0595425,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .4597938,.0013122,.2853892, .4603451, .4607403, .4582959,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0873045,.0018425,2.110413, .0893580, .0857960, .0867594,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 9215.294,33.02602,.3583827,9223.468,9178.949,9243.466,None,,
Y2A,371.030 { 91}2,Cts/S,
283367.2,2712.446,.9572196,284958.1,284908.2,280235.3,None,,
Y2R,371.030 { 91}3,Cts/S,
19250.49,51.26937,.2663276,19226.97,19309.30,19215.20,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3328-C-2-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 15:15:37
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0004918,.0007321,148.8559, .0002657, .0013103, -.000101,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, .0292725,.0021903,7.482452, .0300608, .0267971, .0309595,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, .0272113,.0167399,61.51824, .0463407, .0152438, .0200493,Chk Pass,,
As,189.042 {478},Y1,ppm, .0151739,.0025388,16.73149, .0180895, .0134511, .0139811,Chk Pass,,

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B, 249.773 {135}, Y2A, ppm, .7165644, .0042512, .5932803, .7214730, .7140697,
 .7141503, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .2081147, .0012489, .6000835, .2095189, .2076967,
 .2071284, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, -.000116, .0000322, 27.69661, -.000152, -.000090,
 -.000106, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 232.5113, .8891886, .3824281, 232.8313, 231.5065,
 233.1963, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0009151, .0012337, 134.8102, .0023255, .0003834,
 .0000365, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0010043, .0011908, 118.5684, .0023625, .0001399,
 .0005105, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0022706, .0002212, 9.743654, .0020835, .0025148,
 .0022136, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0042330, .0005575, 13.17071, .0041808, .0048148,
 .0037035, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, 4.386288, .0185456, .4228085, 4.367308, 4.387189,
 4.404367, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, 36.12287, .1972900, .5461638, 36.05426, 35.96904,
 36.34530, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, .0370294, .0017017, 4.595480, .0350734, .0378457,
 .0381691, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 70.48431, .3955658, .5612112, 70.41809, 70.12603,
 70.90881, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .4223691, .0031436, .7442745, .4258960, .4213495,
 .4198620, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0076320, .0006537, 8.565053, .0082631, .0069579,
 .0076750, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, F 1063.518, 19.59860, 1.842808, 1085.953, 1049.731,
 1054.870, Chk Fail, 450.0000, -1.00000
 Ni, 231.604 {445}, Y1, ppm, .0015033, .0016894, 112.3838, .0034105, .0001947,
 .0009046, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .6843048, .0076319, 1.115277, .6882793, .6891292, .6755059, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0023831, .0042146, 176.8534, .0070879, -.001047,
 .0011082, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 25.31479, .0560369, .2213603, 25.25094, 25.33767, 25.35578, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0024024, .0041071, 170.9593, .0057234, -.002190,
 .0036738, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0069503, .0072120, 103.7647, .0098337, -.001257,
 .0122744, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 8.907890, .0316279, .3550549, 8.911439, 8.874638,
 8.937594, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .0022455, .0036435, 162.2557, .0064044, .0007162,
 -.000384, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, 1.685249, .0304254, 1.805396, 1.716435, 1.655646,
 1.683665, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .0064818, .0065225, 100.6278, -.000982, .0093390,
 .0110880, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, -.000841, .0001099, 13.07317, -.000967, -.000768,
 -.000787, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .0016308, .0014643, 89.79287, .0030032, .0017998,
 .0000893, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, -.000151, .0002156, 142.6042, -.000133, .0000548,
 -.000375, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0024122, .0016971, 70.35591, .0041224, .0007284, .0023859, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, -.000197, .0006710, 339.9831, .0005590, -.000430,
 -.000721, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, .0000042, .0010548, 25258.06, .0009687, .0001661,
 -.001122, Chk Pass,,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8195.102,24.16942,.2949252,8219.633,8194.360,8171.312,None,,
 Y2A,371.030 { 91}2,Cts/S,
 243578.7,1850.057,.7595316,241498.1,244199.6,245038.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18412.12,157.0919,.8531984,18430.45,18559.24,18246.66,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-C-2-A PDS
 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:19:02
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0198240,.0001834,.9252191, .0196706, .0197742,
 .0200271,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 1.087641,.0029589,.2720507, 1.084342, 1.090061,
 1.088520,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 1.040033,.0108179,1.040152, 1.030365, 1.051717,
 1.038017,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5478147,.0079906,1.458630, .5449029, .5416884,
 .5568529,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .9069143,.0025795,.2844309, .9039373, .9084878,
 .9083178,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .2546035,.0022414,.8803370, .2520317, .2556383,
 .2561406,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0201562,.0001249,.6197781, .0200151, .0202526,
 .0202010,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 228.0237,.1429761,.0627023, 227.8806, 228.0239,
 228.1665,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0487687,.0001323,.2712427, .0487788, .0486317,
 .0488957,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0963530,.0006044,.6272314, .0969837, .0957789,
 .0962963,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .2034598,.0006016,.2956701, .2027980, .2036080,
 .2039735,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5355239,.0049312,.9208104, .5299427, .5373382,
 .5392910,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 4.763479,.0125471,.2634010, 4.772369, 4.749127,
 4.768941,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 37.55165,.1103771,.2939341, 37.42960, 37.58089,
 37.64447,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, 1.085287,.0051778,.4770855, 1.079895, 1.085748,
 1.090219,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 69.81130,.1732796,.2482114, 69.95610, 69.61931,
 69.85847,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .4731737,.0037974,.8025277, .4688577, .4746618,
 .4760017,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .2012030,.0007995,.3973331, .2018800, .2014081,
 .2003211,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1008.707,9.165446,.9086329, 1015.310, 1012.569,
 998.2428,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, .1442793,.0007056,.4890728, .1447374, .1434667,

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.1446339,Chk Pass,,
P,177.495 {490},Y1,ppm, 1.774621,.0041592,.2343683, 1.779340, 1.771489, 1.773034,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .4677033,.0003980,.0850901, .4672962, .4677221,
.4680915,Chk Pass,,
S,182.034 {485},Y1,ppm, 25.59427,.0822859,.3215012, 25.65891, 25.50164, 25.62225,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .4116740,.0005580,.1355530, .4116559, .4122409,
.4111253,Chk Pass,,
Se,196.090 {472},Y1,ppm, .7854785,.0023791,.3028801, .7875417, .7828761,
.7860177,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 9.789021,.0073796,.0753863, 9.797542, 9.784754,
9.784767,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .5826803,.0034709,.5956779, .5850926, .5787024,
.5842458,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, 1.681366,.0009719,.0578072, 1.680315, 1.681552,
1.682232,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0281809,.0120562,42.78132, .0299021, .0153567,
.0392841,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .1055576,.0006972,.6604588, .1047528, .1059456,
.1059744,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .9132282,.0055901,.6121194, .9074256, .9136808,
.9185782,Chk Pass,,
V,292.402 {115},Y2A,ppm, .1059247,.0009133,.8622667, .1051420, .1057040,
.1069282,Chk Pass,,
W,207.911 {462},Y1,ppm, .0016126,.0008950,55.49794, .0025938, .0008411, .0014030,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .1248962,.0008032,.6431046, .1249582, .1240639,
.1256667,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, 1.003467,.0122604,1.221799, 1.015063, 1.004702,
.9906361,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 8235.326,18.84658,.2288504,8244.446,8247.878,8213.655,None,,
Y2A,371.030 { 91}2,Cts/S,
245677.4,830.5597,.3380691,246607.9,245413.4,245011.0,None,,
Y2R,371.030 { 91}3,Cts/S,
18616.59,111.0016,.5962509,18725.97,18504.04,18619.75,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3328-C-2-B DU
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 15:22:19
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0006216,.0010920,175.6650, .0009542, .0015086,
-.000598,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, .0352317,.0074531,21.15463, .0436016, .0327810,
.0293126,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, .0093593,.0180752,193.1254, .0121122, .0259001,
-.009934,Chk Pass,,
As,189.042 {478},Y1,ppm, .0129936,.0031383,24.15227, .0098066, .0160807,

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.0130935,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .7165236,.0031857,.4446081, .7174518, .7129769,
 .7191422,Chk Pass,,
 Ba,455.403 {74},Y2A,ppm, .2073081,.0002939,.1417490, .2070671, .2072218,
 .2076355,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000063,.0000242,38.19377, -.000037, -.000069,
 -.000084,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 231.9984,4.975569,2.144657, 235.8279, 226.3745,
 233.7927,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004174,.0000991,23.75085, .0005278, .0003884,
 .0003361,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0002650,.0004004,151.1193, -.000195, .0004509,
 .0005386,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0028826,.0001910,6.627043, .0030213, .0029618,
 .0026647,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0045223,.0003970,8.777714, .0048032, .0046955,
 .0040682,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 4.356119,.1095466,2.514776, 4.431118, 4.230405,
 4.406835,Chk Pass,,
 K,766.490 {44},Y2R,ppm, 36.25964,.7153998,1.972992, 36.80143, 35.44870,
 36.52878,Chk Pass,,
 Li,670.784 {50},Y2R,ppm, .0397064,.0013802,3.476072, .0410052, .0382571,
 .0398568,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 70.46630,1.621876,2.301634, 71.74135, 68.64085,
 71.01669,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .4214345,.0012125,.2877181, .4202923, .4213043,
 .4227069,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0090463,.0007712,8.525328, .0099118, .0084321,
 .0087949,Chk Pass,,
 Na,589.592 {57},Y2R,ppm,F 1013.925,22.49139,2.218250, 1033.256, 989.2394,
 1019.279,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, -.000152,.0002492,163.9145, .0001249, -.000223,
 -.000358,Chk Pass,,
 P,177.495 {490},Y1,ppm, .6744443,.0078981,1.171056, .6784567, .6795307, .6653454,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.000648,.0030909,476.7129, -.002556, -.002307,
 .0029178,Chk Pass,,
 S,182.034 {485},Y1,ppm, 25.12881,.2538935,1.010368, 25.20943, 25.33260, 24.84439,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0018514,.0012475,67.37907, .0013349, .0009452,
 .0032742,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0028252,.0066682,236.0235, .0103439, -.002371,
 .0005031,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 8.869816,.1809840,2.040448, 9.017223, 8.667822,
 8.924404,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0026034,.0005707,21.92050, .0021908, .0032547,
 .0023648,Chk Pass,,
 Sr,421.552 {80},Y2A,ppm, 1.694066,.0057897,.3417653, 1.688950, 1.692896,
 1.700351,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.003327,.0087266,262.2609, -.003754, .0056045,
 -.011833,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.000725,.0001612,22.22696, -.000573, -.000708,
 -.000894,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.002298,.0017798,77.45106, -.001230, -.004352,
 -.001311,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0006391,.0000222,3.469160, .0006456, .0006145,
 .0006574,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0004500,.0009598,213.2818, .0012166, .0007598, -.000626,chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, -.000777,.0000859,11.05594, -.000747, -.000710,
 -.000874,Chk Pass,,
 Zr,339.198 {99},Y2R,ppm, .0034391,.0016523,48.04471, .0028885, .0021324,
 .0052965,Chk Pass,,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8164.422,56.21787,.6885714,8153.696,8114.339,8225.230,None,,
 Y2A,371.030 { 91}2,Cts/S,
 242989.9,618.2187,.2544216,243468.8,243208.9,242292.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18279.13,356.5235,1.950440,18057.41,18690.39,18089.59,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-C-2-C MS
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:25:41
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0199585,.0005917,2.964548, .0206278, .0197427,
 .0195049,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, .4473180,.0039898,.8919315, .4469804, .4514658,
 .4435077,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .4075904,.0276676,6.788089, .4259364, .4210685,
 .3757665,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0754601,.0024079,3.190889, .0781521, .0747161,
 .0735120,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .7640134,.0007495,.0980933, .7635704, .7635911,
 .7648787,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .2130038,.0006237,.2928370, .2123524, .2135956,
 .2130636,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0098466,.0000234,.2380140, .0098225, .0098693,
 .0098479,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 231.2708,.8680736,.3753494, 230.4487, 231.1852,
 232.1785,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0098326,.0001322,1.344274, .0099430, .0096861,
 .0098688,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0101734,.0002071,2.035419, .0104121, .0100654,
 .0100427,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0323863,.0003152,.9732118, .0323863, .0327015,
 .0320711,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0454237,.0003981,.8763758, .0457270, .0449730,
 .0455713,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 4.678015,.0112805,.2411382, 4.689921, 4.676640,
 4.667486,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 41.58175,.2175438,.5231712, 41.36230, 41.58562,
 41.79733,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1408845,.0008439,.5989668, .1403726, .1404225,
 .1418585,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 70.22028,.2254351,.3210398, 70.04341, 70.14331,
 70.47412,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .4318272,.0007866,.1821454, .4309838, .4325408,
 .4319570,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0271655,.0006676,2.457337, .0275234, .0275778,
 .0263953,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1006.245,4.682580,.4653521, 1007.033, 1010.483,
 1001.218,Chk Fail,450.0000,-1.00000

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Ni,231.604 {445},Y1,ppm, 1.885622,.0042150,.2235339, 1.885694, 1.889801,
 1.881372,Chk Pass,,
 P,177.495 {490},Y1,ppm, .8968317,.0091930,1.025059, .8913020, .9074438, .8917493,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0282660,.0016112,5.700220, .0278178, .0300538,
 .0269262,Chk Pass,,
 S,182.034 {485},Y1,ppm, 25.86408,.1250219,.4833805, 25.85111, 25.99509, 25.74606,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0990384,.0003826,.3862705, .0987034, .0994552,
 .0989565,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .1027063,.0035346,3.441486, .1065963, .0996916,
 .1018310,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 9.879182,.0403259,.4081904, 9.832853, 9.906400,
 9.898293,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0971195,.0014830,1.526976, .0963358, .0988299,
 .0961928,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.671804,.0081476,.4873528, 1.667621, 1.666598,
 1.681194,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0148643,.0154599,104.0070, .0091775, .0323621,
 .0030532,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0199398,.0001753,.8790345, .0199949, .0200809,
 .0197436,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0507295,.0005136,1.012471, .0513156, .0503577,
 .0505153,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0208033,.0003465,1.665837, .0212033, .0206149,
 .0205918,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0591126,.0005504,.9311904, .0591589, .0596385, .0585405,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4408098,.0013404,.3040773, .4402595, .4423377,
 .4398321,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1056323,.0007144,.6762895, .1053275, .1064485,
 .1051209,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8158.177,12.15222,.1489575,8171.390,8147.480,8155.661,None,,
 Y2A,371.030 { 91}2,Cts/S,
 244780.9,682.7085,.2789060,245363.4,244949.7,244029.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18191.40,140.9200,.7746520,18314.52,18221.98,18037.70,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-B-2-A MSD
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:29:00
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0193930,.0005572,2.873251, .0194895, .0187939,
 .0198957,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .4383830,.0018046,.4116404, .4400329, .4386603,
 .4364559,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .3937226,.0069510,1.765458, .4016928, .3889174,
 .3905574,Chk Pass,,

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As,189.042 {478},Y1,ppm, .0740341,.0030115,4.067655, .0705909, .0753346,
 .0761767,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .7627933,.0033786,.4429249, .7666921, .7609652,
 .7607226,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .2117265,.0006503,.3071526, .2124083, .2116581,
 .2111130,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0098052,.0000644,.6562362, .0098722, .0097439,
 .0097997,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 229.9499,.9976318,.4338475, 229.6934, 231.0507,
 229.1055,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0099155,.0001156,1.165449, .0099871, .0097822,
 .0099772,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0100444,.0003003,2.989558, .0102952, .0097116,
 .0101263,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0322182,.0002986,.9267384, .0324112, .0318743,
 .0323691,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0459767,.0007107,1.545849, .0452713, .0466927,
 .0459661,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 4.528702,.0347148,.7665503, 4.550852, 4.546561,
 4.488693,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 41.15459,.2138324,.5195834, 41.06013, 41.39938,
 41.00425,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .1398183,.0008740,.6250739, .1388976, .1399208,
 .1406365,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 69.25023,.2607764,.3765711, 69.09028, 69.55115,
 69.10927,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .4313875,.0019587,.4540475, .4333996, .4312760,
 .4294869,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0256519,.0000854,.3328389, .0256279, .0255810,
 .0257467,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm,F 1000.352,3.115724,.3114628, 1000.363, 997.2307,
 1003.462,Chk Fail,450.0000,-1.00000
 Ni,231.604 {445},Y1,ppm, 1.874066,.0016668,.0889405, 1.874870, 1.872149,
 1.875178,Chk Pass,,
 P,177.495 {490},Y1,ppm, .8890851,.0045047,.5066626, .8887610, .8847512, .8937431,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0251470,.0008204,3.262371, .0242315, .0253940,
 .0258156,Chk Pass,,
 S,182.034 {485},Y1,ppm, 25.72669,.0474977,.1846241, 25.78154, 25.69980, 25.69875,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0982065,.0049950,5.086236, .0924485, .1007951,
 .1013758,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .1011451,.0050275,4.970564, .1069341, .0978748,
 .0986264,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 9.806286,.0577090,.5884900, 9.807548, 9.863353,
 9.747956,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0960932,.0011795,1.227477, .0951546, .0957078,
 .0974172,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.677955,.0165354,.9854511, 1.695744, 1.663053,
 1.675067,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0076476,.0157875,206.4361, .0025096, -.004931,
 .0253641,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0198724,.0001080,.5435364, .0199939, .0197874,
 .0198357,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0540571,.0021689,4.012182, .0516076, .0557334,
 .0548304,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0210878,.0004318,2.047703, .0215207, .0206571,
 .0210855,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0595440,.0017188,2.886597, .0602903, .0575782, .0607635,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .4369017,.0005234,.1198088, .4364586, .4374793,
 .4367673,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .1061770,.0012823,1.207685, .1064646, .1072910,

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.1047753,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8154.940,21.79505,.2672619,8164.060,8170.693,8130.066,None,
 Y2A,371.030 { 91}2,Cts/S,
 243504.1,694.5589,.2852350,242780.2,244165.0,243567.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18239.07,81.09133,.4446023,18327.91,18220.26,18169.04,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-C-2-A SD@5
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 Comment=UL
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:32:20
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0014269,.0005351,37.50370, .0013146, .0009569,
 .0020093,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0172520,.0035669,20.67500, .0157470, .0146844,
 .0213247,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0022531,.0180306,800.2659, .0228259, -.010803,
 -.005264,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0033416,.0034032,101.8451, .0062380, -.000407,
 .0041934,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1448086,.0009090,.6277213, .1438395, .1449439,
 .1456423,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0423848,.0001836,.4331525, .0422914, .0422666,
 .0425963,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000080,.0000176,22.11328, -.000082, -.000061,
 -.000096,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 46.47962,.1529000,.3289614, 46.31661, 46.61985,
 46.50240,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003552,.0000936,26.34245, .0004585, .0002762,
 .0003309,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.000052,.0000915,176.5631, .0000537, -.000110,
 -.000099,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0009203,.0002751,29.88844, .0008048, .0007218,
 .0012343,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0004779,.0001865,39.02086, .0003730, .0003675,
 .0006932,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .8945203,.0117039,1.308401, .8939041, .9065202,
 .8831367,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 7.272283,.0413876,.5691138, 7.224493, 7.295913,
 7.296442,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0084545,.0006158,7.283569, .0078106, .0090376,
 .0085152,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 14.14971,.0890864,.6295992, 14.08251, 14.25076,
 14.11585,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0856437,.0001391,.1624520, .0855100, .0856336,
 .0857876,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0023095,.0000628,2.719080, .0023817, .0022796,
 .0022673,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 220.4938,.8804842,.3993237, 219.5274, 221.2505,

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220.7036,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0001052,.0003999,380.0386, .0004897, .0001345,
 -.000309,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1311643,.0030858,2.352615, .1336349, .1277054, .1321525,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0009257,.0021924,236.8404, -.000925, .0003545,
 .0033471,Chk Pass,,
 S,182.034 {485},Y1,ppm, 4.739215,.0705578,1.488808, 4.786448, 4.773089, 4.658107,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0017181,.0027839,162.0324, .0019572, .0043746,
 -.001178,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0024084,.0030502,126.6524, .0058804, .0011846,
 .0001600,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.775159,.0212835,1.198965, 1.761377, 1.799672,
 1.764427,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0003880,.0005293,136.4229, .0000361, .0009967,
 .0001311,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3541102,.0010687,.3017890, .3548340, .3546138,
 .3528828,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0089695,.0125717,140.1610, -.003713, .0214274,
 .0091940,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0018452,.0000722,3.910651, .0018997, .0018726,
 .0017634,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000370,.0012633,341.7900, -.001580, .0009405,
 -.000469,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000337,.0001419,42.12759, -.000261, -.000500,
 -.000249,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0006226,.0003314,53.23012, .0004696, .0003954, .0010030,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0019876,.0001281,6.446620, .0018566, .0021127,
 .0019935,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000694,.0018490,266.3809, .0000399, -.002797,
 .0006752,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8774.758,86.97873,.9912379,8724.351,8724.730,8875.192,None,,
 Y2A,371.030 { 91}2,Cts/S,
 262214.9,455.9559,.1738863,262475.0,262481.4,261688.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18425.87,87.17027,.4730864,18526.45,18379.00,18372.16,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-C-4-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:35:46
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0015115,.0006189,40.94399, .0010463, .0012744,
 .0022139,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0130526,.0046985,35.99686, .0137894, .0173393,
 .0080293,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.015195,.0189116,124.4592, -.036746, -.001368,

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-.007471,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0144329,.0049559,34.33761, .0146382, .0093776,
 .0192831,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0637485,.0003700,.5804712, .0638619, .0633350,
 .0640485,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0162843,.0001090,.6693407, .0163249, .0161608,
 .0163671,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000079,.0000127,16.12413, -.000068, -.000093,
 -.000075,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 105.8976,.4987802,.4710025, 106.3305, 105.3522,
 106.0100,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0005243,.0000395,7.526065, .0005082, .0004955,
 .0005693,Chk Pass,,
 Co,228.616 {447},Y1,ppm,F -.006425,.0002048,3.188385, -.006208, -.006450,
 -.006615,Chk Fail,18.00000,-.005000
 Cr,267.716 {126},Y2A,ppm,F 46.80278,.3193529,.6823375, 46.89066, 46.44869,
 47.06900,Chk Fail,18.00000,-.015000
 Cu,327.396 {103},Y2A,ppm, .0025680,.0004447,17.31688, .0029799, .0026275,
 .0020965,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.016135,.0039008,24.17619, -.013884, -.020639,
 -.013881,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 8.197443,.0483332,.5896129, 8.253187, 8.171924,
 8.167217,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0080558,.0014417,17.89663, .0085660, .0064284,
 .0091731,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 56.97646,.1189003,.2086832, 57.07385, 56.84396,
 57.01156,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0015726,.0000191,1.212967, .0015669, .0015939,
 .0015570,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0062416,.0004305,6.897294, .0067331, .0060606,
 .0059312,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 41.22847,.1142609,.2771407, 41.29911, 41.28966,
 41.09665,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0003629,.0002047,56.40325, .0002144, .0005964,
 .0002779,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0437349,.0021675,4.955899, .0438091, .0415314, .0458644,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.001285,.0029211,227.3777, -.003520, .0020205,
 -.002355,Chk Pass,,
 S,182.034 {485},Y1,ppm, 59.61620,.1248748,.2094645, 59.72346, 59.64602, 59.47911,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm,F -.535660,.0084032,1.568760, -.536222, -.526990,
 -.543769,Chk Fail,18.00000,-.050000
 Se,196.090 {472},Y1,ppm, .0037533,.0012789,34.07350, .0050961, .0025497,
 .0036142,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 5.658641,.0328153,.5799145, 5.674859, 5.620874,
 5.680189,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.004026,.0002178,5.410782, -.004258, -.003826,
 -.003993,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3665716,.0024368,.6647612, .3669820, .3639556,
 .3687771,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.020263,.0121925,60.17027, -.032031, -.021073,
 -.007686,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0113047,.0000439,.3882834, .0113050, .0112607,
 .0113484,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0119808,.0016447,13.72820, .0119998, .0103267,
 .0136160,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001834,.0001719,9.368562, -.001639, -.001962,
 -.001903,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0007997,.0012783,159.8468, -.000644, .0012567, .0017866,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0004316,.0002760,63.95128, .0003412, .0002121,
 .0007415,Chk Pass,,

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Zr,339.198 { 99},Y2R,ppm, -.032853,.0016912,5.147566, -.030984, -.034277,
 -.033299,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8187.143,15.56181,.1900762,8190.787,8200.560,8170.083,None,,
 Y2A,371.030 { 91}2,Cts/S,
 268842.8,1645.798,.6121786,268353.9,270677.7,267496.8,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18715.18,173.1474,.9251709,18651.27,18911.20,18583.08,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-2907-J-4-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:39:17
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0006621,.0006600,99.68905, -.000010, .0013092,
 .0006872,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0116273,.0021330,18.34506, .0123026, .0092383,
 .0133409,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.014015,.0019238,13.72636, -.014463, -.015675,
 -.011907,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0114981,.0014857,12.92128, .0105692, .0132117,
 .0107135,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0514799,.0000656,.1274684, .0515557, .0514395,
 .0514447,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 1.278336,.0115590,.9042202, 1.288755, 1.280351,
 1.265902,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000090,.0000062,6.860052, -.000095, -.000083,
 -.000092,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 50.19206,.0772555,.1539197, 50.14938, 50.28124,
 50.14557,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002817,.0002476,87.88339, .0005485, .0000593,
 .0002373,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0002985,.0003044,101.9990, .0002446, .0000246,
 .0006263,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0048531,.0009107,18.76481, .0045377, .0058796,
 .0041421,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0005195,.0003792,72.98966, .0008402, .0006171,
 .0001010,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 14.42791,.0458243,.3176086, 14.41198, 14.39218,
 14.47958,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 18.04815,.0529587,.2934298, 17.99370, 18.09947,
 18.05129,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0198661,.0013693,6.892785, .0182948, .0204987,
 .0208048,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 23.19553,.0596043,.2569645, 23.13097, 23.20716,
 23.24846,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .6907947,.0045935,.6649646, .6956225, .6902833,
 .6864782,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0045045,.0004769,10.58629, .0042400, .0042185,
 .0050550,Chk Pass,,

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Na,589.592 { 57},Y2R,ppm, 28.63118,.0382843,.1337155, 28.58903, 28.64072,
 28.66380,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0000158,.0010001,6319.034, -.000422, .0011602,
 -.000691,Chk Pass,,
 P,177.495 {490},Y1,ppm, .3768038,.0024612,.6531759, .3764972, .3794039, .3745103,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0013149,.0030304,230.4663, .0043179, .0013691,
 -.001742,Chk Pass,,
 S,182.034 {485},Y1,ppm, .2044337,.0046270,2.263341, .2097748, .2018800, .2016463,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.000564,.0023080,409.3488, -.003213, .0005089,
 .0010126,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0046283,.0045862,99.08981, .0040594, .0094724,
 .0003531,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 3.704138,.0084008,.2267957, 3.695624, 3.704369,
 3.712420,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0018488,.0008897,48.12171, .0009186, .0026915,
 .0019362,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .6994006,.0060927,.8711282, .7064219, .6962726,
 .6955072,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0268951,.0096709,35.95777, .0251867, .0373063,
 .0181922,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0014800,.0002099,14.17922, .0013307, .0013892,
 .0017199,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.001224,.0018013,147.1497, -.002251, .0008558,
 -.002277,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001187,.0000675,5.689860, -.001160, -.001264,
 -.001137,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0001483,.0003050,205.6053, -.000184, .0002151, .0004144,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, -.003336,.0001923,5.765364, -.003513, -.003363,
 -.003132,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.003148,.0026189,83.20053, -.004623, -.000124,
 -.004696,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8874.622,21.57662,.2431272,8861.998,8899.536,8862.332,None,,
 Y2A,371.030 { 91}2,Cts/S,
 271778.2,1412.783,.5198295,270390.1,271730.1,273214.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18983.12,56.26541,.2963971,19045.36,18968.14,18935.86,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:42:49
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .5048,.0023,.4513, .5065, .5057, .5023,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, 24.35,.1321,.5426, 24.37, 24.47, 24.21,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 24.58,.1247,.5071, 24.44, 24.63, 24.68,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5114,.0037,.7273, .5083, .5155, .5105,Chk Pass,,

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B,249.773 {135},Y2A,ppm, .4933,.0018,.3673, .4932, .4951, .4915,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .5120,.0035,.6926, .5092, .5160, .5109,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .49694,.00322,.64862, .49678, .50024, .49380,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 25.38,.0352,.1389, 25.34, 25.38, 25.40,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .5033,.0008,.1568, .5024, .5040, .5034,Chk Pass,,
Co,228.616 {447},Y1,ppm, .4915,.0008,.1589, .4916, .4907, .4923,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .5009,.0026,.5241, .5001, .5039, .4989,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .5089,.0044,.8707, .5080, .5137, .5050,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 24.50,.0430,.1754, 24.45, 24.53, 24.51,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 25.11,.0260,.1037, 25.14, 25.10, 25.09,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .5112,.0022,.4228, .5117, .5089, .5132,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 24.53,.0040,.0164, 24.53, 24.53, 24.53,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .50084,.00443,.88551, .49965, .50575, .49712,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .4975,.0017,.3345, .4987, .4956, .4981,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 24.75,.0441,.1783, 24.71, 24.77, 24.79,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .4956,.0007,.1372, .4956, .4949, .4962,Chk Pass,,
P,177.495 {490},Y1,ppm, .5047,.0020,.3899, .5025, .5062, .5054,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .4849,.0028,.5826, .4881, .4835, .4830,Chk Pass,,
S,182.034 {485},Y1,ppm, 24.48,.0140,.0571, 24.46, 24.49, 24.48,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .4942,.0015,.2965, .4940, .4958, .4929,Chk Pass,,
Se,196.090 {472},Y1,ppm, .4965,.0026,.5186, .4955, .4946, .4995,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 25.255,.08719,.34523, 25.165, 25.260, 25.339,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .4916,.0017,.3389, .4932, .4899, .4917,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .5161,.0030,.5863, .5174, .5183, .5127,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .5150,.0097,1.889, .5242, .5160, .5048,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .5109,.0045,.8730, .5103, .5157, .5068,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .4922,.0020,.4162, .4935, .4933, .4898,Chk Pass,,
V,292.402 {115},Y2A,ppm, .5117,.0011,.2225, .5121, .5126, .5104,Chk Pass,,
W,207.911 {462},Y1,ppm, .5122,.0022,.4205, .5134, .5135, .5097,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5025,.0008,.1551, .5017, .5033, .5025,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, F .5565,.0064,1.150, .5497, .5571, .5625,Chk
Fail,.5000,10.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/s, 8880.3,25.767, .29016,8905.9,8880.6,8854.3

Y2A,371.030 { 91}2,Cts/s, 269690.,1397.6, .51822,270030.,268150.,270880.

Y2R,371.030 { 91}3,Cts/s, 18571.,77.860, .41927,18636.,18484.,18591.

[Sample Header]

Method=New TRACE Fast(v1493)

SampleName=CCB 078331

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/9/2020 15:46:03

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .0003,.0001,28.17, .0002, .0004, .0003,Chk Pass,,

Alum Ax,308.215 {109},Y2A,ppm, .0032,.0025,79.66, .0022, .0013, .0061,Chk Pass,,

Al,308.215 {109}2,Y2R,ppm, .0043,.0079,181.2, .0068, .0107, -.0045,Chk Pass,,

As,189.042 {478},Y1,ppm, .0046,.0018,40.00, .0067, .0040, .0032,Chk Pass,,

B,249.773 {135},Y2A,ppm, .0030,.0002,5.181, .0030, .0029, .0032,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .0002,.0000,2.326, .0002, .0002, .0002,Chk Pass,,

Be,313.042 {108},Y2A,ppm, -.00004, .00001,25.402, -.00005, -.00003, -.00005,Chk
Pass,,

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Ca,317.933 {106},Y2R,ppm, .0092,.0029,31.86, .0115, .0103, .0059,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0004,.0001,23.83, .0003, .0004, .0005,Chk Pass,,
Co,228.616 {447},Y1,ppm, -.0000,.0003,954.5, -.0000, -.0003, .0002,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0016,.0001,5.980, .0015, .0017, .0017,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0003,.0010,381.1, .0009, -.0012, -.0005,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, -.0006,.0015,259.3, -.0007, .0010, -.0020,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .0303,.0274,90.43, .0270, .0592, .0047,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.0016,.0020,127.5, .0005, -.0034, -.0018,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, .0037,.0023,61.47, .0063, .0031, .0019,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00010,.00006,54.960, .00016, .00007, .00007,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0026,.0002,6.273, .0027, .0025, .0024,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .1320,.0211,15.99, .1562, .1173, .1225,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0000,.0005,1330., .0003, .0003, -.0005,Chk Pass,,
P,177.495 {490},Y1,ppm, -.0000,.0008,5032., -.0007, .0009, -.0002,Chk Pass,,
Pb,220.353 {453},Y1,ppm, -.0017,.0031,181.3, -.0020, .0015, -.0046,Chk Pass,,
S,182.034 {485},Y1,ppm, .0057,.0007,12.90, .0065, .0051, .0056,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0024,.0032,134.7, .0002, .0009, .0060,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0028,.0032,114.6, -.0004, .0059, .0027,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .00159,.00386,242.72, .00465, .00286, -.00274,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0011,.0001,5.719, .0011, .0010, .0011,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0001,.0000,11.53, .0001, .0001, .0001,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0087,.0127,146.3, .0011, .0233, .0016,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0001,.0002,145.6, .0002, .0002, -.0001,Chk Pass,,
Tl,190.856 {477},Y1,ppm, -.0018,.0021,119.5, -.0004, -.0007, -.0043,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.0011,.0004,34.26, -.0012, -.0007, -.0014,Chk Pass,,
W,207.911 {462},Y1,ppm, .0017,.0012,67.00, .0030, .0007, .0016,Chk Pass,,
Zn,213.856 {458},Y1,ppm, -.0001,.0001,163.6, .0001, -.0001, -.0002,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0009,.0009,107.0, .0010, -.0001, .0017,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 9066.9,6.1498,.06783,9065.6,9073.6,9061.5
Y2A,371.030 { 91}2,Cts/S, 276850.,1998.8,.72199,278400.,277560.,274590.
Y2R,371.030 { 91}3,Cts/S, 18895.,112.00,.59273,18830.,18830.,19024.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-2901-F-1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 15:49:23
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0007493,.0003402,45.39873, .0011194, .0006780,
.0004504,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, .0136198,.0008812,6.470211, .0126501, .0143718,
.0138374,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, .0025195,.0418087,1659.430, -.012535, .0497707,
-.029677,Chk Pass,,
As,189.042 {478},Y1,ppm, .0067308,.0019325,28.71082, .0045266, .0081338,
.0075321,Chk Pass,,
B,249.773 {135},Y2A,ppm, .1309287,.0005453,.4164835, .1311420, .1303090,
.1313351,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0056955,.0000253,.4447806, .0057160, .0057033,
.0056672,Chk Pass,,

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Be, 313.042 {108}, Y2A, ppm, -.000061, .0000107, 17.55151, -.000056, -.000053,
 -.000073, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 8.758080, .0169996, .1941023, 8.746590, 8.777608,
 8.750042, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0004829, .0000923, 19.11338, .0003765, .0005311,
 .0005411, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0002380, .0004418, 185.6114, -.000225, .0002840,
 .0006550, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0014674, .0002707, 18.44984, .0011801, .0015044,
 .0017177, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0010877, .0003880, 35.66876, .0014692, .0011003,
 .0006936, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, 1.231932, .0140402, 1.139688, 1.244025, 1.235237,
 1.216534, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, 1.600708, .0268356, 1.676486, 1.589504, 1.631330,
 1.581289, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, .0009419, .0007273, 77.21935, .0012763, .0001075,
 .0014417, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 2.456917, .0150842, .6139495, 2.460600, 2.469818,
 2.440332, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0322532, .0002287, .7090866, .0322052, .0325021,
 .0320523, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0004492, .0004565, 101.6155, .0009000, .0004602,
 -.000013, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, 10.68041, .0079007, .0739734, 10.68657, 10.68316,
 10.67151, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0013077, .0001551, 11.86115, .0011311, .0013705,
 .0014216, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .0036823, .0036412, 98.88381, .0072269, -.000048, .0038685, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, -.001562, .0010423, 66.74803, -.001298, -.002710,
 -.000677, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 1.435820, .0104839, .7301673, 1.447617, 1.432270, 1.427571, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0017684, .0004488, 25.37695, .0019845, .0020682,
 .0012525, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, -.000293, .0029864, 1018.501, -.003550, .0023176,
 .0003524, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 4.429967, .0188600, .4257358, 4.451333, 4.422931,
 4.415636, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .0004713, .0008827, 187.2799, -.000418, .0004839,
 .0013477, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .0455775, .0002876, .6309117, .0456221, .0458401,
 .0452702, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .0056774, .0066705, 117.4917, -.001275, .0062827,
 .0120246, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0009771, .0001101, 11.27168, .0008851, .0009470,
 .0010991, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, -.001170, .0009385, 80.24925, -.000092, -.001608,
 -.001809, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, -.000955, .0003972, 41.57808, -.000813, -.000649,
 -.001404, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0003779, .0001824, 48.27654, .0003649, .0002023, .0005665, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0055108, .0001624, 2.946313, .0053312, .0056472,
 .0055540, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, -.001544, .0009131, 59.12093, -.002281, -.000523,
 -.001830, Chk Pass,,

[Internal standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 9171.272, 21.37836, .2331013, 9187.605, 9179.136, 9147.076, None, ,
 Y2A, 371.030 { 91}2, Cts/S,

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278531.8,1004.709,.3607160,279356.9,277413.0,278825.4,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19107.84,215.7587,1.129163,19346.09,18925.64,19051.79,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-2901-P-6-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:52:39
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0011257	.0002620	23.27598	.0010179	.0014244	.0009347	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.0117498	.0017582	14.96387	.0134766	.0099617	.0118111	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	.0052856	.0165250	312.6417	.0042898	-.010719	.0222861	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0057071	.0019642	34.41768	.0040992	.0078964	.0051256	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0033014	.0000631	1.910875	.0032864	.0032471	.0033706	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	.0003856	.0000230	5.954717	.0003977	.0004000	.0003591	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	-.000039	.0000222	57.10713	-.000025	-.000027	-.000065	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	.1362660	.0302925	22.23040	.1079056	.1681775	.1327147	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0004646	.0001203	25.88373	.0003718	.0006005	.0004215	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	-.000230	.0000300	13.04992	-.000253	-.000196	-.000241	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0019915	.0005824	29.24242	.0022941	.0013201	.0023602	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	-.000530	.0002226	41.98980	-.000373	-.000785	-.000432	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	-.001314	.0070835	538.8882	-.003254	.0065367	-.007226	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm	.0232631	.0458386	197.0443	-.023100	.0243302	.0685588	Chk Pass,,		
Li	670.784	{ 50}	Y2R,ppm	-.000418	.0010027	239.9738	-.001570	.0000577	.0002586	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	.0306336	.0131018	42.76921	.0180314	.0441834	.0296861	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0002311	.0000937	40.53975	.0002705	.0001241	.0002986	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0001200	.0001826	152.2299	.0001518	.0002847	-.000076	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	.5910563	.0995463	16.84210	.4910924	.6901796	.5918968	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0005118	.0002136	41.73146	.0002694	.0005934	.0006725	Chk Pass,,		
P	177.495	{490}	Y1,ppm	-.002375	.0031664	133.3137	.0012667	-.004477	-.003915	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	-.001309	.0019538	149.2498	-.001975	-.002843				

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.0008906,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0083455,.0050814,60.88752, .0089540, .0029872, .0130952,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0013828,.0009729,70.35594, .0006934, .0024956,
 .0009593,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0005755,.0032485,564.5113, .0037183, -.002769,
 .0007773,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .2624347,.0114762,4.372970, .2528751, .2751620,
 .2592670,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0004811,.0002204,45.80935, .0006934, .0002535,
 .0004963,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0004684,.0000480,10.24691, .0005238, .0004422,
 .0004393,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0006658,.0120104,1803.781, -.010514, -.000850,
 .0133624,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0001259,.0000582,46.23351, .0001801, .0000644,
 .0001330,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0000124,.0034426,27717.87, .0031382, .0005764,
 -.003677,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000961,.0002798,29.09972, -.001093, -.000640,
 -.001151,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000056,.0007408,1332.556, -.000910, .0003392, .0004042,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, -.000234,.0000777,33.16264, -.000318, -.000221,
 -.000164,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000738,.0007723,104.6708, -.001503, -.000752,
 .0000412,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 9193.350,6.049444,.0658024,9200.325,9190.190,9189.534,None,,
 Y2A,371.030 { 91}2,Cts/S,
 281292.5,1013.992,.3604759,281235.8,282333.8,280308.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18903.46,100.8149,.5333143,18885.29,18812.97,19012.13,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-2901-P-4-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:55:58
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0003771,.0001757,46.57805, .0005443, .0003929,
 .0001941,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0121549,.0038668,31.81310, .0082449, .0122426,
 .0159771,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.019400,.0160092,82.52024, -.037260, -.006339,
 -.014602,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0100059,.0026847,26.83108, .0074119, .0098327,
 .0127729,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1713541,.0018561,1.083199, .1702215, .1703446,
 .1734961,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0382512,.0001847,.4829332, .0382650, .0380599,

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.0384286,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000096,.0000105,10.99522, -.000093, -.000087,
 -.000107,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 71.13892,.3531826,.4964689, 71.53696, 70.86301,
 71.01678,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004552,.0001288,28.28182, .0005730, .0004750,
 .0003178,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0001334,.0003290,246.6704, .0004241, -.000224,
 .0001998,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0014885,.0005093,34.21707, .0010013, .0014468,
 .0020174,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0022703,.0002159,9.508713, .0022228, .0025060,
 .0020821,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.003400,.0059254,174.3001, -.000600, .0006075,
 -.010206,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 4.852114,.0375317,.7735130, 4.885325, 4.811396,
 4.859620,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0186912,.0011746,6.284009, .0188253, .0174553,
 .0197929,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 12.94835,.0752228,.5809449, 13.03463, 12.91387,
 12.89654,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0201104,.0001268,.6303976, .0200501, .0200250,
 .0202560,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0007788,.0005412,69.48480, .0003620, .0005840,
 .0013904,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 20.88572,.0426029,.2039810, 20.90273, 20.83724,
 20.91719,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0009030,.0001298,14.37191, .0010415, .0008833,
 .0007842,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0227538,.0031284,13.74878, .0202013, .0218163, .0262437,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0002608,.0013775,528.2236, -.001214, .0004831,
 .0015136,Chk Pass,,
 S,182.034 {485},Y1,ppm, 4.723463,.0031543,.0667792, 4.722560, 4.720858, 4.726970,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0013054,.0053541,410.1686, .0068299, -.003860,
 .0009464,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0027624,.0020772,75.19454, .0005308, .0031168,
 .0046396,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 16.77462,.0441254,.2630484, 16.81966, 16.77273,
 16.73147,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0014862,.0002321,15.61535, .0014560, .0017319,
 .0012707,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3466993,.0016131,.4652813, .3458152, .3457214,
 .3485611,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0174416,.0090755,52.03372, .0279201, .0120758,
 .0123290,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0013498,.0000840,6.221967, .0012528, .0013999,
 .0013966,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.003449,.0015995,46.38048, -.005291, -.002413,
 -.002642,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0427205,.0005027,1.176685, .0421486, .0430924,
 .0429205,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000248,.0005358,216.0226, .0003686, -.000513, -.000600,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0395419,.0001915,.4844105, .0397494, .0395044,
 .0393719,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.002383,.0004356,18.28068, -.002300, -.002854,
 -.001994,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8965.556,21.92602,.2445584,8940.739,8982.305,8973.624,None,,

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Y2A,371.030 { 91}2,Cts/S,
 272709.5,2672.698,.9800531,273672.9,274766.9,269688.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19041.82,113.6640,.5969181,18911.68,19121.63,19092.14,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3266-B-5-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 15:59:24
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0020308	.0002647	13.03347	.0022295	.0017303	.0021326	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.6489698	.0114155	1.759015	.6569894	.6540196	.6359003	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	.6295872	.0015134	.2403865	.6280224	.6296956	.6310435	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0071216	.0035880	50.38182	.0065312	.0109682	.0038654	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.1457042	.0014314	.9824236	.1469542	.1460156	.1441426	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	.1239468	.0021188	1.709415	.1254705	.1248425	.1215272	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	.0012086	.0000172	1.425929	.0012142	.0012223	.0011893	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	315.3268	2.635307	.8357383	313.7620	318.3694	313.8491	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0012087	.0001418	11.73504	.0013529	.0012038	.0010693	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0224778	.0001233	.5483827	.0226039	.0223576	.0224717	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0030476	.0001388	4.554496	.0032078	.0029723	.0029628	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0132885	.0000680	.5114639	.0133350	.0132105	.0133200	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0043969	.0030188	68.65760	.0078788	.0027973	.0025144	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm	5.877899	.0611745	1.040754	5.823585	5.944169	5.865943	Chk Pass,,		
Li	670.784	{ 50}	Y2R,ppm	.0078176	.0008463	10.82538	.0085032	.0068717	.0080778	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	29.76966	.2447700	.8222129	29.49124	29.95097	29.86678	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	3.254638	.0525463	1.614504	3.295017	3.273670	3.195228	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	-.000602	.0001357	22.54563	-.000691	-.000669	-.000446	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	218.7350	.3909300	.1787231	218.9704	218.9508	218.2837	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0493890	.0006487	1.313413	.0499295	.0495678	.0486696	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0380107	.0025577	6.728912	.0350573	.0394854	.0394893	Chk Pass,,		

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Pb,220.353 {453},Y1,ppm, .0033213,.0056479,170.0488, .0048721, -.002940,
.0080319,Chk Pass,,
S,182.034 {485},Y1,ppm, 36.49927,.4548270,1.246126, 36.76320, 36.76053, 35.97409,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0046344,.0021198,45.74098, .0027786, .0041801,
.0069446,Chk Pass,,
Se,196.090 {472},Y1,ppm, -.001152,.0043690,379.1606, .0029241, -.000617,
-.005764,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 3.972547,.0142160,.3578548, 3.957990, 3.973254,
3.986396,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0006790,.0007577,111.5885, -.000065, .0006529,
.0014494,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, 1.258346,.0101093,.8033759, 1.268991, 1.257172,
1.248875,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0005361,.0167736,3128.518, -.016831, .0017942,
.0166453,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, -.003300,.0000895,2.710862, -.003275, -.003400,
-.003226,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0014288,.0029878,209.1053, .0048470, .0001247,
-.000685,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.001477,.0001387,9.389327, -.001581, -.001532,
-.001320,Chk Pass,,
W,207.911 {462},Y1,ppm, .0005965,.0001052,17.63966, .0007062, .0004964, .0005869,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .2079111,.0017109,.8228821, .2091749, .2085941,
.2059642,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.000526,.0018274,347.6354, .0013813, -.000697,
-.002262,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 8837.485,60.53648,.6849967,8811.718,8794.095,8906.642, None, ,
Y2A,371.030 { 91}2,Cts/S,
270313.4,3207.580,1.186615,267485.7,269655.6,273798.9, None, ,
Y2R,371.030 { 91}3,Cts/S,
19329.59,169.0804,.8747233,19524.26,19245.16,19219.36, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3262-T-2-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 16:03:01
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0006289,.0004517,71.82221, .0010490, .0006868,
.0001511,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, .0141636,.0027473,19.39658, .0128689, .0123029,
.0173190,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, .0009045,.0036139,399.5542, -.002549, .0006019,
.0046601,Chk Pass,,
As,189.042 {478},Y1,ppm, .0094111,.0011145,11.84233, .0081276, .0101330,
.0099728,Chk Pass,,
B,249.773 {135},Y2A,ppm, .1916277,.0012072,.6299882, .1930014, .1907360,
.1911455,Chk Pass,,

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Ba,455.403 { 74},Y2A,ppm, .3693396,.0023214,.6285257, .3672236, .3689727,
 .3718226,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000111,.0000114,10.32947, -.000110, -.000100,
 -.000123,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 75.99713,.5789277,.7617757, 75.87040, 75.49207,
 76.62892,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002498,.0002587,103.5640, -.000036, .0003190,
 .0004668,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0000293,.0003141,1070.242, .0001153, -.000319,
 .0002915,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0015264,.0000912,5.978249, .0014936, .0016296,
 .0014561,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0011469,.0005572,48.58171, .0011183, .0006045,
 .0017178,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 4.709362,.0080768,.1715052, 4.705649, 4.718628,
 4.703810,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 70.69493,.6287469,.8893805, 70.60446, 70.11632,
 71.36401,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0339816,.0002461,.7243307, .0337049, .0341760,
 .0340640,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 9.705185,.0585843,.6036392, 9.723067, 9.639744,
 9.752745,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .2892478,.0002903,.1003573, .2889129, .2894024,
 .2894280,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0387259,.0001135,.2931473, .0388567, .0386682,
 .0386528,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 93.11369,.2010117,.2158777, 92.93845, 93.06949,
 93.33312,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0017450,.0002981,17.08364, .0017925, .0020164,
 .0014259,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1327136,.0029683,2.236580, .1294367, .1352220, .1334821,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0001640,.0025023,1526.165, -.001822, -.000661,
 .0029745,Chk Pass,,
 S,182.034 {485},Y1,ppm, 2.000620,.0074032,.3700450, 2.009148, 1.996869, 1.995844,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0026846,.0008100,30.17086, .0021173, .0023244,
 .0036123,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.000724,.0030697,423.7252, -.003941, .0021737,
 -.000406,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.471097,.0291987,1.181611, 2.473206, 2.440901,
 2.499184,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0009274,.0013333,143.7659, .0023550, -.000286,
 .0007128,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.087424,.0047884,.4403462, 1.091856, 1.088070,
 1.082345,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0117208,.0140763,120.0973, .0272159, .0082239,
 -.000278,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0013112,.0000486,3.705640, .0012808, .0013673,
 .0012856,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0020362,.0030303,148.8222, -.000754, .0016027,
 .0052598,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001198,.0004680,39.06880, -.000747, -.001165,
 -.001681,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0049209,.0011696,23.76746, .0036505, .0051592, .0059529,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0024367,.0001216,4.990420, .0024576, .0023060,
 .0025465,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001522,.0024170,158.8463, -.003871, .0009576,
 -.001651,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

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Y1,224.306 {450},Cts/S, 8924.249,28.02013,.3139775,8956.238,8904.052,8912.456,None,,
 Y2A,371.030 { 91}2,Cts/S,
 269520.9,884.9537,.3283432,270499.7,269285.8,268777.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19271.81,153.2662,.7952870,19382.67,19335.85,19096.91,None,,

[Sample Header]

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 SampleName=410-3310-F-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:06:31
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0003808	.0001424	37.40061	.0002448	.0003689	.0005289	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.0760865	.0016491	2.167415	.0742866	.0775248	.0764482	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	.0540986	.0157516	29.11640	.0400992	.0711544	.0510423	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0056687	.0013701	24.17034	.0055566	.0043580	.0070914	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.2231929	.0023218	1.040288	.2214712	.2258336	.2222740	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	.0013642	.0000264	1.933470	.0013777	.0013811	.0013338	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	-.000078	.0000034	4.388042	-.000081	-.000079	-.000075	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	5.998812	.0294211	.4904493	5.984887	5.978938	6.032610	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0003089	.0001083	35.05711	.0002266	.0004316	.0002686	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0000777	.0001951	251.0973	.0000193	-.000082	.0002952	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0017974	.0003876	21.56301	.0021286	.0013712	.0018925	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0052919	.0004325	8.172072	.0050111	.0050747	.0057899	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.1028327	.0037938	3.689296	.1062748	.1034584	.0987650	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm	15.12730	.0226856	.1499645	15.12959	15.10355	15.14875	Chk Pass,,		
Li	670.784	{ 50}	Y2R,ppm	.0025045	.0012398	49.50422	.0038502	.0022546	.0014086	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	9.625201	.0545180	.5664084	9.650067	9.562684	9.662853	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0051103	.0000930	1.820497	.0051366	.0051874	.0050070	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0183197	.0006287	3.431547	.0190021	.0177642	.0181927	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	113.0611	.2583566	.2285106	112.9292	112.8953	113.3588	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0001921	.0002962	154.2053	-.000137	.0004381	.0002749	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.1088418	.0015963	1.466634	.1105400	.1073720	.1086135	Chk		

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Pass,,
 Pb,220.353 {453},Y1,ppm, -.000514,.0031338,609.6527, -.000665, -.003570,
 .0026926,Chk Pass,,
 S,182.034 {485},Y1,ppm, 10.79911,.0240262,.2224829, 10.82109, 10.80278, 10.77346,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0004113,.0018161,441.5957, .0025074, -.000582,
 -.000692,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0012975,.0007623,58.75379, .0018892, .0015660,
 .0004372,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .5010874,.0032912,.6568181, .5047750, .4984477,
 .5000394,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0017439,.0009021,51.72842, .0010013, .0014825,
 .0027478,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0686362,.0006176,.8998773, .0681819, .0693395,
 .0683873,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0061997,.0095715,154.3882, -.001830, .0036374,
 .0167915,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0319093,.0001124,.3523476, .0318580, .0320382,
 .0318317,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000805,.0022316,277.1878, -.001050, .0015386,
 -.002904,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0039204,.0001860,4.744548, .0041185, .0037495,
 .0038933,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0017651,.0001816,10.28617, .0015783, .0017759, .0019410,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0010615,.0000886,8.344545, .0011565, .0010467,
 .0009812,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000743,.0015865,213.4578, -.002560, .0003689,
 -.000039,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8988.909,13.19681,.1468122,8999.191,8993.508,8974.028,None,,
 Y2A,371.030 { 91}2,Cts/S,
 270736.7,2212.309,.8171442,271751.0,268199.1,272260.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18695.38,15.90211,.0850590,18691.06,18682.08,18712.99,None,,

[Sample Header]

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 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:09:44
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0006819,.0000624,9.155064, .0006117, .0007310,
 .0007032,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0151051,.0022632,14.98282, .0132317, .0144639,
 .0176197,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0059853,.0229060,382.7074, -.012264, -.001471,
 .0316904,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0068481,.0011343,16.56376, .0065150, .0059177,
 .0081117,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1263749,.0016194,1.281382, .1245514, .1276450,

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.1269284,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, 1.036863,.0035779,.3450659, 1.032927, 1.039919,
1.037742,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.000114,.0000020,1.764190, -.000113, -.000113,
-.000117,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 137.1315,2.597207,1.893954, 139.5133, 134.3624,
137.5187,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0002340,.0002621,112.0341, -.000069, .0003817,
.0003889,Chk Pass,,
Co,228.616 {447},Y1,ppm, -.000071,.0001797,254.7101, -.000079, -.000246,
.0001134,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0016647,.0003449,20.71643, .0017656, .0012806,
.0019478,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0020926,.0005895,28.17222, .0026055, .0014485,
.0022238,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 5.218127,.1153694,2.210935, 5.312480, 5.089506,
5.252395,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 19.67095,.3243430,1.648842, 19.98722, 19.33910,
19.68654,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .1137518,.0025975,2.283505, .1159067, .1108676,
.1144812,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 11.72034,.1892315,1.614557, 11.89408, 11.51871,
11.74823,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .3155511,.0018411,.5834715, .3136226, .3157404,
.3172903,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0138955,.0005193,3.737042, .0144838, .0137020,
.0135008,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 117.6119,2.513068,2.136747, 119.5440, 114.7708,
118.5208,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0009686,.0001169,12.06979, .0009839, .0008448,
.0010772,Chk Pass,,
P,177.495 {490},Y1,ppm, .0218388,.0044971,20.59236, .0168913, .0229467, .0256785,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0016800,.0015909,94.69348, .0002684, .0013677,
.0034038,Chk Pass,,
S,182.034 {485},Y1,ppm, .3722641,.0018962,.5093632, .3703045, .3723981, .3740898,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0036254,.0027905,76.97053, .0022126, .0068397,
.0018238,Chk Pass,,
Se,196.090 {472},Y1,ppm, -.000249,.0031320,1257.441, -.001596, .0033310,
-.002483,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 1.047964,.0163187,1.557179, 1.066728, 1.037090,
1.040073,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0016563,.0010192,61.53384, .0027927, .0013532,
.0008230,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, 1.600973,.0057165,.3570615, 1.607574, 1.597623,
1.597722,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0099462,.0111024,111.6238, .0043048, .0227366,
.0027973,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0002828,.0001351,47.78542, .0004038, .0001370,
.0003075,Chk Pass,,
Tl,190.856 {477},Y1,ppm, -.002560,.0025936,101.3226, -.005541, -.001317,
-.000821,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.001172,.0003231,27.56670, -.001163, -.001499,
-.000853,Chk Pass,,
W,207.911 {462},Y1,ppm, .0061763,.0007596,12.29833, .0067123, .0053071, .0065096,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .0026247,.0002036,7.757872, .0028290, .0026235,
.0024217,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.002041,.0013247,64.90683, -.000518, -.002929,
-.002675,Chk Pass,,

[Internal Standards]

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Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8762.531,65.02506,.7420808,8744.720,8834.606,8708.268,None,
 Y2A,371.030 { 91}2,Cts/S,
 269547.8,1366.619,.5070041,271021.1,269300.8,268321.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19291.70,233.1343,1.208470,19100.27,19551.33,19223.49,None,,

[Sample Header]

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 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:13:17
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007223,.0001644,22.75779, .0008417, .0007904,
 .0005348,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0331362,.0006804,2.053208, .0338451, .0324885,
 .0330751,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0269866,.0052981,19.63232, .0330878, .0235476,
 .0243242,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0086560,.0022251,25.70564, .0065517, .0109849,
 .0084314,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1367730,.0021058,1.539616, .1374593, .1384500,
 .1344097,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 1.033664,.0089762,.8683892, 1.040762, 1.036656,
 1.023574,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000146,.0000103,7.022014, -.000156, -.000147,
 -.000135,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 157.1432,.6787856,.4319534, 157.8407, 157.1043,
 156.4848,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001238,.0002806,226.5776, .0003501, .0002115,
 -.000190,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0004278,.0002726,63.71125, .0002924, .0002494,
 .0007415,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0017032,.0001082,6.352115, .0017022, .0018118,
 .0015955,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0013493,.0005925,43.91348, .0015047, .0018486,
 .0006945,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 21.01163,.0987782,.4701121, 21.09595, 21.03598,
 20.90295,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 79.51365,.3577752,.4499545, 79.81747, 79.60417,
 79.11930,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0543568,.0015494,2.850477, .0538101, .0531548,
 .0561055,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 18.02795,.1479075,.8204339, 18.15054, 18.06965,
 17.86368,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .6218000,.0050221,.8076698, .6255193, .6237935,
 .6160873,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0100513,.0004754,4.730241, .0097528, .0098016,
 .0105996,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 138.9060,.2848203,.2050453, 139.0207, 138.5817,
 139.1156,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0013986,.0002592,18.53421, .0011260, .0014278,
 .0016419,Chk Pass,,

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P,177.495 {490},Y1,ppm, .0621696,.0026549,4.270397, .0626383, .0593116, .0645589,Chk Pass,,
Pb,220.353 {453},Y1,ppm, -.000091,.0024005,2626.422, .0019661, .0004883, -.002729,Chk Pass,,
S,182.034 {485},Y1,ppm, 1.241722,.0037444,.3015472, 1.242529, 1.244997, 1.237640,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0032464,.0033257,102.4415, .0018948, .0070351, .0008094,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0000032,.0018363,56526.59, .0016388, -.001983, .0003541,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 2.733616,.0173467,.6345703, 2.752301, 2.718023, 2.730524,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0021023,.0009960,47.37495, .0025668, .0027813, .0009590,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, 2.189895,.0100009,.4566834, 2.197158, 2.194039, 2.178488,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0213178,.0146553,68.74646, .0100386, .0160322, .0378827,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0005105,.0002862,56.07344, .0008235, .0002621, .0004458,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0006530,.0034521,528.6129, .0026090, -.003333, .0026829,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.001348,.0004063,30.13519, -.000953, -.001765, -.001327,Chk Pass,,
W,207.911 {462},Y1,ppm, .0033663,.0008006,23.78359, .0039270, .0037225, .0024494,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0039395,.0001796,4.559292, .0041469, .0038347, .0038369,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.000119,.0018193,1524.118, .0019797, -.001243, -.001095,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 8710.309,15.93055,.1828931,8704.711,8728.283,8697.934,None,,
Y2A,371.030 { 91}2,Cts/S,
264226.9,1429.384,.5409683,263811.0,263051.6,265818.1,None,,
Y2R,371.030 { 91}3,Cts/S,
18891.66,59.78651,.3164704,18822.66,18924.34,18927.99,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3310-G-3-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 16:16:48
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0006838,.0005355,78.30208, .0009484, .0010355, .0000676,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, .0348999,.0023408,6.707263, .0375993, .0336684, .0334318,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, .0510121,.0307757,60.33008, .0634506, .0736217, .0159640,Chk Pass,,
As,189.042 {478},Y1,ppm, .0069340,.0027009,38.95111, .0079203, .0038786, .0090031,Chk Pass,,

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B, 249.773 {135}, Y2A, ppm, .0204865, .0005682, 2.773642, .0210868, .0199569,
 .0204159, Chk Pass,,
 Ba, 455.403 { 74}, Y2A, ppm, .0070755, .0000337, .4764672, .0071142, .0070524,
 .0070599, Chk Pass,,
 Be, 313.042 {108}, Y2A, ppm, -.000063, .0000036, 5.706587, -.000059, -.000063,
 -.000066, Chk Pass,,
 Ca, 317.933 {106}, Y2R, ppm, 3.487223, .0163164, .4678909, 3.499740, 3.493160,
 3.468770, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .0003359, .0001260, 37.52025, .0003103, .0002246,
 .0004727, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .0000456, .0004198, 920.6011, -.000143, .0005267,
 -.000247, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .0018364, .0003445, 18.75774, .0016347, .0022341,
 .0016403, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .0140782, .0002246, 1.595138, .0139312, .0143367,
 .0139666, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, .0228956, .0058054, 25.35592, .0162212, .0256925,
 .0267730, Chk Pass,,
 K, 766.490 { 44}, Y2R, ppm, 1.581488, .0480397, 3.037626, 1.606261, 1.612083,
 1.526118, Chk Pass,,
 Li, 670.784 { 50}, Y2R, ppm, -.000043, .0033803, 7935.156, -.002847, .0037108,
 -.000992, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, .8697158, .0065131, .7488829, .8720469, .8747427,
 .8623579, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .0129296, .0000383, .2958879, .0129241, .0128944,
 .0129703, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .0027156, .0001382, 5.089131, .0026337, .0028751,
 .0026378, Chk Pass,,
 Na, 589.592 { 57}, Y2R, ppm, 6.958957, .0561440, .8067875, 6.992312, 6.990423,
 6.894137, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .0005317, .0001067, 20.05983, .0004529, .0004891,
 .0006531, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .0599902, .0016075, 2.679567, .0608545, .0609806, .0581355, Chk
 Pass,,
 Pb, 220.353 {453}, Y1, ppm, .0017874, .0023984, 134.1859, .0038730, -.000833,
 .0023224, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 1.583710, .0023915, .1510037, 1.583395, 1.586243, 1.581491, Chk
 Pass,,
 Sb, 206.833 {463}, Y1, ppm, .0009551, .0017549, 183.7289, .0023585, .0015194,
 -.001012, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .0018047, .0025338, 140.4035, .0002551, .0047288,
 .0004302, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, .1451041, .0019978, 1.376803, .1469536, .1429853,
 .1453734, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .0010763, .0007280, 67.63511, .0012090, .0002912,
 .0017289, Chk Pass,,
 Sr, 421.552 { 80}, Y2A, ppm, .0241730, .0001374, .5685770, .0243044, .0240302,
 .0241845, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .0134824, .0086835, 64.40643, .0198005, .0170661,
 .0035806, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .0035996, .0002934, 8.150376, .0038294, .0032692,
 .0037003, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, -.001201, .0029927, 249.2467, -.004485, -.000490,
 .0013730, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .0012147, .0004388, 36.12503, .0013559, .0015654,
 .0007226, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .0004373, .0004175, 95.47710, .0008993, .0003257, .0000869, Chk
 Pass,,
 Zn, 213.856 {458}, Y1, ppm, .0184175, .0001139, .6181584, .0183116, .0184030,
 .0185379, Chk Pass,,
 Zr, 339.198 { 99}, Y2R, ppm, -.002371, .0015133, 63.82489, -.004099, -.001730,
 -.001284, Chk Pass,,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 9146.955,31.53362,.3447445,9181.901,9138.337,9120.626,None,,
 Y2A,371.030 { 91}2,Cts/S,
 281564.0,1359.990,.4830128,280013.3,282124.3,282554.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18816.58,85.83333,.4561579,18864.58,18717.49,18867.67,None,,

[Sample Header]

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 SampleName=410-3310-H-1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:20:04
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007769,.0002659,34.22579, .0007095, .0010701,
 .0005513,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0783730,.0027003,3.445515, .0752909, .0803230,
 .0795052,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0512291,.0179009,34.94277, .0316309, .0553384,
 .0667181,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0062914,.0012333,19.60226, .0052475, .0059745,
 .0076522,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .2477578,.0010517,.4244817, .2468182, .2475614,
 .2488939,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0012752,.0000163,1.276563, .0012576, .0012896,
 .0012785,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000096,.0000231,24.01420, -.000094, -.000074,
 -.000120,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 5.581817,.0166511,.2983102, 5.572698, 5.601036,
 5.571718,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0001519,.0002217,145.9670, .0001193, -.000052,
 .0003881,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0001714,.0003582,208.9446, -.000222, .0002582,
 .0004783,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0016842,.0003226,19.15292, .0019818, .0013414,
 .0017293,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0058347,.0007878,13.50159, .0050821, .0057685,
 .0066535,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .1042605,.0067893,6.511872, .1117014, .1026780,
 .0984023,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 15.55824,.0511512,.3287725, 15.55194, 15.61225,
 15.51053,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0018136,.0007815,43.09105, .0009809, .0019289,
 .0025311,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 9.156389,.0434992,.4750692, 9.167142, 9.193503,
 9.108522,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0052277,.0000533,1.020364, .0052263, .0052817,
 .0051750,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0223084,.0004448,1.993850, .0219669, .0228114,
 .0221470,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 104.4115,.2535474,.2428347, 104.5157, 104.5963,
 104.1225,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0008166,.0004696,57.50702, .0004607, .0013488,

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.0006402,Chk Pass,,
P,177.495 {490},Y1,ppm, .1137084,.0004998,.4395299, .1142763, .1133358, .1135130,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, -.001447,.0028031,193.7800, -.004623, .0006793,
-.000396,Chk Pass,,
S,182.034 {485},Y1,ppm, 11.02735,.0183453,.1663615, 11.01930, 11.04835, 11.01441,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0003513,.0022759,647.9328, .0004985, -.001995,
.0025499,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0036480,.0026375,72.29915, .0063138, .0010397,
.0035906,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .5051886,.0060082,1.189295, .5063153, .5105537,
.4986969,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0013277,.0005232,39.40958, .0008188, .0013001,
.0018642,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0649176,.0006740,1.038291, .0642913, .0648308,
.0656309,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0179096,.0356025,198.7901, .0436228, .0328318,
-.022726,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0365075,.0002664,.7295783, .0365770, .0362133,
.0367323,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0025379,.0015070,59.38078, .0029817, .0008588,
.0037731,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0039447,.0007034,17.83202, .0035246, .0047568,
.0035527,Chk Pass,,
W,207.911 {462},Y1,ppm, .0005652,.0004871,86.18529, .0001099, .0005069, .0010789,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .0010864,.0000891,8.200672, .0011567, .0009862,
.0011162,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.001840,.0011807,64.17675, -.001530, -.003145,
-.000845,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 9026.966,6.631995,.0734687,9031.285,9030.282,9019.329,None,,
Y2A,371.030 { 91}2,Cts/S,
270018.2,2675.720,.9909404,272375.7,270569.1,267110.0,None,,
Y2R,371.030 { 91}3,Cts/S,
18867.82,81.16178,.4301598,18856.38,18792.99,18954.10,None,,

[Sample Header]

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SampleName=CCV 078332
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/9/2020 16:23:18
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .5034,.0063,1.246, .5019, .4980, .5103,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, 24.21,.2866,1.184, 24.06, 24.02, 24.54,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, 24.36,.0943,.3872, 24.42, 24.41, 24.25,Chk Pass,,
As,189.042 {478},Y1,ppm, .5065,.0014,.2735, .5072, .5049, .5074,Chk Pass,,
B,249.773 {135},Y2A,ppm, .4935,.0058,1.176, .4906, .4898, .5002,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .5144,.0017,.3236, .5126, .5147, .5159,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .49838,.00500,1.0025, .49438, .49679, .50398,Chk Pass,,

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Ca, 317.933 {106}, Y2R, ppm, 25.20, .1316, .5223, 25.32, 25.22, 25.06, Chk Pass,,
 Cd, 226.502 {449}, Y1, ppm, .5010, .0005, .1073, .5015, .5010, .5004, Chk Pass,,
 Co, 228.616 {447}, Y1, ppm, .4854, .0008, .1682, .4845, .4861, .4856, Chk Pass,,
 Cr, 267.716 {126}, Y2A, ppm, .4989, .0056, 1.124, .4941, .4976, .5051, Chk Pass,,
 Cu, 327.396 {103}, Y2A, ppm, .5112, .0053, 1.034, .5076, .5088, .5173, Chk Pass,,
 Fe, 261.187 {129}, Y2R, ppm, 24.22, .1407, .5808, 24.31, 24.30, 24.06, Chk Pass,,
 K, 766.490 {44}, Y2R, ppm, 24.99, .1456, .5828, 25.09, 25.06, 24.82, Chk Pass,,
 Li, 670.784 {50}, Y2R, ppm, .5104, .0026, .5122, .5128, .5108, .5076, Chk Pass,,
 Mg, 285.213 {118}, Y2R, ppm, 24.26, .1260, .5192, 24.37, 24.30, 24.12, Chk Pass,,
 Mn, 257.610 {131}, Y2A, ppm, .50237, .00504, 1.0040, .49721, .50263, .50729, Chk Pass,,
 Mo, 202.030 {467}, Y1, ppm, .4927, .0019, .3901, .4947, .4924, .4909, Chk Pass,,
 Na, 589.592 {57}, Y2R, ppm, 24.72, .0763, .3087, 24.76, 24.77, 24.63, Chk Pass,,
 Ni, 231.604 {445}, Y1, ppm, .4931, .0003, .0590, .4928, .4934, .4931, Chk Pass,,
 P, 177.495 {490}, Y1, ppm, .5022, .0027, .5306, .5049, .5021, .4995, Chk Pass,,
 Pb, 220.353 {453}, Y1, ppm, .4774, .0007, .1491, .4770, .4771, .4783, Chk Pass,,
 S, 182.034 {485}, Y1, ppm, 24.32, .0174, .0717, 24.33, 24.32, 24.30, Chk Pass,,
 Sb, 206.833 {463}, Y1, ppm, .4913, .0030, .6131, .4941, .4918, .4881, Chk Pass,,
 Se, 196.090 {472}, Y1, ppm, .4898, .0026, .5220, .4899, .4872, .4923, Chk Pass,,
 Si, 251.611 {134}, Y2R, ppm, 25.040, .11434, .45663, 25.128, 25.080, 24.911, Chk Pass,,
 Sn, 189.989 {477}, Y1, ppm, .4857, .0010, .1972, .4846, .4864, .4861, Chk Pass,,
 Sr, 421.552 {80}, Y2A, ppm, .5198, .0014, .2685, .5186, .5196, .5213, Chk Pass,,
 Th, 283.730 {119}, Y2R, ppm, .5239, .0075, 1.435, .5155, .5300, .5262, Chk Pass,,
 Ti, 334.941 {101}, Y2A, ppm, .5131, .0051, 1.000, .5085, .5122, .5187, Chk Pass,,
 Tl, 190.856 {477}, Y1, ppm, .4867, .0012, .2552, .4869, .4878, .4853, Chk Pass,,
 V, 292.402 {115}, Y2A, ppm, .5107, .0051, .9967, .5085, .5071, .5165, Chk Pass,,
 W, 207.911 {462}, Y1, ppm, .5085, .0036, .7115, .5123, .5081, .5051, Chk Pass,,
 Zn, 213.856 {458}, Y1, ppm, .5014, .0009, .1810, .5021, .5018, .5004, Chk Pass,,
 Zr, 339.198 {99}, Y2R, ppm, .5015, .0004, .0716, .5017, .5016, .5011, Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8941.9,3.8295,.04283,8939.6,8939.9,8946.4
 Y2A,371.030 {91}2,Cts/S, 270810.,1920.5,.70917,272310.,271480.,268650.
 Y2R,371.030 {91}3,Cts/S, 18843.,109.53,.58127,18826.,18744.,18961.

[Sample Header]

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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:26:35
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0003,.0004,116.7, -.0001, .0005, .0005, Chk Pass,,
 Al,um Ax,308.215 {109},Y2A,ppm, .0058,.0014,24.92, .0074, .0054, .0046, Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0019,.0156,829.1, .0009, .0180, -.0132, Chk Pass,,
 As,189.042 {478},Y1,ppm, .0016,.0029,181.3, .0050, .0000, -.0002, Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0027,.0002,6.912, .0025, .0028, .0028, Chk Pass,,
 Ba,455.403 {74},Y2A,ppm, .0001,.0000,5.338, .0001, .0002, .0001, Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00007,.00001,12.464, -.00006, -.00008, -.00007, Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, .0071,.0022,30.34, .0047, .0089, .0077, Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003,.0001,17.85, .0003, .0003, .0002, Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0001,.0004,340.8, .0000, -.0003, .0006, Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0007,.0004,66.68, .0008, .0002, .0010, Chk Pass,,

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Cu,327.396 {103},Y2A,ppm, -.0004,.0005,132.7, .0001, -.0003, -.0009,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0002,.0062,2847., -.0073, .0024, .0042,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .0496,.0687,138.5, .0866, -.0297, .0917,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0003,.0013,376.3, -.0017, .0008, -.0001,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0009,.0008,92.09, .0014, .0013, -.0001,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, -.00002,.00008,473.76, .00004, .00002, -.00011,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0022,.0004,16.34, .0026, .0019, .0022,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0608,.0073,12.06, .0556, .0575, .0691,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0004,.0002,64.75, .0005, .0001, .0005,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.0014,.0031,215.0, -.0047, -.0010, .0014,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0006,.0016,290.3, -.0019, .0013, -.0011,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0105,.0100,94.83, -.0010, .0164, .0162,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0003,.0023,884.8, .0011, .0021, -.0024,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0014,.0051,363.0, .0005, -.0032, .0069,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .00112,.01279,1145.3, -.01108, -.00000, .01443,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0008,.0004,55.78, .0006, .0013, .0005,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,22.05, .0001, .0001, .0001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0145,.0171,118.2, -.0029, .0314, .0150,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0002,.0001,55.79, .0001, .0002, .0002,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.0018,.0010,58.65, -.0007, -.0028, -.0018,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0011,.0001,4.589, -.0011, -.0011, -.0010,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0018,.0005,26.84, .0023, .0018, .0013,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0001,.0002,231.1, .0000, .0003, -.0001,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0017,.0024,146.3, .0011, -.0035, -.0026,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/s, 9110.6,44.983,.49374,9157.3,9067.5,9106.9

Y2A,371.030 { 91}2,Cts/s, 279310.,815.33,.29191,278810.,280250.,278870.

Y2R,371.030 { 91}3,Cts/s, 18961.,87.225,.46001,18885.,18943.,19057.

[Sample Header]

Method=New TRACE Fast(v1493)

SampleName=410-3310-F-4-A

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/9/2020 16:29:54

Sample Type=Unk

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .0007231,.0002320,32.08794, .0006008, .0009907,
.0005778,Chk Pass,,Alum Ax,308.215 {109},Y2A,ppm, .0370180,.0009892,2.672066, .0361100, .0380721,
.0368720,Chk Pass,,Al,308.215 {109}2,Y2R,ppm, -.000305,.0099184,3248.018, -.011674, .0065810,
.0041766,Chk Pass,,As,189.042 {478},Y1,ppm, .0042219,.0013190,31.24154, .0049752, .0026989,
.0049917,Chk Pass,,B,249.773 {135},Y2A,ppm, .0169531,.0005150,3.037893, .0174620, .0164322,
.0169652,Chk Pass,,Ba,455.403 { 74},Y2A,ppm, .0072745,.0000819,1.126334, .0073687, .0072344,
.0072203,Chk Pass,,Be,313.042 {108},Y2A,ppm, -.000081,.0000121,15.02356, -.000094, -.000071,
-.000077,Chk Pass,,Ca,317.933 {106},Y2R,ppm, 3.373294,.0195029,.5781559, 3.355641, 3.370010,
3.394230,Chk Pass,,

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Cd,226.502 {449},Y1,ppm, .0004254,.0001890,44.43593, .0002281, .0004432,
 .0006049,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0003550,.0002981,83.94933, .0006738, .0003081,
 .0000833,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0014486,.0000791,5.463219, .0014531, .0013673,
 .0015254,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0141644,.0002607,1.840395, .0144082, .0138896,
 .0141952,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0160562,.0063358,39.46021, .0088008, .0188707,
 .0204972,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.264520,.0645710,5.106364, 1.194676, 1.322042,
 1.276842,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.000088,.0019224,2174.008, -.001305, -.001088,
 .0021278,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .7307510,.0059775,.8180011, .7276458, .7269651,
 .7376421,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0134041,.0002722,2.030499, .0137166, .0132769,
 .0132189,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0024593,.0002209,8.983114, .0024837, .0026670,
 .0022272,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 5.429024,.0409070,.7534872, 5.403561, 5.407301,
 5.476210,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0005178,.0001728,33.37716, .0003448, .0005181,
 .0006905,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0600488,.0026058,4.339440, .0584234, .0630543, .0586686,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.000399,.0013817,346.6992, .0007448, -.000006,
 -.001934,Chk Pass,,
 S,182.034 {485},Y1,ppm, 1.420849,.0059622,.4196195, 1.414066, 1.423222, 1.425260,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0014100,.0026736,189.6128, .0015016, -.001308,
 .0040366,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0032565,.0022521,69.15781, .0053358, .0035695,
 .0008642,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .1440475,.0010732,.7450561, .1440638, .1451125,
 .1429662,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.000272,.0008906,327.0767, -.000592, .0007340,
 -.000959,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0235478,.0003175,1.348355, .0239134, .0233420,
 .0233879,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0047611,.0098627,207.1508, .0001878, .0160803,
 -.001985,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0037486,.0002110,5.629332, .0036108, .0039915,
 .0036434,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000018,.0016086,9141.511, .0003510, .0013746,
 -.001778,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0012740,.0003041,23.87179, .0015113, .0013796,
 .0009311,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0006563,.0006413,97.71956, .0010329, -.000084, .0010201,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0192592,.0000751,.3898531, .0192865, .0193168,
 .0191742,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001213,.0007557,62.28542, -.000672, -.000892,
 -.002077,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 9204.256,21.97690,.2387689,9227.779,9200.738,9184.250,None,,
 Y2A,371.030 { 91}2,Cts/S,
 280250.9,3377.894,1.205310,276492.1,283032.4,281228.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19132.11,141.6382,.7403166,19282.05,19113.70,19000.57,None,,

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[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=410-3144-L-3-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:33:10
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0006325	.0007460	117.9416	.0007262	.0013271				
Alum Ax	308.215	{109}	Y2A,ppm	.0100280	.0029219	29.13778	.0099811	.0071298				
Al	308.215	{109}2	Y2R,ppm	.0110516	.0162591	147.1204	.0241677	.0161269				
As	189.042	{478}	Y1,ppm	.0220616	.0024021	10.88818	.0247762	.0202110				
B	249.773	{135}	Y2A,ppm	.1099193	.0010688	.9723391	.1087250	.1107858				
Ba	455.403	{74}	Y2A,ppm	.1376087	.0005326	.3870122	.1371241	.1381788				
Be	313.042	{108}	Y2A,ppm	-.000071	.0000067	9.391957	-.000076	-.000073				
Ca	317.933	{106}	Y2R,ppm	29.64477	.1369196	.4618677	29.80284	29.56866				
Cd	226.502	{449}	Y1,ppm	.0004334	.0002304	53.16738	.0005890	.0005426				
Co	228.616	{447}	Y1,ppm	-.000034	.0002038	596.7582	-.000200	.0001936				
Cr	267.716	{126}	Y2A,ppm	.0009295	.0004015	43.19501	.0012567	.0004815				
Cu	327.396	{103}	Y2A,ppm	.0004409	.0006956	157.7698	.0012421	-.000009				
Fe	261.187	{129}	Y2R,ppm	-.002173	.0044696	205.7342	.0008785	-.000093				
K	766.490	{44}	Y2R,ppm	6.237627	.0557474	.8937271	6.251587	6.176227				
Li	670.784	{50}	Y2R,ppm	.0728251	.0029083	3.993507	.0745194	.0694669				
Mg	285.213	{118}	Y2R,ppm	7.253783	.0299545	.4129496	7.288172	7.239796				
Mn	257.610	{131}	Y2A,ppm	.0242640	.0001469	.6055212	.0241129	.0242729				
Mo	202.030	{467}	Y1,ppm	.0052155	.0002777	5.325301	.0050482	.0055362				
Na	589.592	{57}	Y2R,ppm	34.98046	.0358251	.1024146	35.00427	34.93926				
Ni	231.604	{445}	Y1,ppm	-.000956	.0002616	27.37346	-.001257	-.000793				
P	177.495	{490}	Y1,ppm	.0009934	.0018309	184.2998	.0030451	-.000474	.0004094	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	-.000355	.0007302	205.5757	-.001161	-.000167				
S	182.034	{485}	Y1,ppm	10.01433	.0126937	.1267557	9.999778	10.02010	10.02312	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0000182	.0017488	9593.936	.0015478	-.001888				

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.0003951,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0010979,.0020690,188.4460, .0021542, .0024255,
 -.001286,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 29.71376,.1474614,.4962732, 29.87379, 29.58336,
 29.68412,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0012305,.0006015,48.88038, .0018920, .0007163,
 .0010834,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3566492,.0005119,.1435258, .3568054, .3560774,
 .3570647,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0096584,.0136714,141.5488, .0053976, .0249529,
 -.001375,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0014207,.0000916,6.450030, .0013322, .0014147,
 .0015152,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0003043,.0029589,972.2593, -.001212, .0037140,
 -.001589,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0035621,.0003728,10.46461, .0032885, .0034111,
 .0039866,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0005439,.0013166,242.0532, -.000534, .0020113, .0001544,chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0058874,.0002142,3.638842, .0056942, .0061178,
 .0058502,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001588,.0022720,143.0558, -.003673, -.001925,
 .0008332,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 9023.776,11.32199,.1254685,9032.932,9027.279,9011.116,None,,
 Y2A,371.030 { 91}2,Cts/S,
 276802.0,830.5568,.3000545,277588.4,275933.4,276884.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18820.34,37.49610,.1992318,18778.38,18850.56,18832.09,None,,

[Sample Header]

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 SampleName=410-3263-K-7-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:36:33
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0005692,.0000936,16.44059, .0004698, .0005824,
 .0006555,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0293708,.0041545,14.14503, .0313815, .0321373,
 .0245934,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0007114,.0363637,5111.698, -.018365, .0426439,
 -.022145,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0189437,.0018161,9.586877, .0208430, .0187639,
 .0172242,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 1.116353,.0068145,.6104214, 1.109460, 1.123086,
 1.116513,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5042043,.0028404,.5633500, .5029826, .5074512,
 .5021792,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000148,.0000183,12.32463, -.000152, -.000128,
 -.000164,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 232.3323,.5875863,.2529077, 232.7218, 232.6187,

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231.6564,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003915,.0002400,61.31861, .0002163, .0002930,
 .0006651,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0013458,.0002309,17.15551, .0012025, .0012228,
 .0016121,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0092823,.0003462,3.729337, .0088909, .0094076,
 .0095483,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0039654,.0006888,17.36916, .0032800, .0039586,
 .0046575,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 12.52212,.0396837,.3169086, 12.51170, 12.56598,
 12.48870,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 26.04690,.1332465,.5115637, 26.15961, 26.08126,
 25.89984,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0054122,.0015287,28.24600, .0068753, .0038253,
 .0055360,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 63.14571,.3651714,.5782996, 63.46493, 63.22469,
 62.74751,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 10.27713,.0214702,.2089127, 10.26252, 10.30178,
 10.26709,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0050476,.0002681,5.310601, .0052589, .0047461,
 .0051379,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 314.7830,1.686974,.5359165, 312.9134, 316.1915,
 315.2441,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0072691,.0007657,10.53410, .0079014, .0064177,
 .0074883,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1448805,.0023134,1.596788, .1462107, .1462216, .1422092,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0019091,.0024884,130.3449, .0042053, .0022567,
 -.000735,Chk Pass,,
 S,182.034 {485},Y1,ppm, 3.310720,.0060268,.1820402, 3.306342, 3.317594, 3.308224,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0004454,.0018192,408.4741, .0023248, -.001307,
 .0003182,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0084820,.0028562,33.67317, .0114329, .0082822,
 .0057311,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 15.54334,.0515803,.3318481, 15.51376, 15.60290,
 15.51337,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0009996,.0004650,46.52208, .0007500, .0015361,
 .0007126,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm,^ ***** ,-----,-----,^ -----,^ -----,^ -----,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0203945,.0121380,59.51603, .0327031, .0084346,
 .0200459,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.001218,.0000924,7.591485, -.001286, -.001113,
 -.001255,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0011813,.0036267,307.0183, .0053614, -.001127,
 -.000691,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001123,.0003368,29.99795, -.000955, -.000902,
 -.001510,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000413,.0003374,81.62071, -.000030, -.000664, -.000546,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0127434,.0000945,.7412448, .0126457, .0128342,
 .0127504,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.003359,.0027117,80.74050, -.006355, -.001073,
 -.002648,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8382.134,18.64042,.2223827,8382.947,8363.100,8400.354,None,,
 Y2A,371.030 { 91}2,Cts/S,
 256941.1,971.5494,.3781214,257492.4,255819.3,257511.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18515.66,24.07537,.1300271,18540.19,18514.72,18492.07,None,,

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[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=410-3262-T-3-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:40:08
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0010097	.0003113	30.82864	.0012311	.0011443	.0006538	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.0544888	.0028768	5.279592	.0565685	.0512057	.0556922	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	.0429196	.0293769	68.44645	.0566807	.0628900	.0091880	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0027902	.0020664	74.06027	.0034894	.0044163	.0004649	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0032769	.0001317	4.017932	.0031285	.0033799	.0033222	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0018810	.0000135	.7150907	.0018965	.0018728	.0018736	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	-.000063	.0000172	27.29125	-.000057	-.000082	-.000050	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	.5401022	.0037116	.6872128	.5372220	.5442908	.5387937	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002767	.0000922	33.32201	.0002869	.0003634	.0001798	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	-.000207	.0000927	44.74166	-.000245	-.000275	-.000102	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0006485	.0003209	49.48338	.0009866	.0006106	.0003482	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0008037	.0004227	52.59867	.0012402	.0007745	.0003963	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0215330	.0007242	3.363185	.0223488	.0209661	.0212841	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	.0550187	.0429831	78.12457	.0465885	.0168752	.1015924	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0001292	.0020493	1586.444	-.001723	.0023309	-.000221	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	.0453964	.0007705	1.697350	.0448911	.0450149	.0462833	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0008302	.0001157	13.94008	.0008406	.0009405	.0007097	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0003302	.0003651	110.5730	.0004857	.0005919	-.000087	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	1.332392	.0144469	1.084285	1.348120	1.329342	1.319713	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0005003	.0004370	87.33808	.0000136	.0006286	.0008588	Chk Pass,,		
P	177.495	{490}	Y1,ppm	-.000691	.0023911	345.8318	.0019050	-.001176	-.002803	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	-.000698	.0013904	199.2518	-.002134	.0006412	-.000600	Chk Pass,,		
S	182.034	{485}	Y1,ppm	.0235354	.0030975	13.16084	.0219072	.0271074	.0215916	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0023692	.0019458	82.12914	.0032186	.0001431				

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.0037458,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0038655,.0027380,70.83168, .0070152, .0025265,
 .0020546,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.436477,.0121950,.5005190, 2.435417, 2.424846,
 2.449167,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0013861,.0005847,42.18097, .0015162, .0018949,
 .0007474,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0016322,.0000669,4.099784, .0016443, .0016923,
 .0015601,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0021177,.0126531,597.5073, .0044813, .0134223,
 -.011551,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0016812,.0000439,2.613391, .0017031, .0016306,
 .0017099,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.001051,.0023665,225.1786, .0016762, -.002264,
 -.002565,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000491,.0003910,79.71808, -.000893, -.000112,
 -.000467,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0012197,.0003338,27.36689, .0014639, .0008393, .0013558,chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0029943,.0001952,6.518202, .0032004, .0029704,
 .0028122,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0006733,.0006172,91.66311, -.000039, .0010338,
 .0010256,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 9162.306,18.15552,.1981545,9166.199,9178.199,9142.519,None,,
 Y2A,371.030 { 91}2,Cts/S,
 283772.0,1885.669,.6645012,281595.9,284925.2,284794.9,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19035.35,137.1504,.7205035,19005.24,19185.05,18915.75,None,,

[Sample Header]

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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:43:26
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0011775,.0006971,59.20185, .0003750, .0015247,
 .0016327,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0292559,.0015026,5.135961, .0303722, .0275475,
 .0298481,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0005160,.0250670,4858.356, .0282152, -.006059,
 -.020608,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0150550,.0019375,12.86941, .0129110, .0166804,
 .0155736,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .9568726,.0105733,1.104980, .9612583, .9645472,
 .9448122,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .2216387,.0025023,1.128986, .2223993, .2236725,
 .2188444,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000120,.0000179,14.90685, -.000106, -.000140,
 -.000115,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 121.1777,.6999629,.5776333, 120.7627, 121.9859,

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120.7846,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003990,.0001436,35.98736, .0004805, .0004834,
 .0002332,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0121130,.0002661,2.197014, .0123276, .0118152,
 .0121961,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0013778,.0002694,19.55140, .0014046, .0016327,
 .0010960,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0022081,.0004554,20.62565, .0017037, .0023315,
 .0025892,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .5436961,.0112649,2.071916, .5411321, .5560220,
 .5339342,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 13.03375,.0686401,.5266335, 12.95617, 13.08660,
 13.05848,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0078414,.0013392,17.07859, .0078995, .0091506,
 .0064741,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 109.9793,.5360540,.4874134, 109.8817, 110.5575,
 109.4988,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, 4.750480,.0509779,1.073110, 4.770962, 4.788031,
 4.692446,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0102687,.0003171,3.087664, .0102684, .0099519,
 .0105860,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 449.7171,5.778601,1.284941, 448.2476, 456.0886,
 444.8151,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0137652,.0003737,2.714509, .0133337, .0139818,
 .0139800,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.330654,.0069316,.5209139, 1.334287, 1.335014, 1.322661,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0019368,.0021020,108.5315, .0011769, .0043130,
 .0003204,Chk Pass,,
 S,182.034 {485},Y1,ppm, 47.47017,.2748640,.5790247, 47.73626, 47.48695, 47.18730,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0032434,.0012355,38.09166, .0019171, .0043617,
 .0034515,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0035996,.0029651,82.37271, .0017342, .0070187,
 .0020460,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 18.01152,.1063646,.5905364, 17.95357, 18.13427,
 17.94671,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0036295,.0014530,40.03259, .0053069, .0028199,
 .0027616,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 1.947822,.0144612,.7424300, 1.955044, 1.957250,
 1.931173,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0092587,.0188299,203.3763, -.001878, .0309994,
 -.001346,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0009240,.0000812,8.785321, .0010009, .0009319,
 .0008392,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000870,.0020273,233.0536, -.001401, .0013702,
 -.002579,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001219,.0000971,7.967208, -.001216, -.001123,
 -.001317,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0019839,.0010700,53.93373, .0016563, .0011160, .0031794,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0014796,.0000347,2.341594, .0015105, .0014421,
 .0014863,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001571,.0020642,131.3585, -.000225, -.003948,
 -.000541,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8465.103,21.90051,.2587152,8440.198,8473.758,8481.354,None,,
 Y2A,371.030 { 91}2,Cts/S,
 255548.3,2332.659,.9128055,254522.7,253904.3,258218.1,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18256.90,140.2827,.7683817,18415.02,18147.38,18208.30,None,,

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[Sample Header]
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 SampleName=410-2724-H-5-A
 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:46:47
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0011944	.0001062	8.893965	.0010717	.0012549	.0012565	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.0087405	.0029220	33.43059	.0058166	.0116606	.0087442	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	-.003783	.0431630	1140.840	.0422231	-.043388	-.010186	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0047801	.0021586	45.15865	.0056424	.0023236	.0063742	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0523025	.0003833	.7328037	.0518603	.0525388	.0525084	Chk Pass,,		
Ba	455.403	{ 74}	Y2A,ppm	.0439830	.0002928	.6658019	.0439833	.0436901	.0442757	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	-.000095	.0000038	3.998508	-.000099	-.000093	-.000092	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	107.1741	.2553200	.2382292	107.1293	106.9442	107.4489	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002282	.0001363	59.71861	.0000796	.0002579	.0003473	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0001305	.0003132	239.9124	.0003612	-.000226	.0002564	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0011012	.0006987	63.44436	.0005931	.0008127	.0018980	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0026879	.0002965	11.02943	.0025115	.0025220	.0030301	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.0054329	.0052822	97.22731	.0107607	.0053405	.0001974	Chk Pass,,		
K	766.490	{ 44}	Y2R,ppm	2.487959	.0296827	1.193056	2.466262	2.475829	2.521786	Chk Pass,,		
Li	670.784	{ 50}	Y2R,ppm	.0058186	.0007294	12.53488	.0050028	.0060453	.0064077	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	11.72406	.0721663	.6155401	11.70394	11.66409	11.80415	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0006500	.0000842	12.95822	.0007312	.0005631	.0006556	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0010234	.0003770	36.83842	.0010871	.0013644	.0006186	Chk Pass,,		
Na	589.592	{ 57}	Y2R,ppm	24.83048	.0317106	.1277082	24.85915	24.83586	24.79642	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0002992	.0003382	113.0167	.0002739	-.000026	.0006494	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.0530785	.0017492	3.295576	.0550382	.0525220	.0516751	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0011437	.0021864	191.1645	.0018064	.0029222	-.001297	Chk Pass,,		
S	182.034	{485}	Y1,ppm	56.17088	.0543201	.0967051	56.22523	56.17083	56.11658	Chk Pass,,		

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Sb,206.833 {463},Y1,ppm, .0020517,.0018090,88.17380, .0040938, .0006498,
 .0014115,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.001086,.0038954,358.8560, -.003553, .0034052,
 -.003108,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 6.499486,.0153097,.2355528, 6.484571, 6.515162,
 6.498725,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0008983,.0009892,110.1228, .0005872, .0020056,
 .0001020,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .2298477,.0011565,.5031788, .2299832, .2286294,
 .2309306,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0101696,.0123537,121.4766, .0184765, .0160590,
 -.004027,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0007090,.0000840,11.84393, .0007456, .0007684,
 .0006129,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000354,.0002958,83.55347, -.000080, -.000668,
 -.000314,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001026,.0002536,24.70270, -.000811, -.000962,
 -.001306,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0020610,.0004708,22.84618, .0025431, .0016022, .0020376,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0019508,.0001995,10.22858, .0020790, .0017209,
 .0020524,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001502,.0011692,77.86077, -.001048, -.000628,
 -.002830,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8885.712,5.254918,.0591390,8886.817,8890.326,8879.992,None, ,
 Y2A,371.030 { 91}2,Cts/S,
 272273.7,724.1584,.2659671,272104.2,273067.5,271649.3,None, ,
 Y2R,371.030 { 91}3,Cts/S,
 18979.80,111.2400,.5860964,19030.17,19056.95,18852.29,None, ,

[Sample Header]

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 Custom ID2=
 Custom ID3=
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 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0002932,.0001359,46.34036, .0001594, .0004311,
 .0002891,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0088468,.0035440,40.05973, .0128787, .0074378,
 .0062241,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0050723,.0113670,224.0994, -.001892, .0181895,
 -.001080,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0047804,.0007102,14.85565, .0047027, .0041123,
 .0055263,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0509441,.0008667,1.701209, .0503161, .0505834,
 .0519329,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0439250,.0003400,.7740449, .0437278, .0437296,
 .0443176,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000106,.0000168,15.88154, -.000096, -.000096,
 -.000125,Chk Pass,,

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Ca, 317.933 {106}, Y2R, ppm, 107.0327, .4363896, .4077160, 107.4886, 106.9907, 106.6189, Chk Pass,,
Cd, 226.502 {449}, Y1, ppm, .0002848, .0001326, 46.56631, .0003615, .0001316, .0003611, Chk Pass,,
Co, 228.616 {447}, Y1, ppm, .0000813, .0002427, 298.5401, .0002586, .0001806, -.000195, Chk Pass,,
Cr, 267.716 {126}, Y2A, ppm, .0009442, .0000424, 4.493946, .0009382, .0009051, .0009893, Chk Pass,,
Cu, 327.396 {103}, Y2A, ppm, .0024106, .0001613, 6.689822, .0025494, .0022337, .0024488, Chk Pass,,
Fe, 261.187 {129}, Y2R, ppm, .0123171, .0064637, 52.47717, .0113047, .0192272, .0064194, Chk Pass,,
K, 766.490 { 44}, Y2R, ppm, 2.444592, .0078981, .3230859, 2.437553, 2.443088, 2.453133, Chk Pass,,
Li, 670.784 { 50}, Y2R, ppm, .0047027, .0010222, 21.73684, .0036563, .0047527, .0056989, Chk Pass,,
Mg, 285.213 {118}, Y2R, ppm, 11.77892, .0400931, .3403797, 11.80972, 11.79346, 11.73359, Chk Pass,,
Mn, 257.610 {131}, Y2A, ppm, .0003843, .0000662, 17.23017, .0003395, .0003531, .0004604, Chk Pass,,
Mo, 202.030 {467}, Y1, ppm, .0010077, .0004184, 41.51922, .0006186, .0014503, .0009543, Chk Pass,,
Na, 589.592 { 57}, Y2R, ppm, 24.79703, .0529369, .2134810, 24.85036, 24.79623, 24.74449, Chk Pass,,
Ni, 231.604 {445}, Y1, ppm, .0001564, .0002450, 156.6703, -.000060, .0004223, .0001072, Chk Pass,,
P, 177.495 {490}, Y1, ppm, .0544373, .0003551, .6523110, .0547061, .0540347, .0545709, Chk Pass,,
Pb, 220.353 {453}, Y1, ppm, -.001662, .0033200, 199.7520, .0021700, -.003484, -.003673, Chk Pass,,
S, 182.034 {485}, Y1, ppm, 56.63009, .2350885, .4151300, 56.38144, 56.66008, 56.84874, Chk Pass,,
Sb, 206.833 {463}, Y1, ppm, .0024175, .0019765, 81.75736, .0020137, .0045648, .0006741, Chk Pass,,
Se, 196.090 {472}, Y1, ppm, .0001518, .0019172, 1262.862, .0006560, .0017666, -.001967, Chk Pass,,
Si, 251.611 {134}, Y2R, ppm, 6.473644, .0450512, .6959176, 6.481945, 6.513968, 6.425020, Chk Pass,,
Sn, 189.989 {477}, Y1, ppm, .0008665, .0010755, 124.1192, -.000128, .0020079, .0007196, Chk Pass,,
Sr, 421.552 { 80}, Y2A, ppm, .2295104, .0020504, .8933653, .2288741, .2278537, .2318035, Chk Pass,,
Th, 283.730 {119}, Y2R, ppm, .0116525, .0188692, 161.9331, .0028632, .0333130, -.001219, Chk Pass,,
Ti, 334.941 {101}, Y2A, ppm, .0007068, .0001012, 14.32158, .0005977, .0007977, .0007250, Chk Pass,,
Tl, 190.856 {477}, Y1, ppm, -.001694, .0018558, 109.5736, -.003009, .0004292, -.002502, Chk Pass,,
V, 292.402 {115}, Y2A, ppm, -.001194, .0003810, 31.91351, -.001549, -.000791, -.001241, Chk Pass,,
W, 207.911 {462}, Y1, ppm, .0000989, .0006366, 643.4910, .0007668, -.000501, .0000307, Chk Pass,,
Zn, 213.856 {458}, Y1, ppm, .0006525, .0000536, 8.220406, .0006646, .0005938, .0006990, Chk Pass,,
Zr, 339.198 { 99}, Y2R, ppm, -.001056, .0028830, 272.9620, -.000783, -.004066, .0016804, Chk Pass,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
Y1, 224.306 {450}, Cts/S, 8915.343, 34.71958, .3894363, 8950.460, 8914.534, 8881.035, None, ,
Y2A, 371.030 { 91}2, Cts/S,
275816.1, 2663.614, .9657209, 277207.0, 277496.4, 272745.0, None, ,
Y2R, 371.030 { 91}3, Cts/S,

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19036.55,114.3701,.6007924,19012.37,18936.20,19161.07,None,,

[Sample Header]

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 Custom ID2=
 Custom ID3=
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 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.5018	.0081	1.610	.5010	.5103	.4942	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A, ppm	24.10	.3090	1.282	24.01	24.44	23.84	Chk Pass,,		
Al	308.215	{109}	2, Y2R, ppm	24.33	.0386	.1586	24.36	24.29	24.34	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.5075	.0015	.2983	.5089	.5077	.5059	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4896	.0071	1.457	.4888	.4971	.4829	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.5070	.0036	.7013	.5043	.5111	.5057	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.49236	.00458	.93025	.49277	.49672	.48759	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	25.06	.2031	.8103	25.12	24.84	25.23	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.5009	.0028	.5607	.5019	.5031	.4977	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.4851	.0016	.3334	.4865	.4853	.4833	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.4925	.0052	1.050	.4935	.4970	.4868	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.5074	.0033	.6480	.5068	.5109	.5044	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	24.14	.0751	.3111	24.17	24.05	24.18	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	24.85	.2705	1.089	24.91	24.56	25.09	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.5106	.0044	.8698	.5120	.5056	.5142	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	24.09	.2318	.9620	24.19	23.83	24.26	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.49429	.00382	.77283	.49498	.49772	.49017	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.4911	.0054	1.108	.4963	.4916	.4854	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	24.80	.0668	.2694	24.79	24.74	24.87	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4916	.0024	.4946	.4939	.4920	.4890	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.5005	.0041	.8131	.5003	.5047	.4966	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.4756	.0048	1.004	.4802	.4760	.4707	Chk Pass,,		
S	182.034	{485}	Y1, ppm	24.34	.1318	.5416	24.39	24.43	24.18	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.4940	.0059	1.198	.4890	.5005	.4924	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4922	.0087	1.777	.5006	.4927	.4832	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	24.986	.15184	.60770	25.052	24.812	25.093	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4830	.0045	.9312	.4817	.4880	.4792	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.5114	.0092	1.792	.5151	.5181	.5009	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.5207	.0123	2.357	.5348	.5136	.5135	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.5069	.0043	.8532	.5069	.5112	.5025	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4889	.0071	1.450	.4952	.4903	.4812	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.5079	.0075	1.482	.5070	.5158	.5008	Chk Pass,,		
w	207.911	{462}	Y1, ppm	.5094	.0032	.6315	.5092	.5127	.5062	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.5004	.0033	.6505	.5013	.5031	.4968	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	.4983	.0023	.4649	.4972	.4969	.5010	Chk Pass,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/s	8981.5	32.794	.36513	8979.1	8950.0	9015.5
Y2A	371.030	{91}	2, Cts/s	275860.	1432.1	.51914	276360.	274250.	276980.
Y2R	371.030	{91}	3, Cts/s	19271.	174.82	.90717	19275.	19444.	19095.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCB 078331

11592

Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 16:56:33
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0003	.0002	64.74	.0004	.0001	.0005	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.0047	.0028	58.71	.0053	.0017	.0071	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	-.0142	.0163	114.2	-.0201	.0041	-.0267	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0028	.0004	15.99	.0032	.0023	.0028	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.0027	.0004	14.45	.0032	.0024	.0026	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0001	.0000	6.111	.0001	.0001	.0001	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	-.00007	.00001	9.2070	-.00006	-.00007	-.00007	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	-.0016	.0048	295.9	.0033	-.0019	-.0062	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0002	.0001	42.88	.0002	.0003	.0002	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	.0001	.0002	230.1	.0000	-.0001	.0003	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0002	.0002	98.24	.0004	-.0000	.0002	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	-.0004	.0005	141.3	-.0009	-.0002	.0000	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	-.0061	.0025	41.05	-.0064	-.0084	-.0034	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	-.0050	.0363	733.0	-.0389	-.0094	.0334	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	-.0013	.0004	33.85	-.0016	-.0008	-.0016	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	-.0014	.0013	89.62	-.0004	-.0010	-.0028	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	-.00001	.00005	497.90	-.00002	-.00006	.00005	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0022	.0003	15.58	.0024	.0018	.0024	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	.0459	.0022	4.889	.0453	.0440	.0484	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0000	.0006	1461.	.0000	.0006	-.0005	Chk Pass,,		
P	177.495	{490}	Y1,ppm	-.0002	.0036	1562.	-.0016	-.0029	.0038	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	.0010	.0010	100.1	.0016	-.0002	.0015	Chk Pass,,		
S	182.034	{485}	Y1,ppm	.0074	.0033	44.67	.0106	.0076	.0040	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0006	.0016	250.1	-.0011	.0010	.0020	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	-.0025	.0013	53.55	-.0040	-.0022	-.0014	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	.00268	.00379	141.81	.00081	.00017	.00704	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	.0008	.0005	66.56	.0004	.0014	.0006	Chk Pass,,		
Sr	421.552	{80}	Y2A,ppm	.0001	.0000	3.182	.0001	.0001	.0001	Chk Pass,,		
Th	283.730	{119}	Y2R,ppm	.0197	.0250	126.8	.0312	.0369	-.0090	Chk Pass,,		
Ti	334.941	{101}	Y2A,ppm	.0001	.0001	150.9	-.0001	.0002	.0002	Chk Pass,,		
Tl	190.856	{477}	Y1,ppm	-.0012	.0013	107.7	-.0027	-.0004	-.0005	Chk Pass,,		
V	292.402	{115}	Y2A,ppm	-.0012	.0003	21.43	-.0014	-.0013	-.0009	Chk Pass,,		
W	207.911	{462}	Y1,ppm	.0012	.0007	57.11	.0018	.0012	.0005	Chk Pass,,		
Zn	213.856	{458}	Y1,ppm	-.0000	.0002	1188.	.0000	.0002	-.0002	Chk Pass,,		
Zr	339.198	{99}	Y2R,ppm	-.0038	.0017	43.81	-.0051	-.0043	-.0019	Chk Pass,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	9078.3	5.2722	.05808	9083.3	9078.7
Y2A	371.030	{91}2	Cts/S	281440.	1106.7	.39324	280760.	282710.
Y2R	371.030	{91}3	Cts/S	19406.	364.25	1.8770	19826.	19207.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-C-2-A @5
 Username=dept 22
 Comment=
 Custom ID1=

11592

Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:07:30
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A,ppm	.0006525	.0002689	41.21467	.0009438	.0004137	.0006000	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A,ppm	.0181709	.0017917	9.860104	.0191669	.0161025	.0192432	Chk Pass,,		
Al	308.215	{109}2	Y2R,ppm	-.023496	.0161191	68.60284	-.028158	-.036771	-.005560	Chk Pass,,		
As	189.042	{478}	Y1,ppm	.0059554	.0002986	5.014021	.0059758	.0062433	.0056471	Chk Pass,,		
B	249.773	{135}	Y2A,ppm	.1431164	.0010883	.7604481	.1438615	.1418674	.1436202	Chk Pass,,		
Ba	455.403	{74}	Y2A,ppm	.0423781	.0002719	.6417062	.0426096	.0420786	.0424460	Chk Pass,,		
Be	313.042	{108}	Y2A,ppm	-.000088	.0000056	6.402898	-.000085	-.000084	-.000095	Chk Pass,,		
Ca	317.933	{106}	Y2R,ppm	46.18329	.0609873	.1320548	46.24000	46.11878	46.19110	Chk Pass,,		
Cd	226.502	{449}	Y1,ppm	.0003614	.0000674	18.64360	.0002837	.0003980	.0004026	Chk Pass,,		
Co	228.616	{447}	Y1,ppm	-.000057	.0002644	465.6781	.0000631	.0001265	-.000360	Chk Pass,,		
Cr	267.716	{126}	Y2A,ppm	.0011168	.0000278	2.491078	.0010899	.0011150	.0011454	Chk Pass,,		
Cu	327.396	{103}	Y2A,ppm	.0007692	.0011763	152.9211	.0018964	-.000451	.0008620	Chk Pass,,		
Fe	261.187	{129}	Y2R,ppm	.8794571	.0123410	1.403251	.8783372	.8923199	.8677142	Chk Pass,,		
K	766.490	{44}	Y2R,ppm	7.059334	.0040455	.0573066	7.055977	7.058200	7.063826	Chk Pass,,		
Li	670.784	{50}	Y2R,ppm	.0058963	.0012304	20.86734	.0071176	.0059141	.0046570	Chk Pass,,		
Mg	285.213	{118}	Y2R,ppm	14.00732	.0200325	.1430146	13.98419	14.01924	14.01853	Chk Pass,,		
Mn	257.610	{131}	Y2A,ppm	.0848971	.0003992	.4701834	.0850354	.0844471	.0852087	Chk Pass,,		
Mo	202.030	{467}	Y1,ppm	.0020371	.0002544	12.48666	.0020228	.0017902	.0022983	Chk Pass,,		
Na	589.592	{57}	Y2R,ppm	233.7232	1.593570	.6818192	235.5281	233.1309	232.5106	Chk Pass,,		
Ni	231.604	{445}	Y1,ppm	.0002316	.0004107	177.3808	.0006110	-.000205	.0002882	Chk Pass,,		
P	177.495	{490}	Y1,ppm	.1337127	.0022149	1.656433	.1327303	.1362488	.1321589	Chk Pass,,		
Pb	220.353	{453}	Y1,ppm	-.000619	.0003408	55.10177	-.000975	-.000296	-.000585	Chk Pass,,		
S	182.034	{485}	Y1,ppm	4.902634	.0109372	.2230872	4.905885	4.911577	4.890440	Chk Pass,,		
Sb	206.833	{463}	Y1,ppm	.0005485	.0011274	205.5558	-.000455	.0003323	.0017682	Chk Pass,,		
Se	196.090	{472}	Y1,ppm	-.000531	.0043290	815.5177	.0035050	.0000056	-.005103	Chk Pass,,		
Si	251.611	{134}	Y2R,ppm	1.752501	.0059180	.3376903	1.745671	1.755714	1.756117	Chk Pass,,		
Sn	189.989	{477}	Y1,ppm	.0004982	.0012379	248.4903	-.000269	-.000162				

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.0019262,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3563672,.0020750,.5822693, .3564190, .3584158,
 .3542668,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, -.008225,.0134072,163.0147, -.012859, .0068852,
 -.018699,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0017391,.0000131,.7509963, .0017401, .0017256,
 .0017516,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0024456,.0033142,135.5173, .0053129, -.001183,
 .0032070,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.000809,.0003699,45.72476, -.001215, -.000722,
 -.000491,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0007518,.0006743,89.68350, .0013144, .0009366, .0000044,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0002459,.0001318,53.60950, .0003739, .0002532,
 .0001106,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.000145,.0028804,1990.246, -.001423, -.002164,
 .0031536,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8748.699,19.61252,.2241765,8768.104,8749.107,8728.885,None,,
 Y2A,371.030 { 91}2,Cts/S,
 267421.0,212.0548,.0792962,267183.0,267490.5,267589.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19014.18,51.52973,.2710068,19069.40,19005.77,18967.37,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=3328-C-2-A PDS@5
 Username=dept 22
 Comment=UP
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:11:03
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0201267,.0003340,1.659650, .0200401, .0198445,
 .0204955,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 1.030971,.0118714,1.151479, 1.028600, 1.020464,
 1.043849,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 1.005276,.0245315,2.440270, 1.010115, 1.027027,
 .9786857,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5340189,.0043874,.8215790, .5301433, .5387823,
 .5331312,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .3444536,.0033096,.9608262, .3438664, .3414769,
 .3480175,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0933288,.0007025,.7527478, .0931933, .0927038,
 .0940892,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0208314,.0001115,.5352729, .0208578, .0207090,
 .0209273,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 45.84916,.1195948,.2608440, 45.72874, 45.85082,
 45.96791,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0514102,.0003095,.6020877, .0513145, .0517563,
 .0511598,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .1004523,.0007562,.7527817, .1008897, .1008880,
 .0995791,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .2052456,.0021706,1.057579, .2045485, .2035092,

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.2076792,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5165448,.0044837,.8680264, .5146317, .5133350,
 .5216678,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 1.356962,.0127753,.9414601, 1.371216, 1.346545,
 1.353125,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 8.886672,.0428354,.4820179, 8.867464, 8.856802,
 8.935749,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, 1.042636,.0047865,.4590716, 1.037597, 1.043189,
 1.047122,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 14.64472,.0302901,.2068331, 14.61129, 14.65254,
 14.67034,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .1445933,.0012153,.8404876, .1449643, .1432358,
 .1455799,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .2065378,.0020860,1.009968, .2069685, .2083747,
 .2042701,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 224.3750,1.570083,.6997584, 222.5894, 225.5397,
 224.9959,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .1513067,.0006556,.4333168, .1520045, .1507035,
 .1512122,Chk Pass,,
 P,177.495 {490},Y1,ppm, 1.223482,.0072030,.5887338, 1.222675, 1.231055, 1.216717,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .4811354,.0023107,.4802537, .4803944, .4837257,
 .4792861,Chk Pass,,
 S,182.034 {485},Y1,ppm, 5.802272,.0384312,.6623469, 5.818952, 5.829546, 5.758319,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .4175383,.0040654,.9736646, .4213558, .4179956,
 .4132636,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .8014521,.0089732,1.119619, .8031593, .8094491,
 .7917479,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 2.763622,.0137977,.4992633, 2.776851, 2.749319,
 2.764697,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .6072593,.0028897,.4758506, .6079155, .6097645,
 .6040980,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3677049,.0025818,.7021399, .3687333, .3647673,
 .3696140,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0227618,.0133256,58.54375, .0297309, .0073968,
 .0311576,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .1067937,.0005843,.5471449, .1070430, .1061261,
 .1072120,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 1.001081,.0076481,.7639848, 1.000819, 1.008857,
 .9935679,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .1064538,.0015920,1.495472, .1056120, .1054594,
 .1082899,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0000678,.0010732,1583.749, -.001131, .0003964, .0009382,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .1263284,.0009785,.7745543, .1260912, .1274037,
 .1254904,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 1.004818,.0121028,1.204475, 1.015032, 1.007972,
 .9914509,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8714.806,5.377129,.0617011,8717.974,8708.598,8717.847,None,,
 Y2A,371.030 { 91}2,Cts/S,
 265387.9,1549.208,.5837522,265501.4,266877.2,263785.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18964.25,112.6079,.5937904,19092.91,18916.25,18883.60,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=3328-C-2-B DU @5
 Username=dept 22
 Comment=

11592

Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:14:29
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0005382,.0005292,98.31503, .0011346, .0003552,
 .0001249,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0165266,.0021814,13.19917, .0190371, .0150942,
 .0154483,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.011544,.0150598,130.4597, .0053996, -.016625,
 -.023405,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0074554,.0014964,20.07128, .0084912, .0057398,
 .0081354,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1456270,.0012344,.8476651, .1469376, .1444864,
 .1454570,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0427424,.0001221,.2856432, .0428647, .0426205,
 .0427419,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000099,.0000426,43.07325, -.000108, -.000053,
 -.000136,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 46.29962,.1695134,.3661225, 46.46563, 46.30643,
 46.12681,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002663,.0000895,33.62345, .0001633, .0003098,
 .0003258,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0000438,.0002099,479.7498, -.000049, .0002841,
 -.000104,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0007144,.0003184,44.57542, .0003765, .0007577,
 .0010089,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0005460,.0003820,69.96398, .0004537, .0002186,
 .0009656,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .8784041,.0055842,.6357197, .8748173, .8848380,
 .8755570,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 7.129368,.0095320,.1336998, 7.118387, 7.134202,
 7.135514,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0064186,.0015532,24.19770, .0081831, .0052586,
 .0058141,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 14.03983,.0286239,.2038762, 14.06993, 14.03661,
 14.01296,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0858131,.0003740,.4357977, .0862021, .0854562,
 .0857809,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0025540,.0003780,14.79952, .0029898, .0023156,
 .0023567,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 230.3775,3.301210,1.432957, 232.5892, 231.9604,
 226.5829,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, -.000185,.0003823,206.6345, -.000077, .0001319,
 -.000610,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1328519,.0005086,.3828012, .1326906, .1334216, .1324436,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.002002,.0030526,152.4543, -.002176, -.004964,
 .0011334,Chk Pass,,
 S,182.034 {485},Y1,ppm, 4.889957,.0205583,.4204183, 4.894398, 4.907931, 4.867541,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, -.000027,.0036679,13493.67, -.003321, -.000685,
 .0039252,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.000169,.0012391,732.7358, -.001007, .0012542,
 -.000754,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.752570,.0247110,1.409988, 1.775034, 1.756575,
 1.726101,Chk Pass,,

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Sn,189.989 {477},Y1,ppm, .0021058,.0007990,37.94161, .0016133, .0016764,
 .0030276,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3587986,.0003461,.0964760, .3586476, .3591946,
 .3585536,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0069141,.0112897,163.2848, .0079560, .0176467,
 -.004860,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0017336,.0001403,8.090993, .0017159, .0016030,
 .0018819,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0029645,.0008207,27.68343, .0023115, .0026961,
 .0038857,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001168,.0002041,17.47804, -.001398, -.001010,
 -.001096,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0000015,.0011593,76582.38, -.000211, .0012524, -.001037,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0001742,.0002730,156.7015, -.000136, .0002800,
 .0003784,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001198,.0021207,177.0087, -.003633, -.000208,
 .0002469,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8759.173,10.79094,.1231958,8765.793,8765.005,8746.721,None,,
 Y2A,371.030 { 91}2,Cts/S,
 264386.8,695.4485,.2630421,264194.3,263807.9,265158.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18984.87,50.10509,.2639212,18958.84,18953.13,19042.63,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=3328-C-2-C MS @5
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:18:05
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0044596,.0003419,7.666082, .0045572, .0047420,
 .0040795,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0943290,.0018490,1.960180, .0953719, .0921941,
 .0954210,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0583984,.0080323,13.75435, .0555712, .0674621,
 .0521619,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0176235,.0001773,1.006148, .0177657, .0176800,
 .0174248,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1530424,.0009260,.6050498, .1532115, .1520436,
 .1538723,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0439581,.0001916,.4359660, .0440772, .0437371,
 .0440601,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0019456,.0000263,1.349928, .0019759, .0019319,
 .0019291,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 45.57049,.0326815,.0717163, 45.57002, 45.60340,
 45.53804,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0024138,.0001303,5.397439, .0025640, .0023474,
 .0023302,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0020435,.0002530,12.38089, .0023317, .0019403,
 .0018583,Chk Pass,,

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Cr,267.716 {126},Y2A,ppm, .0072808,.0008487,11.65706, .0076722, .0078633,
.0063070,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .0079885,.0007608,9.524171, .0085352, .0071196,
.0083107,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .9435842,.0072947,.7730888, .9504069, .9358948,
.9444510,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 8.090078,.0372855,.4608791, 8.120379, 8.101416,
8.048440,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0278714,.0012678,4.548814, .0293336, .0272033,
.0270773,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 13.81830,.0406541,.2942051, 13.86072, 13.81451,
13.77968,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .0877536,.0005481,.6246428, .0880172, .0871234,
.0881202,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0052858,.0003081,5.828289, .0056371, .0050615,
.0051589,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 227.3608,3.207160,1.410604, 229.5077, 228.9006,
223.6741,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .3942476,.0008627,.2188191, .3949119, .3945584,
.3932726,Chk Pass,,
P,177.495 {490},Y1,ppm, .1731756,.0006915,.3993002, .1725429, .1739138, .1730702,Chk
Pass,,
Pb,220.353 {453},Y1,ppm, .0065240,.0012469,19.11234, .0075645, .0068656,
.0051419,Chk Pass,,
S,182.034 {485},Y1,ppm, 5.001081,.0121661,.2432698, 5.011247, 4.987602, 5.004396,Chk
Pass,,
Sb,206.833 {463},Y1,ppm, .0215730,.0038825,17.99713, .0197501, .0189373,
.0260315,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0191975,.0032007,16.67238, .0225081, .0189650,
.0161195,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 1.929945,.0066393,.3440170, 1.926710, 1.925543,
1.937582,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0202356,.0015676,7.746931, .0216824, .0204543,
.0185701,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .3552293,.0026684,.7511882, .3573822, .3522438,
.3560618,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0204084,.0230451,112.9194, .0411950, .0244031,
-.004373,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0056284,.0001641,2.915562, .0057823, .0056473,
.0054557,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0099542,.0010522,10.57072, .0111301, .0091015,
.0096309,Chk Pass,,
V,292.402 {115},Y2A,ppm, .0032339,.0003877,11.98977, .0029309, .0036708,
.0030999,Chk Pass,,
W,207.911 {462},Y1,ppm, .0122682,.0007978,6.503094, .0125391, .0128953, .0113702,Chk
Pass,,
Zn,213.856 {458},Y1,ppm, .0887610,.0001986,.2237278, .0889689, .0887409,
.0885733,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .0185754,.0008122,4.372294, .0180550, .0181599,
.0195112,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 8716.766,7.758694,.0890089,8720.249,8722.173,8707.876,None,,
Y2A,371.030 { 91}2,Cts/S,
265931.4,1214.646,.4567516,265022.4,267310.9,265460.8,None,,
Y2R,371.030 { 91}3,Cts/S,
19003.56,119.8761,.6308086,19121.93,18882.23,19006.51,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=3328-B-2-A MSD @5
Username=dept 22

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Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:21:35
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0044788,.0005077,11.33462, .0050063, .0044364,
 .0039937,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0992287,.0031921,3.216889, .1027532, .0965322,
 .0984007,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .0706251,.0186581,26.41854, .0867759, .0502010,
 .0748983,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0215926,.0029678,13.74462, .0247278, .0188268,
 .0212231,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .1552848,.0016972,1.092978, .1563773, .1533295,
 .1561475,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0440467,.0004397,.9983406, .0444338, .0435685,
 .0441377,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .0019703,.0000296,1.503539, .0019915, .0019364,
 .0019829,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 45.28339,.5609612,1.238779, 45.74781, 45.44223,
 44.66014,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0023082,.0000383,1.660902, .0022641, .0023339,
 .0023266,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0021267,.0004447,20.90843, .0023847, .0016133,
 .0023822,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0072048,.0000835,1.158800, .0072702, .0071108,
 .0072334,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0086256,.0001392,1.613812, .0087072, .0087046,
 .0084648,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .9054007,.0131575,1.453228, .9115996, .9143139,
 .8902888,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 8.041633,.1096019,1.362931, 8.129063, 8.077162,
 7.918674,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0276547,.0008338,3.014996, .0267262, .0278986,
 .0283394,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 13.63320,.1832295,1.343995, 13.77418, 13.69932,
 13.42608,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0884919,.0011391,1.287220, .0894780, .0872450,
 .0887527,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0050417,.0004352,8.631842, .0054889, .0050164,
 .0046197,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 225.3030,1.621101,.7195203, 226.8791, 225.3894,
 223.6404,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .3914369,.0016446,.4201498, .3931036, .3913919,
 .3898153,Chk Pass,,
 P,177.495 {490},Y1,ppm, .1726940,.0012600,.7296283, .1722862, .1741074, .1716884,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, .0051300,.0004768,9.294470, .0045920, .0055001,
 .0052981,Chk Pass,,
 S,182.034 {485},Y1,ppm, 5.028726,.0014816,.0294623, 5.027304, 5.030260, 5.028614,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0214260,.0018229,8.507673, .0206658, .0235059,
 .0201063,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0214371,.0036996,17.25787, .0237789, .0233604,
 .0171720,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.903731,.0313169,1.645028, 1.920859, 1.922749,

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1.867586,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0207902,.0017989,8.652904, .0226599, .0206391,
 .0190715,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .3585323,.0044388,1.238050, .3605933, .3534377,
 .3615659,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0053647,.0155579,290.0014, -.010477, .0206221,
 .0059492,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0057548,.0001086,1.886996, .0058789, .0056770,
 .0057085,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0108196,.0025696,23.74968, .0137799, .0095129,
 .0091658,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0033410,.0003454,10.33752, .0035662, .0029434,
 .0035135,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0128753,.0009532,7.403392, .0121225, .0139471, .0125563,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0893911,.0003768,.4215052, .0895033, .0889710,
 .0896991,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0176184,.0021129,11.99240, .0198212, .0156087,
 .0174254,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8695.474,33.84909,.3892725,8725.295,8702.445,8658.682,None,,
 Y2A,371.030 { 91}2,Cts/S,
 263127.9,3328.170,1.264849,260569.9,266890.7,261923.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19021.44,124.5829,.6549600,18892.31,19031.11,19140.92,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=3328-C-2-A SD@25
 Username=dept 22
 Comment=UL
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:25:09
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0004580,.0002235,48.80577, .0002295, .0004683,
 .0006762,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0093651,.0024360,26.01113, .0070680, .0091078,
 .0119195,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.014519,.0147448,101.5570, .0024693, -.023994,
 -.022032,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0041083,.0029623,72.10516, .0012547, .0071684,
 .0039017,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0289309,.0006699,2.315379, .0283542, .0287729,
 .0296656,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0088470,.0000576,.6508561, .0088984, .0087848,
 .0088577,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000069,.0000223,32.19906, -.000072, -.000090,
 -.000045,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 9.271650,.0390220,.4208743, 9.231030, 9.308849,
 9.275071,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002410,.0001324,54.95249, .0002361, .0001111,
 .0003757,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.000031,.0000912,290.6132, .0000420, -.000134,

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-.000003,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0005205,.0004266,81.96544, .0002645, .0010130,
 .0002840,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.000258,.0006331,245.3104, -.000463, .0004521,
 -.000763,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .1763737,.0051069,2.895522, .1717714, .1754818,
 .1818678,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.407456,.0267479,1.900443, 1.401091, 1.436812,
 1.384465,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0025548,.0002953,11.56049, .0027721, .0026737,
 .0022185,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 2.801360,.0163574,.5839095, 2.786836, 2.819079,
 2.798164,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0171993,.0000929,.5399830, .0173018, .0171753,
 .0171208,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, -.000039,.0001388,354.8499, -.000096, .0001191,
 -.000140,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 46.59569,.1844391,.3958286, 46.38748, 46.73858,
 46.66100,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, -.000412,.0004777,115.9921, .0000436, -.000370,
 -.000909,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0271728,.0006893,2.536823, .0276307, .0263800, .0275077,Chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.001431,.0016876,117.9375, -.000464, -.003380,
 -.000450,Chk Pass,,
 S,182.034 {485},Y1,ppm, .9568400,.0010570,.1104646, .9577749, .9556931, .9570521,Chk
 Pass,,
 Sb,206.833 {463},Y1,ppm, .0047313,.0003231,6.829054, .0046383, .0044649,
 .0050907,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0018810,.0048742,259.1269, .0050534, -.003731,
 .0043210,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .3515449,.0091010,2.588851, .3411842, .3552022,
 .3582484,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.000139,.0014975,1080.211, -.001696, .0012913,
 -.000011,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0724968,.0001693,.2335563, .0725696, .0723032,
 .0726175,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0177173,.0220839,124.6457, -.007071, .0249296,
 .0352934,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0008432,.0000726,8.614839, .0007711, .0008422,
 .0009164,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, -.000323,.0036491,1128.749, -.000505, -.003878,
 .0034132,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001063,.0000378,3.559912, -.001031, -.001105,
 -.001054,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0001483,.0006213,419.0324, .0008607, -.000281, -.000135,Chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0001779,.0001230,69.14898, .0001181, .0000962,
 .0003194,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.001384,.0027112,195.8794, .0008643, -.000622,
 -.004395,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8950.525,8.814181,.0984767,8958.217,8952.452,8940.907,None,,
 Y2A,371.030 { 91}2,Cts/S,
 276342.7,408.1454,.1476954,275875.3,276524.2,276628.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19122.62,111.0611,.5807837,19213.16,18998.70,19156.01,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-C-4-A @5

11592

Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:28:28
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007556,.0001231,16.28788, .0008875, .0007356,
 .0006438,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, .0068167,.0012973,19.03185, .0077915, .0073143,
 .0053442,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.017715,.0302982,171.0323, .0169379, -.039209,
 -.030874,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0124221,.0018711,15.06296, .0131482, .0102967,
 .0138213,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0136956,.0002834,2.069102, .0133714, .0138199,
 .0138957,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0036445,.0000344,.9444923, .0036162, .0036345,
 .0036829,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.000069,.0000143,20.74741, -.000085, -.000059,
 -.000063,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 20.91277,.1808769,.8649113, 21.10425, 20.74479,
 20.88927,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003949,.0000433,10.95450, .0003899, .0004405,
 .0003545,Chk Pass,,
 Co,228.616 {447},Y1,ppm, -.001485,.0003372,22.71084, -.001255, -.001872,
 -.001328,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 9.646792,.0425492,.4410713, 9.615232, 9.629962,
 9.695182,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0002267,.0000820,36.16879, .0001910, .0001686,
 .0003205,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.004348,.0034447,79.22484, -.005717, -.006897,
 -.000429,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 1.613963,.0116163,.7197410, 1.605810, 1.627263,
 1.608815,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0007138,.0015839,221.8830, .0009369, -.000970,
 .0021744,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 11.13461,.0797789,.7164945, 11.21977, 11.06161,
 11.12246,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .0003989,.0000593,14.86890, .0003329, .0004159,
 .0004478,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0007862,.0003847,48.93166, .0003442, .0010453,
 .0009693,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, 8.180025,.0558681,.6829821, 8.235942, 8.124206,
 8.179929,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0000630,.0004472,709.8044, .0001260, -.000412,
 .0004754,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0127055,.0012294,9.675754, .0126373, .0139676, .0115117,chk
 Pass,,
 Pb,220.353 {453},Y1,ppm, -.002889,.0009763,33.78850, -.001764, -.003391,
 -.003513,Chk Pass,,
 S,182.034 {485},Y1,ppm, 11.19594,.0688961,.6153669, 11.26681, 11.12920, 11.19182,chk
 Pass,,
 Sb,206.833 {463},Y1,ppm,F -.100644,.0013670,1.358245, -.100834, -.101905,
 -.099191,Chk Fail,18.00000,-.050000
 Se,196.090 {472},Y1,ppm, .0039182,.0049128,125.3845, .0091880, .0031020,
 -.000535,Chk Pass,,

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Si,251.611 {134},Y2R,ppm, 1.092674,.0091546,.8378173, 1.100888, 1.082805,
 1.094330,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0006536,.0012109,185.2741, -.000239, .0001675,
 .0020321,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0743147,.0002973,.4000053, .0740872, .0742059,
 .0746510,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0096411,.0052032,53.96920, .0101899, .0145481,
 .0041852,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0032649,.0001116,3.418061, .0032932, .0031419,
 .0033597,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0037377,.0007346,19.65277, .0029745, .0037986,
 .0044399,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.001173,.0006560,55.93065, -.000416, -.001566,
 -.001537,Chk Pass,,
 W,207.911 {462},Y1,ppm, -.000107,.0010971,1028.364, -.000998, .0011185, -.000440,chk
 Pass,,
 Zn,213.856 {458},Y1,ppm, .0020902,.0000913,4.368350, .0020619, .0021923,
 .0020164,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.008789,.0011901,13.54039, -.009997, -.008752,
 -.007618,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8900.824,24.55792,.2759061,8883.949,8928.998,8889.526,None,,
 Y2A,371.030 { 91}2,Cts/S,
 277147.3,1662.664,.5999208,278480.3,277677.3,275284.2,None,,
 Y2R,371.030 { 91}3,Cts/S,
 19206.35,112.2230,.5843018,19079.93,19294.20,19244.91,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCV 078332
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:31:41
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .5036,.0056,1.116, .5005, .5101, .5003,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, 24.07,.3231,1.342, 23.95, 24.44, 23.83,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 24.31,.0574,.2362, 24.34, 24.35, 24.25,Chk Pass,,
 As,189.042 {478},Y1,ppm, .5088,.0044,.8589, .5124, .5040, .5102,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .4912,.0068,1.375, .4911, .4980, .4845,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5089,.0045,.8898, .5062, .5141, .5063,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .49390,.00737,1.4914, .49114, .50225, .48832,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 25.10,.1604,.6392, 25.21, 24.91, 25.17,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5003,.0032,.6495, .5020, .4965, .5023,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4851,.0021,.4283, .4857, .4828, .4868,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4975,.0062,1.254, .4947, .5046, .4931,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5070,.0083,1.644, .5028, .5167, .5017,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 24.07,.0714,.2968, 24.13, 23.99, 24.09,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 24.76,.1785,.7212, 24.95, 24.60, 24.72,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .5099,.0050,.9837, .5157, .5069, .5071,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 23.92,.1558,.6516, 24.01, 23.74, 24.00,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .49571,.00764,1.5407, .49274, .50439, .49001,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .4893,.0034,.7001, .4925, .4857, .4898,Chk Pass,,

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Na,589.592 { 57},Y2R,ppm, 24.92,.0094,.0376, 24.92, 24.92, 24.91,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .4917,.0033,.6743, .4937, .4879, .4936,Chk Pass,,
 P,177.495 {490},Y1,ppm, .5034,.0043,.8613, .5062, .5057, .4984,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .4763,.0014,.2962, .4773, .4747, .4769,Chk Pass,,
 S,182.034 {485},Y1,ppm, 24.30,.1656,.6816, 24.36, 24.11, 24.43,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .4913,.0041,.8335, .4945, .4867, .4927,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .4895,.0041,.8302, .4940, .4863, .4881,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 24.962,.13480,.54002, 25.052, 24.807, 25.026,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .4839,.0032,.6520, .4874, .4833, .4812,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5145,.0052,1.020, .5105, .5204, .5125,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .5146,.0093,1.803, .5073, .5116, .5251,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .5069,.0074,1.463, .5040, .5153, .5014,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .4857,.0062,1.270, .4926, .4836, .4809,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5096,.0066,1.293, .5078, .5168, .5040,Chk Pass,,
 W,207.911 {462},Y1,ppm, .5095,.0026,.5086, .5114, .5066, .5106,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .5008,.0034,.6865, .5021, .4969, .5035,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm,W .5413,.0023,.4283, .5387, .5418, .5433,Chk
 warn,.5000,8.000%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8954.5,34.961,.39043,8959.5,8986.6,8917.3
 Y2A,371.030 { 91}2,Cts/S, 274510.,4144.3,1.5097,277020.,269730.,276790.
 Y2R,371.030 { 91}3,Cts/S, 19165.,87.085,.45440,19135.,19263.,19097.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCB 078331

Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/9/2020 17:34:58
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0004,.0002,39.77, .0006, .0003, .0004,Chk Pass,,
 Al,um Ax,308.215 {109},Y2A,ppm, .0056,.0027,48.33, .0025, .0076, .0067,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.0093,.0269,289.2, .0214, -.0208, -.0286,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0035,.0012,33.37, .0032, .0047, .0024,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0020,.0004,18.22, .0021, .0015, .0022,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0001,.0000,7.317, .0001, .0001, .0001,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00007,.00002,24.936, -.00009, -.00005, -.00008,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, .0002,.0049,2120., -.0044, .0054, -.0003,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004,.0000,12.23, .0004, .0004, .0005,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0001,.0002,215.4, .0001, -.0001, .0002,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0006,.0001,11.80, .0007, .0006, .0006,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0005,.0003,61.04, -.0008, -.0004, -.0003,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0031,.0049,157.6, .0009, -.0016, -.0086,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0063,.0268,426.2, -.0229, -.0205, .0246,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0001,.0003,258.8, .0002, .0004, -.0002,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, -.0002,.0017,1063., -.0010, .0017, -.0012,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00002,.00003,170.86, .00004, -.00002, .00003,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0023,.0002,8.541, .0024, .0021, .0024,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0271,.0106,39.07, .0353, .0152, .0309,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0000,.0000,47.84, .0000, .0001, .0000,Chk Pass,,

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P,177.495 {490},Y1,ppm, .0004,.0014,333.2, .0004, -.0010, .0019,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0009,.0018,199.7, .0011, -.0025, -.0014,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0051,.0036,70.67, .0015, .0087, .0051,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0012,.0023,200.5, .0038, -.0003, -.0001,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0035,.0040,112.5, .0081, .0007, .0018,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .00424,.00601,141.58, .01066, .00332, -.00125,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0007,.0005,68.17, .0007, .0002, .0012,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,5.146, .0001, .0001, .0001,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0040,.0110,276.9, .0166, -.0015, -.0033,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0001,.0001,73.84, .0002, .0002, .0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0003,.0032,905.4, -.0017, .0040, -.0012,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0011,.0005,49.33, -.0011, -.0016, -.0005,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0010,.0006,56.36, .0014, .0012, .0004,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0001,.0001,86.66, -.0001, -.0001, -.0000,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .0003,.0004,118.1, .0004, -.0001, .0007,Chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 9117.1,40.023,.43898,9086.7,9162.4,9102.2

Y2A,371.030 { 91}2,Cts/S, 277960.,1279.2,.46022,279280.,277880.,276730.

Y2R,371.030 { 91}3,Cts/S, 18887.,139.02,.73609,19032.,18755.,18873.

T2016404T75

[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=Matrix_Rinse
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 9:59:30
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	-4.590	.0000	.0004	-4.590	-4.590	-4.590	None,,		
Al	308.215	{109}	Y2A, ppm	18.95	.0002	.0011	18.95	18.95	18.95	None,,		
Al	308.215	{109}2	Y2R, ppm	20.77	.0002	.0010	20.77	20.77	20.77	None,,		
As	189.042	{478}	Y1, ppm	2.899	.0000	.0001	2.899	2.899	2.899	None,,		
B	249.773	{135}	Y2A, ppm	-.0005	.0000	.00089	-.0005	-.0005	-.0005	None,,		
Ba	455.403	{ 74}	Y2A, ppm	-.5188	.0000	.0000	-.5188	-.5188	-.5188	None,,		
Be	313.042	{108}	Y2A, ppm	-.82678	.00000	.00000	-.82678	-.82678	-.82678	None,,		
Ca	317.933	{106}	Y2R, ppm	-8.760	.0001	.0011	-8.760	-8.760	-8.760	None,,		
Cd	226.502	{449}	Y1, ppm	-.2333	.0000	.0001	-.2333	-.2333	-.2333	None,,		
Co	228.616	{447}	Y1, ppm	-1.638	.0000	.0001	-1.638	-1.638	-1.638	None,,		
Cr	267.716	{126}	Y2A, ppm	-4.411	.0000	.0000	-4.411	-4.411	-4.411	None,,		
Cu	327.396	{103}	Y2A, ppm	3.239	.0000	.0011	3.239	3.239	3.239	None,,		
Fe	261.187	{129}	Y2R, ppm	.1669	.0000	.0029	.1669	.1669	.1669	None,,		
K	766.490	{ 44}	Y2R, ppm	1.796	.0000	.0003	1.796	1.796	1.796	None,,		
Li	670.784	{ 50}	Y2R, ppm	.0003	.0000	.1523	.0003	.0003	.0003	None,,		
Mg	285.213	{118}	Y2R, ppm	.0690	.0000	.0018	.0690	.0690	.0690	None,,		
Mn	257.610	{131}	Y2A, ppm	-.00267	.00000	.00017	-.00267	-.00267	-.00267	None,,		
Mo	202.030	{467}	Y1, ppm	.0009	.0000	.1079	.0009	.0009	.0009	None,,		
Na	589.592	{ 57}	Y2R, ppm	.4865	.0000	.0033	.4865	.4865	.4865	None,,		
Ni	231.604	{445}	Y1, ppm	-.0024	.0000	.0071	-.0024	-.0024	-.0024	None,,		
P	177.495	{490}	Y1, ppm	.0077	.0000	.0280	.0077	.0077	.0077	None,,		
Pb	220.353	{453}	Y1, ppm	-13.76	.0000	.0003	-13.76	-13.76	-13.76	None,,		
S	182.034	{485}	Y1, ppm	-7.164	.0000	.0001	-7.164	-7.164	-7.164	None,,		
Sb	206.833	{463}	Y1, ppm	-8.130	.0000	.0002	-8.130	-8.130	-8.130	None,,		
Se	196.090	{472}	Y1, ppm	-.0141	.0000	.0161	-.0141	-.0141	-.0140	None,,		
Si	251.611	{134}	Y2R, ppm	.34535	.00001	.00409	.34533	.34536	.34535	None,,		
Sn	189.989	{477}	Y1, ppm	.0036	.0000	.0480	.0036	.0036	.0036	None,,		
Sr	421.552	{ 80}	Y2A, ppm	-.9645	.0000	.0000	-.9645	-.9645	-.9645	None,,		
Th	283.730	{119}	Y2R, ppm	-267.4	.0029	.0011	-267.4	-267.4	-267.4	None,,		
Ti	334.941	{101}	Y2A, ppm	-.0003	.0000	.0119	-.0003	-.0003	-.0003	None,,		
Tl	190.856	{477}	Y1, ppm	-.2737	.0000	.0015	-.2737	-.2737	-.2737	None,,		
V	292.402	{115}	Y2A, ppm	-9.841	.0000	.0000	-9.841	-9.841	-9.841	None,,		
W	207.911	{462}	Y1, ppm	-.0084	.0000	.0094	-.0084	-.0084	-.0084	None,,		
Zn	213.856	{458}	Y1, ppm	1.048	.0000	.0000	1.048	1.048	1.048	None,,		
Zr	339.198	{ 99}	Y2R, ppm	18.06	.0002	.0011	18.06	18.06	18.06	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	8524.7	15.462	.18138	8507.1	8536.1	8531.0
Y2A	371.030	{ 91}2	Cts/S	263560.	1971.6	.74806	263430.	265600.	261660.
Y2R	371.030	{ 91}3	Cts/S	17715.	93.119	.52566	17621.	17717.	17807.

[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=S0
 Username=dept 22

T2016404T75

Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:02:38
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Ag	328.068	{103}	Y2A,Cts/S	-.0035	.0008	23.69	-.0025	-.0037	-.0041
Alum Ax	308.215	{109}	Y2A,Cts/S	.0685	.0016	2.396	.0669	.0701	.0684
Al	308.215	{109}2	Y2R,Cts/S	.0510	.0125	24.47	.0373	.0538	.0617
As	189.042	{478}	Y1,Cts/S	.0032	.0025	78.23	.0015	.0061	.0021
B	249.773	{135}	Y2A,Cts/S	.0001	.0000	14.55	.0001	.0001	.0001
Ba	455.403	{74}	Y2A,Cts/S	-.0002	.0000	17.87	-.0002	-.0002	-.0003
Be	313.042	{108}	Y2A,Cts/S	-.02506	.00043	1.7102	-.02487	-.02555	-.02475
Ca	317.933	{106}	Y2R,Cts/S	.0048	.0005	9.427	.0045	.0046	.0053
Cd	226.502	{449}	Y1,Cts/S	-.0056	.0077	137.2	-.0024	-.0145	-.0001
Co	228.616	{447}	Y1,Cts/S	.0016	.0109	670.1	.0094	.0064	-.0109
Cr	267.716	{126}	Y2A,Cts/S	-.0000	.0000	24.52	-.0000	-.0000	-.0000
Cu	327.396	{103}	Y2A,Cts/S	.0067	.0011	16.78	.0054	.0071	.0075
Fe	261.187	{129}	Y2R,Cts/S	.0001	.0001	69.23	.0001	.0003	.0001
K	766.490	{44}	Y2R,Cts/S	.1571	.0253	16.13	.1854	.1365	.1494
Li	670.784	{50}	Y2R,Cts/S	.0006	.0004	57.95	.0007	.0002	.0010
Mg	285.213	{118}	Y2R,Cts/S	.0004	.0002	53.58	.0005	.0002	.0006
Mn	257.610	{131}	Y2A,Cts/S	.00128	.00045	34.966	.00138	.00079	.00167
Mo	202.030	{467}	Y1,Cts/S	.0139	.0017	12.47	.0158	.0127	.0130
Na	589.592	{57}	Y2R,Cts/S	.0017	.0004	21.57	.0016	.0013	.0020
Ni	231.604	{445}	Y1,Cts/S	.0244	.0070	28.77	.0182	.0321	.0230
P	177.495	{490}	Y1,Cts/S	-.0000	.0001	404.9	.0001	-.0001	-.0001
Pb	220.353	{453}	Y1,Cts/S	-.0223	.0105	47.00	-.0304	-.0259	-.0105
S	182.034	{485}	Y1,Cts/S	-.0001	.0001	176.1	.0000	-.0000	-.0002
Sb	206.833	{463}	Y1,Cts/S	-.0001	.0001	55.04	-.0001	-.0001	-.0002
Se	196.090	{472}	Y1,Cts/S	.0064	.0033	52.21	.0062	.0098	.0031
Si	251.611	{134}	Y2R,Cts/S	.00030	.00010	31.987	.00019	.00035	.00037
Sn	189.989	{477}	Y1,Cts/S	.0070	.0027	38.14	.0085	.0085	.0039
Sr	421.552	{80}	Y2A,Cts/S	-.0005	.0000	8.789	-.0006	-.0005	-.0005
Th	283.730	{119}	Y2R,Cts/S	-.0001	.0001	100.4	-.0001	-.0000	-.0002
Ti	334.941	{101}	Y2A,Cts/S	.0088	.0007	8.414	.0082	.0086	.0096
Tl	190.856	{477}	Y1,Cts/S	-.0027	.0042	158.1	.0021	-.0041	-.0060
V	292.402	{115}	Y2A,Cts/S	-.0066	.0011	17.04	-.0066	-.0054	-.0076
W	207.911	{462}	Y1,Cts/S	.0001	.0001	86.68	.0002	.0001	.0000
Zn	213.856	{458}	Y1,Cts/S	.0594	.0101	16.98	.0680	.0619	.0483
Zr	339.198	{99}	Y2R,Cts/S	.0002	.0002	72.48	.0002	.0004	.0001

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	8576.6	7.9305	.09247	8577.2	8568.3	8584.2
Y2A	371.030	{91}2	Cts/S	263400.	1220.8	.46348	263580.	264510.	262090.
Y2R	371.030	{91}3	Cts/S	17907.	57.571	.32149	17852.	17967.	17903.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=S1
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:05:46

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Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Alum Ax,308.215 {109},Y2A,Cts/S, 29.19,.0291,.0997, 29.16, 29.22, 29.18
 Al,308.215 {109}2,Y2R,Cts/S, 24.48,.0852,.3480, 24.57, 24.46, 24.41
 Ca,317.933 {106},Y2R,Cts/S, 3.758,.0225,.5998, 3.784, 3.745, 3.745
 Fe,261.187 {129},Y2R,Cts/S, .8812,.0016,.1789, .8825, .8818, .8794
 K,766.490 { 44},Y2R,Cts/S, 67.01,.4564,.6811, 67.54, 66.75, 66.74
 Mg,285.213 {118},Y2R,Cts/S, 6.818,.0487,.7138, 6.874, 6.786, 6.793
 Na,589.592 { 57},Y2R,Cts/S, 3.913,.0041,.1048, 3.911, 3.917, 3.910
 S,182.034 {485},Y1,Cts/S, .8330,.0012,.1470, .8329, .8342, .8318
 Si,251.611 {134},Y2R,Cts/S, .72148,.00368,.50967, .72572, .71930, .71940

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8311.0,15.922,.19158,8329.1,8299.5,8304.2
 Y2A,371.030 { 91}2,Cts/S, 255800.,650.54,.25432,255740.,255190.,256480.
 Y2R,371.030 { 91}3,Cts/S, 17904.,33.549,.18738,17865.,17926.,17921.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=S2
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:08:50
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Ag,328.068 {103},Y2A,Cts/S, 3.585,.0042,.1176, 3.590, 3.581, 3.585
 As,189.042 {478},Y1,Cts/S, 1.534,.0095,.6182, 1.542, 1.536, 1.524
 B,249.773 {135},Y2A,Cts/S, .0352,.0000,.1187, .0352, .0352, .0352
 Ba,455.403 { 74},Y2A,Cts/S, 3.236,.0132,.4072, 3.221, 3.241, 3.246
 Be,313.042 {108},Y2A,Cts/S, 86.838,.25406,.29257, 87.108, 86.802, 86.604
 Cd,226.502 {449},Y1,Cts/S, 57.70,.3502,.6069, 58.02, 57.75, 57.33
 Co,228.616 {447},Y1,Cts/S, 33.95,.2678,.7888, 34.11, 34.10, 33.64
 Cu,327.396 {103},Y2A,Cts/S, 3.095,.0041,.1339, 3.094, 3.099, 3.091
 Li,670.784 { 50},Y2R,Cts/S, .4994,.0010,.2102, .4985, .4991, .5005
 Mn,257.610 {131},Y2A,Cts/S, 12.226,.00387,.03165, 12.229, 12.227, 12.221
 Ni,231.604 {445},Y1,Cts/S, 21.85,.1603,.7339, 21.99, 21.88, 21.67
 P,177.495 {490},Y1,Cts/S, .0307,.0001,.4044, .0308, .0306, .0306
 Pb,220.353 {453},Y1,Cts/S, 4.889,.0517,1.059, 4.909, 4.927, 4.830
 Se,196.090 {472},Y1,Cts/S, 1.214,.0074,.6083, 1.215, 1.221, 1.207
 Sr,421.552 { 80},Y2A,Cts/S, 3.545,.0040,.1133, 3.548, 3.540, 3.546
 Th,283.730 {119},Y2R,Cts/S, .0098,.0001,.6478, .0098, .0099, .0099
 Tl,190.856 {477},Y1,Cts/S, 1.631,.0301,1.844, 1.650, 1.647, 1.597
 W,207.911 {462},Y1,Cts/S, .1116,.0010,.8548, .1125, .1118, .1106
 Zn,213.856 {458},Y1,Cts/S, 39.95,.2590,.6484, 40.21, 39.95, 39.70

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8453.4,9.4327,.11159,8459.7,8442.5,8457.9
 Y2A,371.030 { 91}2,Cts/S, 258990.,607.55,.23458,259670.,258800.,258500.

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Y2R,371.030 { 91}3,Cts/S, 17913.,31.030,.17323,17877.,17926.,17935.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=S3
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:12:10
 Sample Type=ReSlope
 Mode=IR
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Cr,267.716 {126},Y2A,Cts/S, .0464,.0000,.0621, .0464, .0465, .0464
 Mo,202.030 {467},Y1,Cts/S, 11.50,.0608,.5288, 11.57, 11.48, 11.45
 Sb,206.833 {463},Y1,Cts/S, .0519,.0001,.2284, .0520, .0520, .0518
 Sn,189.989 {477},Y1,Cts/S, 4.094,.0170,.4160, 4.110, 4.096, 4.076
 Ti,334.941 {101},Y2A,Cts/S, 11.55,.0539,.4667, 11.61, 11.54, 11.51
 V,292.402 {115},Y2A,Cts/S, 3.144,.0095,.3014, 3.135, 3.154, 3.144
 Zr,339.198 { 99},Y2R,Cts/S, .1985,.0013,.6658, .2000, .1982, .1974

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8622.9,9.2364,.10712,8616.0,8633.4,8619.3
 Y2A,371.030 { 91}2,Cts/S, 265370.,948.39,.35739,264810.,266460.,264830.
 Y2R,371.030 { 91}3,Cts/S, 17941.,62.017,.34568,17955.,17994.,17873.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICV 62173
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:15:15
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .5900,.0027,.4515, .5888, .5882, .5931,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 29.19,.0299,.1023, 29.19, 29.22, 29.16,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 29.43,.1553,.5278, 29.53, 29.25, 29.50,Chk Pass,,
 As,189.042 {478},Y1,ppm, .6043,.0030,.4948, .6073, .6044, .6013,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .5950,.0012,.1967, .5937, .5955, .5959,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .5948,.0049,.8193, .5899, .5996, .5950,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .57831,.00239,.41241, .57556, .57954, .57984,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 29.38,.0718,.2444, 29.43, 29.29, 29.41,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .5947,.0014,.2292, .5957, .5953, .5932,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .5946,.0019,.3135, .5966, .5943, .5929,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .5858,.0014,.2388, .5846, .5873, .5855,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .6017,.0026,.4398, .5990, .6018, .6043,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 29.13,.0595,.2041, 29.12, 29.07, 29.19,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, 29.47,.1217,.4128, 29.60, 29.37, 29.44,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .6006,.0024,.3961, .6031, .5983, .6003,Chk Pass,,

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Mg,285.213 {118},Y2R,ppm, 29.32,.0691,.2358, 29.40, 29.26, 29.32,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .58835,.00436,.74148, .58331, .59104, .59068,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .6163,.0032,.5252, .6193, .6167, .6129,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 28.63,.0949,.3313, 28.67, 28.53, 28.70,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .5946,.0016,.2694, .5952, .5958, .5928,Chk Pass,,
P,177.495 {490},Y1,ppm, .6141,.0025,.4092, .6161, .6113, .6150,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .5902,.0038,.6450, .5931, .5916, .5859,Chk Pass,,
S,182.034 {485},Y1,ppm, 29.95,.0772,.2577, 30.03, 29.88, 29.93,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .6220,.0035,.5610, .6238, .6180, .6242,Chk Pass,,
Se,196.090 {472},Y1,ppm, .5955,.0057,.9579, .6006, .5966, .5894,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 29.889,.05152,.17237, 29.933, 29.832, 29.902, None,,
Sn,189.989 {477},Y1,ppm, .5901,.0012,.1971, .5914, .5897, .5892,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .5958,.0014,.2424, .5942, .5971, .5960,Chk Pass,,
Th,283.730 {119},Y2R,ppm,W .6424,.0063,.9802, .6385, .6390, .6496,Chk
Warn,.6000,5.000%
Ti,334.941 {101},Y2A,ppm, .6036,.0031,.5187, .6000, .6055, .6053,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .5853,.0065,1.104, .5923, .5840, .5796,Chk Pass,,
V,292.402 {115},Y2A,ppm, .5972,.0007,.1159, .5965, .5972, .5979,Chk Pass,,
W,207.911 {462},Y1,ppm, .6084,.0027,.4486, .6113, .6080, .6058,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .5862,.0006,.1098, .5869, .5857, .5861,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm,F .6657,.0090,1.355, .6572, .6649, .6751,Chk
Fail,.6000,10.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 8337.6,17.428,.20903,8339.1,8354.3,8319.5

Y2A,371.030 { 91}2,Cts/S, 257230.,1693.5,.65838,259050.,255710.,256920.

Y2R,371.030 { 91}3,Cts/S, 17880.,71.212,.39827,17901.,17939.,17801.

[Sample Header]

Method=New TRACE Fast(v1493)

SampleName=ICV 62173

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/12/2020 10:18:23

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .5924,.0020,.3292, .5947, .5914, .5912,Chk Pass,,

Alum Ax,308.215 {109},Y2A,ppm, 29.10,.0607,.2085, 29.06, 29.07, 29.17,Chk Pass,,

Al,308.215 {109}2,Y2R,ppm, 29.12,.3468,1.191, 29.29, 29.36, 28.73,Chk Pass,,

As,189.042 {478},Y1,ppm, .6009,.0039,.6493, .5995, .6053, .5979,Chk Pass,,

B,249.773 {135},Y2A,ppm, .5944,.0003,.0479, .5942, .5947, .5942,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .5950,.0029,.4923, .5930, .5984, .5936,Chk Pass,,

Be,313.042 {108},Y2A,ppm, .57822,.00195,.33696, .57624, .58014, .57828,Chk Pass,,

Ca,317.933 {106},Y2R,ppm, 29.07,.3915,1.347, 29.29, 29.29, 28.62,Chk Pass,,

Cd,226.502 {449},Y1,ppm, .5920,.0006,.0959, .5922, .5924, .5914,Chk Pass,,

Co,228.616 {447},Y1,ppm, .5927,.0023,.3917, .5946, .5932, .5901,Chk Pass,,

Cr,267.716 {126},Y2A,ppm, .5847,.0021,.3609, .5825, .5849, .5867,Chk Pass,,

Cu,327.396 {103},Y2A,ppm, .5998,.0035,.5872, .5958, .6011, .6024,Chk Pass,,

Fe,261.187 {129},Y2R,ppm, 28.83,.2654,.9207, 29.05, 28.90, 28.53,Chk Pass,,

K,766.490 { 44},Y2R,ppm, 29.10,.2959,1.017, 29.23, 29.30, 28.76,Chk Pass,,

Li,670.784 { 50},Y2R,ppm, .5966,.0051,.8524, .5992, .5998, .5907,Chk Pass,,

Mg,285.213 {118},Y2R,ppm, 28.94,.2855,.9865, 29.13, 29.07, 28.61,Chk Pass,,

Mn,257.610 {131},Y2A,ppm, .58670,.00433,.73815, .58229, .59094, .58687,Chk Pass,,

Mo,202.030 {467},Y1,ppm, .6092,.0039,.6388, .6124, .6105, .6049,Chk Pass,,

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Na,589.592 { 57},Y2R,ppm,w 28.38,.4049,1.427, 28.62, 28.60, 27.91,Chk
 Warn,30.00,-5.000%
 Ni,231.604 {445},Y1,ppm, .5910,.0018,.2979, .5927, .5909, .5892,Chk Pass,,
 P,177.495 {490},Y1,ppm, .6069,.0014,.2275, .6077, .6078, .6053,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .5873,.0025,.4298, .5860, .5902, .5857,Chk Pass,,
 S,182.034 {485},Y1,ppm, 29.72,.0782,.2630, 29.73, 29.79, 29.64,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6172,.0027,.4449, .6154, .6204, .6158,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5921,.0082,1.384, .5938, .5994, .5832,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 29.636,.39281,1.3255, 29.847, 29.878, 29.182, None,,
 Sn,189.989 {477},Y1,ppm, .5891,.0033,.5621, .5904, .5915, .5853,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .5972,.0047,.7852, .5935, .5957, .6025,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .6183,.0074,1.191, .6167, .6119, .6264,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .6008,.0033,.5574, .5970, .6033, .6020,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .5779,.0072,1.252, .5858, .5760, .5717,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5989,.0010,1.1655, .5994, .5977, .5994,Chk Pass,,
 W,207.911 {462},Y1,ppm, .6065,.0026,.4257, .6092, .6061, .6041,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .5829,.0007,.1159, .5833, .5833, .5821,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, .6107,.0118,1.925, .6209, .6134, .5979,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8392.9,14.773,.17602,8408.3,8378.9,8391.6
 Y2A,371.030 { 91}2,Cts/S, 257740.,1608.1,.62391,259550.,256470.,257210.
 Y2R,371.030 { 91}3,Cts/S, 18092.,134.00,.74067,17994.,18037.,18245.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:21:32
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0004,.0003,90.93, -.0000, .0005, .0006,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, -.0089,.0009,10.61, -.0079, -.0092, -.0097,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.0395,.0110,27.87, -.0426, -.0273, -.0486,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0081,.0025,31.44, .0065, .0110, .0067,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0009,.0008,93.75, .0015, .0012, -.0001,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0001,.0000,22.86, .0001, .0001, .0001,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00010,.00001,13.021, -.00012, -.00009, -.00010,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, .0061,.0044,71.41, .0026, .0110, .0048,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0004,.0001,28.47, .0005, .0004, .0003,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0003,.0000,13.71, .0003, .0004, .0003,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, -.0002,.0002,100.8, -.0003, -.0000, -.0001,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0007,.0001,14.67, -.0007, -.0006, -.0008,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0083,.0034,40.47, .0122, .0064, .0063,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0034,.0352,1048., .0007, -.0404, .0297,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, -.0003,.0010,286.5, -.0009, .0008, -.0009,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, -.0022,.0017,76.09, -.0004, -.0025, -.0037,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00016,.00004,25.131, .00015, .00021, .00013,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0023,.0004,19.02, .0024, .0027, .0018,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, -.0026,.0061,237.8, -.0093, .0025, -.0009,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0003,.0006,191.9, -.0003, .0009, .0004,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.0005,.0016,296.6, .0007, -.0024, .0000,Chk Pass,,

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Pb,220.353 {453},Y1,ppm, -.0001,.0022,3552., -.0023, -.0001, .0022,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0051,.0034,65.35, .0064, .0076, .0013,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0002,.0006,269.9, .0004, -.0008, -.0003,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.0002,.0030,1545., .0006, .0024, -.0035,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .00566,.00198,34.912, .00544, .00774, .00381,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0012,.0009,78.72, .0019, .0001, .0014,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000,.0000,50.92, .0001, .0000, .0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0179,.0186,104.1, .0242, .0325, -.0031,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0001,.0001,129.6, -.0001, .0000, -.0001,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0011,.0026,246.0, .0036, -.0016, .0011,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0013,.0002,18.07, -.0010, -.0013, -.0015,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0003,.0005,147.9, -.0002, .0007, .0006,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0008,.0001,17.24, .0007, .0009, .0007,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0017,.0019,109.1, -.0011, -.0038, -.0002,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8641.0,7.2872,.08433,8647.4,8633.1,8642.6
 Y2A,371.030 { 91}2,Cts/S, 267540.,3533.0,1.3205,267150.,264220.,271250.
 Y2R,371.030 { 91}3,Cts/S, 17986.,110.51,.61439,18113.,17910.,17936.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CRI 058707
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:24:41
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0098,.0002,2.122, .0100, .0097, .0097,Chk Pass,,
 Al,um Ax,308.215 {109},Y2A,ppm, .1819,.0048,2.649, .1764, .1854, .1838,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, .1822,.0106,5.844, .1809, .1934, .1723,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0359,.0016,4.372, .0358, .0376, .0344,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0294,.0008,2.751, .0284, .0297, .0299,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0052,.0001,1.904, .0051, .0052, .0052,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .00491,.00007,1.4764, .00483, .00496, .00495,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .2043,.0044,2.137, .2089, .2003, .2036,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0056,.0001,2.149, .0056, .0054, .0057,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0057,.0005,8.862, .0056, .0052, .0062,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0151,.0002,1.282, .0149, .0153, .0150,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .0223,.0006,2.547, .0216, .0225, .0227,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .2034,.0052,2.550, .1979, .2082, .2042,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .3202,.0423,13.20, .3459, .3432, .2714,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0492,.0018,3.708, .0513, .0480, .0484,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .1004,.0014,1.395, .1020, .0999, .0993,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .01027,.00016,1.5280, .01010, .01041, .01030,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0108,.0004,3.318, .0108, .0105, .0112,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .9968,.0005,.0527, .9971, .9970, .9962,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0106,.0004,3.387, .0109, .0107, .0102,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0985,.0030,3.084, .0971, .1020, .0964,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .0137,.0018,13.00, .0117, .0141, .0152,Chk Pass,,
 S,182.034 {485},Y1,ppm, .5003,.0069,1.385, .4931, .5010, .5069,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0523,.0014,2.603, .0511, .0538, .0519,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0524,.0013,2.566, .0539, .0520, .0513,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .50670,.00899,1.7739, .51594, .49798, .50617,Chk Pass,,

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Sn,189.989 {477},Y1,ppm, .0500,.0016,3.107, .0516, .0485, .0498,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0052,.0001,1.427, .0051, .0052, .0052,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .4875,.0105,2.159, .4766, .4884, .4976,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0100,.0003,2.511, .0098, .0102, .0099,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0325,.0013,3.989, .0325, .0312, .0338,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .0098,.0004,3.787, .0099, .0093, .0100,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0312,.0005,1.713, .0318, .0309, .0310,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0202,.0001,.4781, .0202, .0203, .0201,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm,W .0269,.0020,7.596, .0292, .0263, .0253,Chk
 Warn,.0500,-20.00%

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 8654.4,11.540,.13335,8643.6,8653.1,8666.6
 Y2A,371.030 { 91}2,Cts/s, 267750.,3440.4,1.2849,271660.,266390.,265200.
 Y2R,371.030 { 91}3,Cts/s, 18050.,32.051,.17757,18021.,18044.,18085.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICSA 078287
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:27:48
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0011,.0011,95.12, .0022, .0011, .0001,Chk Pass,,
 Alum Ax,308.215 {109},Y2A,ppm, 468.2,1.571, .3356, 469.2, 469.1, 466.4,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 476.1, .2273, .0477, 476.2, 475.9, 476.3,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0099,.0043,43.75, .0091, .0145, .0060,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0299,.0010,3.413, -.0293, -.0294, -.0311,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0020,.0000,.5872, .0020, .0020, .0020,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00030,.00001,4.5491, -.00029, -.00032, -.00030,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, 482.9,1.393, .2886, 482.9, 481.4, 484.2,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, -.0002,.0005,234.1, .0003, -.0007, -.0002,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0012,.0010,76.68, .0023, .0006, .0008,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0018,.0002,13.21, .0015, .0019, .0020,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0051,.0004,7.293, -.0056, -.0048, -.0050,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 187.0, .2020, .1080, 186.8, 187.2, 186.9,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, .0098,.0741,753.6, .0153, -.0669, .0811,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0117,.0013,10.73, .0114, .0130, .0105,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm,W 442.5,1.677, .3790, 440.9, 442.3, 444.3,Chk
 Warn,550.0,450.0
 Mn,257.610 {131},Y2A,ppm, .00089,.00023,25.424, .00114, .00082, .00071,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0017,.0010,57.98, .0027, .0008, .0015,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0572,.0119,20.73, .0537, .0704, .0475,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0028,.0013,46.91, .0043, .0017, .0024,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0054,.0039,72.35, .0014, .0092, .0057,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0041,.0045,108.7, -.0033, -.0001, -.0090,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0070,.0116,165.8, .0061, -.0110, -.0161,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, -.0035,.0011,30.55, -.0023, -.0044, -.0037,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .0094,.0021,22.15, .0103, .0070, .0108,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, .01982,.00634,31.959, .01681, .02710, .01556,Chk Pass,,
 Sn,189.989 {477},Y1,ppm, .0061,.0006,10.20, .0054, .0065, .0065,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0044,.0000,.2140, .0044, .0044, .0044,Chk Pass,,

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Th,283.730 {119},Y2R,ppm, .1254,.0083,6.580, .1313, .1290, .1160,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0076,.0003,3.879, -.0074, -.0080, -.0075,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0107,.0019,17.56, .0116, .0085, .0118,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0042,.0002,5.548, -.0044, -.0041, -.0040,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0008,.0014,169.8, .0023, .0006, -.0005,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, -.0173,.0007,4.232, -.0166, -.0174, -.0180,Chk Pass,,
 Zr,339.198 {99},Y2R,ppm, -.0046,.0010,20.76, -.0052, -.0051, -.0035,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/s, 7742.2,33.061,.42702,7757.1,7704.3,7765.2
 Y2A,371.030 {91}2,Cts/s, 233650.,374.21,.16016,233810.,233220.,233920.
 Y2R,371.030 {91}3,Cts/s, 17448.,111.77,.64059,17577.,17383.,17384.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=ICSAB 070731
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:31:19
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .2132,.0006,.2832, .2134, .2137, .2126,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, 481.3,2.612,.5428, 484.3, 479.5, 480.0,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 490.7,1.313,.2675, 492.2, 489.9, 490.0,Chk Pass,,
 As,189.042 {478},Y1,ppm, .1071,.0045,4.207, .1105, .1088, .1020,Chk Pass,,
 B,249.773 {135},Y2A,ppm, -.0343,.0015,4.260, -.0348, -.0355, -.0327,Chk Pass,,
 Ba,455.403 {74},Y2A,ppm, .5058,.0010,.2060, .5062, .5046, .5066,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, .48982,.00263,.53593, .49253, .48964, .48729,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, 500.4,5.707,1.141, 506.5, 495.2, 499.4,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .9041,.0102,1.130, .9125, .9069, .8927,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .4563,.0044,.9576, .4592, .4585, .4513,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .4770,.0019,.4022, .4783, .4779, .4748,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, .5279,.0032,.6143, .5314, .5272, .5251,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, 193.3,.5978,.3092, 194.0, 192.9, 193.1,Chk Pass,,
 K,766.490 {44},Y2R,ppm, .0069,.0311,452.8, .0279, .0215, -.0288,Chk Pass,,
 Li,670.784 {50},Y2R,ppm, .0108,.0007,6.774, .0105, .0102, .0116,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, 459.6,5.506,1.198, 465.5, 454.6, 458.7,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .48265,.00307,.63647, .48609, .48164, .48020,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0018,.0008,47.60, .0024, .0008, .0020,Chk Pass,,
 Na,589.592 {57},Y2R,ppm, .0692,.0130,18.83, .0843, .0610, .0625,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, .9041,.0076,.8438, .9103, .9065, .8956,Chk Pass,,
 P,177.495 {490},Y1,ppm, .0100,.0028,28.01, .0128, .0072, .0100,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, .5014,.0067,1.338, .5052, .5053, .4936,Chk Pass,,
 S,182.034 {485},Y1,ppm, -.0131,.0082,63.03, -.0221, -.0060, -.0111,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .6223,.0060,.9633, .6212, .6288, .6170,Chk Pass,,
 Se,196.090 {472},Y1,ppm, .5057,.0026,.5237, .5043, .5088, .5042,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, F .01544,.00213,13.763, .01452, .01787, .01394,Chk
 Fail,1.0000,1.0000
 Sn,189.989 {477},Y1,ppm, .0080,.0012,15.28, .0075, .0094, .0071,Chk Pass,,
 Sr,421.552 {80},Y2A,ppm, .0045,.0000,.5889, .0046, .0045, .0045,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .1390,.0087,6.255, .1289, .1441, .1439,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0076,.0001,1.278, -.0075, -.0077, -.0077,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0902,.0085,9.380, .0999, .0865, .0842,Chk Pass,,
 V,292.402 {115},Y2A,ppm, .5012,.0017,.3421, .5018, .5025, .4992,Chk Pass,,

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w,207.911 {462},Y1,ppm,F -.0010,.0009,90.42, -.0004, -.0006, -.0021,Chk
Fail,-.0600,-.0600
Zn,213.856 {458},Y1,ppm, .9375,.0113,1.207, .9457, .9422, .9246,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.0068,.0018,26.88, -.0048, -.0084, -.0072,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/s, 7715.2,31.682,.41065,7697.9,7696.0,7751.8
Y2A,371.030 { 91}2,Cts/s, 232860.,746.51,.32058,232000.,233330.,233250.
Y2R,371.030 { 91}3,Cts/s, 17163.,76.029,.44298,17075.,17211.,17203.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=CCV 095153
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 10:34:48
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .4946,.0011,.2262, .4941, .4958, .4937,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, 24.42,.0696,.2850, 24.47, 24.34, 24.45,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, 24.75,.0502,.2026, 24.72, 24.81, 24.72,Chk Pass,,
As,189.042 {478},Y1,ppm, .4964,.0046,.9185, .4993, .4987, .4911,Chk Pass,,
Ba,249.773 {135},Y2A,ppm, .4805,.0008,.1687, .4814, .4800, .4800,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .4977,.0034,.6765, .5015, .4951, .4965,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .48685,.00086,.17677, .48682, .48600, .48772,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 24.92,.1368,.5490, 24.79, 25.06, 24.91,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .4934,.0061,1.233, .4977, .4960, .4864,Chk Pass,,
Co,228.616 {447},Y1,ppm, .4941,.0062,1.255, .4985, .4967, .4870,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .4881,.0005,.0995, .4887, .4879, .4879,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .5017,.0025,.4921, .5016, .4992, .5042,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 24.87,.0510,.2051, 24.90, 24.91, 24.82,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 24.94,.1585,.6358, 24.81, 25.11, 24.88,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .4961,.0040,.8036, .4918, .4996, .4969,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 24.70,.0994,.4024, 24.65, 24.82, 24.64,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .49437,.00219,.44239, .49612, .49192, .49508,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .4975,.0074,1.486, .5037, .4994, .4893,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 24.57,.0321,.1307, 24.53, 24.60, 24.57,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .4936,.0051,1.032, .4972, .4957, .4877,Chk Pass,,
P,177.495 {490},Y1,ppm, .4942,.0075,1.520, .4978, .4992, .4856,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .4916,.0078,1.592, .4993, .4917, .4837,Chk Pass,,
S,182.034 {485},Y1,ppm, 23.97,.2608,1.088, 24.14, 24.10, 23.67,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .4900,.0065,1.319, .4920, .4952, .4827,Chk Pass,,
Se,196.090 {472},Y1,ppm, .4946,.0061,1.230, .4951, .5004, .4883,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 24.789,.06528,.26335, 24.737, 24.862, 24.767,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .4868,.0055,1.134, .4886, .4913, .4807,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .5011,.0022,.4432, .5037, .4998, .4998,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .5372,.0058,1.074, .5335, .5439, .5343,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .5028,.0019,.3685, .5034, .5007, .5042,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .4888,.0113,2.315, .4976, .4928, .4760,Chk Pass,,
V,292.402 {115},Y2A,ppm, .5019,.0009,.1808, .5009, .5027, .5021,Chk Pass,,
w,207.911 {462},Y1,ppm, .5021,.0068,1.363, .5057, .5064, .4942,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .4854,.0056,1.153, .4890, .4882, .4789,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .5186,.0028,.5318, .5210, .5156, .5191,Chk Pass,,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8591.4,71.220,.82896,8543.5,8557.5,8673.3
 Y2A,371.030 { 91}2,Cts/S, 259070.,363.54,.14032,258650.,259320.,259240.
 Y2R,371.030 { 91}3,Cts/S, 17916.,49.227,.27476,17962.,17864.,17922.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCB 078331
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:37:57
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0005,.0006,113.4, .0007, -.0001, .0011,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, -.0047,.0013,27.42, -.0041, -.0061, -.0037,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, -.0389,.0105,26.87, -.0510, -.0334, -.0324,Chk Pass,,
 As,189.042 {478},Y1,ppm, .0042,.0003,7.704, .0038, .0044, .0043,Chk Pass,,
 B,249.773 {135},Y2A,ppm, .0001,.0003,294.3, -.0002, .0003, .0002,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, .0000,.0000,11.71, .0001, .0000, .0000,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, -.00011,.00001,5.6078, -.00010, -.00011, -.00011,Chk
 Pass,,
 Ca,317.933 {106},Y2R,ppm, .0122,.0033,26.86, .0087, .0153, .0127,Chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0002,.0001,60.69, .0003, .0001, .0002,Chk Pass,,
 Co,228.616 {447},Y1,ppm, .0002,.0005,204.0, .0004, -.0003, .0006,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0001,.0003,578.5, -.0001, .0004, -.0002,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0004,.0003,64.65, -.0001, -.0006, -.0006,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0045,.0051,113.4, -.0014, .0072, .0078,Chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0143,.0155,108.2, -.0296, .0015, -.0149,Chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0001,.0013,897.9, .0017, -.0007, -.0005,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0016,.0004,28.00, .0015, .0020, .0012,Chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00011,.00002,22.778, .00013, .00011, .00008,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0021,.0001,7.152, .0021, .0022, .0019,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0039,.0058,147.2, .0104, .0023, -.0009,Chk Pass,,
 Ni,231.604 {445},Y1,ppm, -.0000,.0004,1552., .0004, -.0002, -.0003,Chk Pass,,
 P,177.495 {490},Y1,ppm, -.0012,.0034,295.0, -.0050, .0014, .0002,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0001,.0008,572.5, -.0011, .0004, .0002,Chk Pass,,
 S,182.034 {485},Y1,ppm, .0000,.0028,12460., .0028, -.0027, .0000,Chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0008,.0026,345.4, -.0014, .0000, .0037,Chk Pass,,
 Se,196.090 {472},Y1,ppm, -.0001,.0043,4125., .0027, .0021, -.0050,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, -.00689,.00090,13.131, -.00682, -.00602, -.00783,Chk
 Pass,,
 Sn,189.989 {477},Y1,ppm, .0011,.0005,49.83, .0014, .0005, .0013,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0000,.0000,56.95, .0001, .0000, .0000,Chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0095,.0134,140.2, -.0048, .0117, .0217,Chk Pass,,
 Ti,334.941 {101},Y2A,ppm, .0000,.0001,236.6, .0001, .0000, -.0000,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0030,.0017,54.40, .0049, .0017, .0026,Chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0014,.0003,19.74, -.0017, -.0013, -.0011,Chk Pass,,
 W,207.911 {462},Y1,ppm, .0001,.0003,296.8, .0004, -.0002, .0001,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0007,.0002,24.89, .0007, .0008, .0005,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0012,.0005,43.58, -.0014, -.0006, -.0016,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8657.3,18.406,.21260,8673.9,8637.5,8660.4

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Y2A,371.030 { 91}2,Cts/S, 267070.,2452.9,.91847,269030.,267850.,264320.
 Y2R,371.030 { 91}3,Cts/S, 17979.,134.74,.74941,17898.,18134.,17904.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=LRC 083291
 Username=dept 22
 Comment=LRS2
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:41:06
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm,F 2.689,.0048,.1798, 2.683, 2.690, 2.693,Chk
 Fail,5.000,-10.00%
 Alum Ax,308.215 {109},Y2A,ppm, .0385,.0086,22.39, .0408, .0290, .0458,None,,
 Al,308.215 {109}2,Y2R,ppm, .2269,.0135,5.965, .2296, .2123, .2389,None,,
 As,189.042 {478},Y1,ppm, 18.88,.5868,3.107, 19.29, 19.14, 18.21,Chk Pass,,
 B,249.773 {135},Y2A,ppm, 4.776,.0157,.3294, 4.758, 4.785, 4.786,Chk Pass,,
 Ba,455.403 { 74},Y2A,ppm, 4.746,.0131,.2762, 4.745, 4.734, 4.760,Chk Pass,,
 Be,313.042 {108},Y2A,ppm, 4.6954,.02735,.58246, 4.6887, 4.6720, 4.7255,Chk Pass,,
 Ca,317.933 {106},Y2R,ppm, .0618,.0013,2.142, .0622, .0604, .0629,None,,
 Cd,226.502 {449},Y1,ppm, 19.13,.6286,3.286, 19.58, 19.40, 18.41,Chk Pass,,
 Co,228.616 {447},Y1,ppm, 20.19,.6689,3.313, 20.68, 20.46, 19.42,Chk Pass,,
 Cr,267.716 {126},Y2A,ppm, 19.46,.0279,.1434, 19.44, 19.44, 19.49,Chk Pass,,
 Cu,327.396 {103},Y2A,ppm, 20.18,.0879,.4355, 20.13, 20.13, 20.29,Chk Pass,,
 Fe,261.187 {129},Y2R,ppm, -.0646,.0063,9.723, -.0688, -.0677, -.0574,None,,
 K,766.490 { 44},Y2R,ppm, .0045,.0091,202.4, -.0057, .0076, .0117,None,,
 Li,670.784 { 50},Y2R,ppm, 19.95,.0883,.4427, 19.88, 19.91, 20.05,Chk Pass,,
 Mg,285.213 {118},Y2R,ppm, -.0076,.0009,11.80, -.0086, -.0068, -.0075,None,,
 Mn,257.610 {131},Y2A,ppm, 18.577,.12392,.66704, 18.458, 18.569, 18.705,Chk Pass,,
 Mo,202.030 {467},Y1,ppm, 19.99,.6941,3.473, 20.52, 20.24, 19.20,Chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0866,.0101,11.66, .0802, .0983, .0814,None,,
 Ni,231.604 {445},Y1,ppm, 20.04,.6737,3.362, 20.52, 20.32, 19.27,Chk Pass,,
 P,177.495 {490},Y1,ppm, 19.14,.6079,3.176, 19.60, 19.37, 18.45,Chk Pass,,
 Pb,220.353 {453},Y1,ppm, 20.12,.5852,2.908, 20.54, 20.37, 19.45,Chk Pass,,
 S,182.034 {485},Y1,ppm, .2022,.0210,10.38, .2210, .2060, .1795,None,,
 Sb,206.833 {463},Y1,ppm, 20.48,.6379,3.115, 20.93, 20.75, 19.75,Chk Pass,,
 Se,196.090 {472},Y1,ppm, 19.12,.5597,2.928, 19.51, 19.36, 18.47,Chk Pass,,
 Si,251.611 {134},Y2R,ppm, 1.3906,.13878,9.9800, 1.2403, 1.4176, 1.5139,None,,
 Sn,189.989 {477},Y1,ppm, 19.59,.6504,3.319, 20.08, 19.85, 18.85,Chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, 4.622,.0371,.8021, 4.605, 4.597, 4.665,Chk Pass,,
 Th,283.730 {119},Y2R,ppm,F 2.468,.0210,.8512, 2.482, 2.444, 2.477,Chk
 Fail,20.00,-10.00%
 Ti,334.941 {101},Y2A,ppm, 19.36,.1625,.8393, 19.35, 19.20, 19.52,Chk Pass,,
 Tl,190.856 {477},Y1,ppm, 20.18,.5284,2.618, 20.55, 20.43, 19.58,Chk Pass,,
 V,292.402 {115},Y2A,ppm, 20.37,.0343,.1684, 20.33, 20.39, 20.40,Chk Pass,,
 W,207.911 {462},Y1,ppm, 20.22,.6862,3.394, 20.73, 20.49, 19.44,Chk Pass,,
 Zn,213.856 {458},Y1,ppm, 9.069,.3002,3.311, 9.282, 9.198, 8.725,Chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, 21.84,.0445,.2036, 21.80, 21.88, 21.83,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
 Y1,224.306 {450},Cts/S, 8377.7,174.84,2.0869,8266.8,8287.1,8579.3
 Y2A,371.030 { 91}2,Cts/S, 260090.,1843.4,.70875,261150.,261150.,257960.
 Y2R,371.030 { 91}3,Cts/S, 18087.,106.51,.58886,18193.,18089.,17980.

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[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=LRC 083294
 Username=dept 22
 Comment=LRS4
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:44:42
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0085	.0068	80.35	.0049	.0042	.0163	None		
Alum Ax	308.215	{109}	Y2A, ppm	493.9	5.338	1.081	496.2	497.7	487.8	Chk Pass		
Al	308.215	{109}2	Y2R, ppm	500.8	.9646	.1926	500.4	501.8	500.0	Chk Pass		
As	189.042	{478}	Y1, ppm	.0108	.0053	48.85	.0103	.0162	.0058	None		
B	249.773	{135}	Y2A, ppm	-.0435	.0023	5.319	-.0408	-.0448	-.0448	None		
Ba	455.403	{74}	Y2A, ppm	.0020	.0000	1.713	.0021	.0020	.0020	None		
Be	313.042	{108}	Y2A, ppm	-.00017	.00002	12.637	-.00015	-.00017	-.00020	None		
Ca	317.933	{106}	Y2R, ppm	492.4	5.051	1.026	487.7	497.7	491.8	Chk Pass		
Cd	226.502	{449}	Y1, ppm	-.0000	.0011	256300.	.0009	.0003	-.0013	None		
Co	228.616	{447}	Y1, ppm	.0011	.0003	29.05	.0012	.0008	.0015	None		
Cr	267.716	{126}	Y2A, ppm	.0005	.0005	105.1	-.0000	.0005	.0010	None		
Cu	327.396	{103}	Y2A, ppm	-.0130	.0010	8.042	-.0126	-.0122	-.0142	None		
Fe	261.187	{129}	Y2R, ppm	299.6	.9254	.3089	299.7	300.4	298.6	Chk Pass		
K	766.490	{44}	Y2R, ppm	507.8	2.675	.5267	508.7	510.0	504.8	Chk Pass		
Li	670.784	{50}	Y2R, ppm	.0158	.0008	4.815	.0165	.0150	.0159	None		
Mg	285.213	{118}	Y2R, ppm	F 438.9	5.804	1.322	432.6	444.0	440.1	Chk		
Fail	500.0									-10.00%		
Mn	257.610	{131}	Y2A, ppm	-.01380	.00012	.84089	-.01371	-.01393	-.01376	None		
Mo	202.030	{467}	Y1, ppm	.1193	.0012	1.005	.1207	.1184	.1189	None		
Na	589.592	{57}	Y2R, ppm	479.7	5.988	1.248	477.3	486.5	475.2	Chk Pass		
Ni	231.604	{445}	Y1, ppm	-.0001	.0006	822.8	-.0007	.0003	.0002	None		
P	177.495	{490}	Y1, ppm	.0094	.0062	66.03	.0023	.0138	.0122	None		
Pb	220.353	{453}	Y1, ppm	.0030	.0006	19.97	.0036	.0031	.0024	None		
S	182.034	{485}	Y1, ppm	198.2	5.064	2.555	201.9	200.3	192.4	Chk Pass		
Sb	206.833	{463}	Y1, ppm	.0025	.0047	187.0	-.0007	.0079	.0003	None		
Se	196.090	{472}	Y1, ppm	.0101	.0072	71.51	.0166	.0113	.0024	None		
Si	251.611	{134}	Y2R, ppm	191.38	.72735	.38006	190.79	192.19	191.15	Chk Pass		
Sn	189.989	{477}	Y1, ppm	.0127	.0013	10.10	.0134	.0135	.0112	None		
Sr	421.552	{80}	Y2A, ppm	.0138	.0001	.6950	.0139	.0137	.0138	None		
Th	283.730	{119}	Y2R, ppm	.2206	.0131	5.937	.2062	.2237	.2318	None		
Ti	334.941	{101}	Y2A, ppm	.0118	.0003	2.311	.0121	.0118	.0115	None		
Tl	190.856	{477}	Y1, ppm	.0084	.0032	38.47	.0113	.0089	.0049	None		
V	292.402	{115}	Y2A, ppm	-.0036	.0006	15.61	-.0041	-.0030	-.0037	None		
W	207.911	{462}	Y1, ppm	.0438	.0011	2.475	.0427	.0449	.0439	None		
Zn	213.856	{458}	Y1, ppm	-.0553	.0011	2.046	-.0544	-.0550	-.0566	None		
Zr	339.198	{99}	Y2R, ppm	.0092	.0038	40.91	.0061	.0082	.0134	None		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	7494.0	123.70	1.6506	7436.1	7409.9
Y2A	371.030	{91}2	Cts/S	226040.	1004.2	.44427	225180.	225800.
Y2R	371.030	{91}3	Cts/S	17105.	161.15	.94212	17269.	16947.

[Sample Header]
 Method=New TRACE Fast(v1493)
 SampleName=LRC 083293
 Username=dept 22

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Comment=LRS3
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:48:19
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	2.491	.0066	.2638	2.499	2.487	2.487	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A, ppm	.0224	.0049	21.87	.0169	.0241	.0263	None,,		
Al	308.215	{109}	2, Y2R, ppm	.2027	.0321	15.84	.2350	.1708	.2023	None,,		
As	189.042	{478}	Y1, ppm	9.719	.1096	1.127	9.832	9.712	9.613	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	2.395	.0078	.3262	2.404	2.389	2.394	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	2.477	.0136	.5475	2.484	2.461	2.485	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	2.4387	.00206	.08458	2.4394	2.4364	2.4403	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	.1064	.0031	2.941	.1099	.1056	.1038	None,,		
Cd	226.502	{449}	Y1, ppm	10.04	.1350	1.345	10.17	10.04	9.899	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	10.47	.1399	1.337	10.60	10.47	10.32	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	9.852	.0555	.5630	9.915	9.811	9.829	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	10.20	.0476	.4666	10.25	10.15	10.19	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	-.0047	.0051	108.6	-.0097	.0005	-.0050	None,,		
K	766.490	{44}	Y2R, ppm	.2765	.0144	5.204	.2835	.2860	.2599	None,,		
Li	670.784	{50}	Y2R, ppm	9.945	.0275	.2761	9.949	9.916	9.971	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	-.0079	.0016	20.07	-.0092	-.0061	-.0083	None,,		
Mn	257.610	{131}	Y2A, ppm	9.8408	.06383	.64866	9.9130	9.8180	9.7916	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	10.18	.1617	1.588	10.34	10.18	10.01	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	.1856	.0148	7.995	.2027	.1776	.1765	None,,		
Ni	231.604	{445}	Y1, ppm	10.38	.1461	1.407	10.53	10.39	10.24	Chk Pass,,		
P	177.495	{490}	Y1, ppm	9.891	.1387	1.402	10.03	9.897	9.750	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	10.43	.1138	1.090	10.54	10.44	10.32	Chk Pass,,		
S	182.034	{485}	Y1, ppm	.1125	.0016	1.433	.1132	.1135	.1106	None,,		
Sb	206.833	{463}	Y1, ppm	10.44	.1537	1.472	10.60	10.45	10.29	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	10.04	.1338	1.333	10.18	10.01	9.914	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	1.3734	.05657	4.1189	1.3261	1.3581	1.4361	None,,		
Sn	189.989	{477}	Y1, ppm	10.14	.1513	1.491	10.29	10.15	9.991	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	2.413	.0046	.1895	2.408	2.416	2.414	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	F 8.892	.0393	.4422	8.934	8.855	8.889	Chk		
Fail	10.00			-10.00%								
Ti	334.941	{101}	Y2A, ppm	9.883	.0537	.5436	9.876	9.833	9.940	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	10.51	.1037	.9868	10.62	10.51	10.41	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	10.25	.0425	.4143	10.30	10.23	10.23	Chk Pass,,		
W	207.911	{462}	Y1, ppm	10.22	.1491	1.458	10.37	10.23	10.07	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	4.830	.0658	1.362	4.894	4.835	4.763	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	10.59	.0160	.1515	10.59	10.58	10.61	Chk Pass,,		

[Internal standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/S	8336.7	38.510	.46193	8294.9	8344.2
Y2A	371.030	{91}	2, Cts/S	261290	.785.67	.30069	260890	.262200
Y2R	371.030	{91}	3, Cts/S	18043	.68.475	.37952	18065	.18097

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=LRC 083311
 Username=dept 22
 Comment=LRS5
 Custom ID1=
 Custom ID2=
 Custom ID3=

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Run Time=6/12/2020 10:51:46
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0015	.0005	33.87	.0010	.0020	.0013	None,,		
Alum Ax	308.215	{109}	Y2A, ppm	256.7	1.997	.7781	254.9	258.8	256.3	Chk Pass,,		
Al	308.215	{109}2	Y2R, ppm	252.6	.8075	.3197	251.7	253.1	253.0	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.0110	.0025	22.97	.0113	.0083	.0133	None,,		
B	249.773	{135}	Y2A, ppm	-.0109	.0012	11.13	-.0115	-.0095	-.0116	None,,		
Ba	455.403	{74}	Y2A, ppm	.0009	.0000	1.119	.0009	.0010	.0009	None,,		
Be	313.042	{108}	Y2A, ppm	-.00020	.00002	11.935	-.00017	-.00020	-.00021	None,,		
Ca	317.933	{106}	Y2R, ppm	248.9	.8948	.3595	248.0	249.0	249.8	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	-.0002	.0005	221.6	.0004	-.0005	-.0006	None,,		
Co	228.616	{447}	Y1, ppm	.0005	.0004	80.25	.0002	.0009	.0003	None,,		
Cr	267.716	{126}	Y2A, ppm	.0003	.0003	136.9	.0000	.0007	.0001	None,,		
Cu	327.396	{103}	Y2A, ppm	-.0063	.0002	2.442	-.0062	-.0062	-.0065	None,,		
Fe	261.187	{129}	Y2R, ppm	149.4	.6078	.4068	148.7	149.7	149.8	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	254.7	1.163	.4565	253.5	254.9	255.8	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.0089	.0013	14.16	.0098	.0093	.0074	None,,		
Mg	285.213	{118}	Y2R, ppm	241.2	1.655	.6862	239.8	240.8	243.1	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	-.00668	.00008	1.2061	-.00660	-.00667	-.00676	None,,		
Mo	202.030	{467}	Y1, ppm	.0855	.0021	2.448	.0880	.0842	.0845	None,,		
Na	589.592	{57}	Y2R, ppm	240.3	.3687	.1534	239.9	240.6	240.5	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	-.0011	.0009	78.31	-.0018	-.0001	-.0014	None,,		
P	177.495	{490}	Y1, ppm	.0040	.0035	88.17	.0027	.0080	.0013	None,,		
Pb	220.353	{453}	Y1, ppm	-.0014	.0021	149.1	-.0006	.0002	-.0038	None,,		
S	182.034	{485}	Y1, ppm	100.8	1.203	1.194	102.1	99.92	100.2	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.0065	.0022	34.72	.0062	.0088	.0044	None,,		
Se	196.090	{472}	Y1, ppm	.0104	.0027	25.53	.0086	.0092	.0135	None,,		
Si	251.611	{134}	Y2R, ppm	100.87	.35417	.35113	100.46	101.00	101.13	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.0067	.0013	19.24	.0079	.0068	.0053	None,,		
Sr	421.552	{80}	Y2A, ppm	.0070	.0000	2949	.0070	.0070	.0070	None,,		
Th	283.730	{119}	Y2R, ppm	.1306	.0057	4.386	.1293	.1368	.1256	None,,		
Ti	334.941	{101}	Y2A, ppm	.0080	.0003	4.083	.0077	.0083	.0078	None,,		
Tl	190.856	{477}	Y1, ppm	.0026	.0037	141.2	.0031	.0061	-.0013	None,,		
V	292.402	{115}	Y2A, ppm	-.0034	.0002	7.179	-.0037	-.0033	-.0033	None,,		
W	207.911	{462}	Y1, ppm	.0378	.0006	1.536	.0383	.0379	.0371	None,,		
Zn	213.856	{458}	Y1, ppm	-.0295	.0007	2.463	-.0287	-.0300	-.0298	None,,		
Zr	339.198	{99}	Y2R, ppm	.0143	.0035	24.66	.0120	.0125	.0184	None,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	
Y1	224.306	{450}	Cts/S	7877.6	50.838	.64535	7834.7	7933.8	7864.2
Y2A	371.030	{91}2	Cts/S	236200.	1478.3	.62588	236280.	234680.	237640.
Y2R	371.030	{91}3	Cts/S	17443.	104.10	.59681	17562.	17371.	17396.

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 10:55:15
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

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[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.4919	.0012	.2422	.4905	.4925	.4926	Chk Pass,,		
Alum Ax	308.215	{109}	Y2A, ppm	24.30	.0362	.1489	24.30	24.27	24.34	Chk Pass,,		
Al	308.215	{109}2	Y2R, ppm	24.77	.0589	.2378	24.73	24.84	24.73	Chk Pass,,		
As	189.042	{478}	Y1, ppm	.5021	.0020	.3926	.5043	.5007	.5011	Chk Pass,,		
B	249.773	{135}	Y2A, ppm	.4772	.0017	.3535	.4768	.4758	.4791	Chk Pass,,		
Ba	455.403	{74}	Y2A, ppm	.4903	.0016	.3338	.4885	.4917	.4906	Chk Pass,,		
Be	313.042	{108}	Y2A, ppm	.47939	.00150	.31346	.47960	.47780	.48079	Chk Pass,,		
Ca	317.933	{106}	Y2R, ppm	24.63	.0567	.2303	24.58	24.69	24.61	Chk Pass,,		
Cd	226.502	{449}	Y1, ppm	.4911	.0015	.3027	.4928	.4902	.4903	Chk Pass,,		
Co	228.616	{447}	Y1, ppm	.4947	.0026	.5176	.4966	.4956	.4918	Chk Pass,,		
Cr	267.716	{126}	Y2A, ppm	.4815	.0020	.4180	.4797	.4811	.4837	Chk Pass,,		
Cu	327.396	{103}	Y2A, ppm	.4938	.0038	.7658	.4932	.4903	.4978	Chk Pass,,		
Fe	261.187	{129}	Y2R, ppm	24.89	.0334	.1343	24.89	24.92	24.85	Chk Pass,,		
K	766.490	{44}	Y2R, ppm	24.87	.0899	.3614	24.76	24.93	24.90	Chk Pass,,		
Li	670.784	{50}	Y2R, ppm	.4926	.0025	.5092	.4909	.4914	.4955	Chk Pass,,		
Mg	285.213	{118}	Y2R, ppm	24.72	.0851	.3444	24.62	24.79	24.74	Chk Pass,,		
Mn	257.610	{131}	Y2A, ppm	.48554	.00284	.58487	.48679	.48229	.48753	Chk Pass,,		
Mo	202.030	{467}	Y1, ppm	.5065	.0030	.5866	.5092	.5071	.5033	Chk Pass,,		
Na	589.592	{57}	Y2R, ppm	24.20	.0307	.1268	24.22	24.21	24.16	Chk Pass,,		
Ni	231.604	{445}	Y1, ppm	.4938	.0017	.3410	.4957	.4924	.4933	Chk Pass,,		
P	177.495	{490}	Y1, ppm	.4899	.0012	.2488	.4885	.4907	.4904	Chk Pass,,		
Pb	220.353	{453}	Y1, ppm	.4979	.0034	.6761	.4979	.5013	.4945	Chk Pass,,		
S	182.034	{485}	Y1, ppm	23.89	.0162	.0680	23.89	23.91	23.88	Chk Pass,,		
Sb	206.833	{463}	Y1, ppm	.4906	.0015	.3027	.4890	.4910	.4919	Chk Pass,,		
Se	196.090	{472}	Y1, ppm	.4945	.0037	.7529	.4956	.4975	.4903	Chk Pass,,		
Si	251.611	{134}	Y2R, ppm	24.659	.04792	.19435	24.608	24.703	24.666	Chk Pass,,		
Sn	189.989	{477}	Y1, ppm	.4874	.0022	.4461	.4889	.4849	.4883	Chk Pass,,		
Sr	421.552	{80}	Y2A, ppm	.4878	.0026	.5269	.4894	.4892	.4849	Chk Pass,,		
Th	283.730	{119}	Y2R, ppm	.5216	.0180	3.446	.5415	.5169	.5065	Chk Pass,,		
Ti	334.941	{101}	Y2A, ppm	.4939	.0034	.6980	.4945	.4902	.4970	Chk Pass,,		
Tl	190.856	{477}	Y1, ppm	.4876	.0070	1.444	.4925	.4908	.4795	Chk Pass,,		
V	292.402	{115}	Y2A, ppm	.4966	.0024	.4808	.4944	.4992	.4963	Chk Pass,,		
W	207.911	{462}	Y1, ppm	.5038	.0029	.5752	.5065	.5008	.5040	Chk Pass,,		
Zn	213.856	{458}	Y1, ppm	.4840	.0003	.0681	.4844	.4839	.4838	Chk Pass,,		
Zr	339.198	{99}	Y2R, ppm	.5050	.0026	.5106	.5065	.5065	.5020	Chk Pass,,		

[Internal Standards]

Elem	WL	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3
Y1	224.306	{450}	Cts/s	8530.0	22.707	.26620	8544.9	8541.1
Y2A	371.030	{91}2	Cts/s	260500	.776.16	.29795	260550	261240
Y2R	371.030	{91}3	Cts/s	18032	.68.640	.38067	18093	17958

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=CCB 078331

Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 10:58:23
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem	WL	ISRef	Units	Avg	Stddev	RSD	Rep1	Rep2	Rep3	chk_Pass/Fail	chk_Low	chk_High
Ag	328.068	{103}	Y2A, ppm	.0004	.0002	54.48	.0002	.0007	.0004	Chk Pass,,		

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Alum Ax,308.215 {109},Y2A,ppm, -.0082,.0056,67.86, -.0146, -.0042, -.0059,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, -.0036,.0188,518.0, .0009, .0125, -.0243,Chk Pass,,
As,189.042 {478},Y1,ppm, .0063,.0044,69.93, .0012, .0092, .0085,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0026,.0002,8.613, .0028, .0025, .0024,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0001,.0000,36.20, .0000, .0001, .0001,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.00009,.00004,44.924, -.00011, -.00004, -.00011,Chk
Pass,,
Ca,317.933 {106},Y2R,ppm, .0064,.0029,45.99, .0074, .0031, .0086,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0004,.0001,33.43, .0005, .0003, .0004,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0000,.0001,1315., -.0001, -.0000, .0002,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0000,.0004,3004., -.0001, .0004, -.0003,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0002,.0005,239.7, .0003, -.0005, -.0004,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0115,.0065,56.70, .0109, .0183, .0053,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .1345,.0148,10.98, .1196, .1491, .1347,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .0011,.0020,179.7, .0021, .0025, -.0012,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, -.0023,.0006,23.84, -.0019, -.0022, -.0030,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00019,.00006,32.722, .00017, .00025, .00013,Chk Pass,,
Mo,202.030 {467},Y1,ppm,F .0060,.0010,16.28, .0049, .0067, .0065,chk
Fail,.0050,-.0050
Na,589.592 { 57},Y2R,ppm, .0437,.0100,22.78, .0551, .0387, .0372,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0003,.0004,140.8, .0005, .0006, -.0002,Chk Pass,,
P,177.495 {490},Y1,ppm, .0018,.0018,97.55, .0012, .0039, .0005,Chk Pass,,
Pb,220.353 {453},Y1,ppm, -.0010,.0031,305.7, -.0042, -.0008, .0019,Chk Pass,,
S,182.034 {485},Y1,ppm, .0058,.0038,64.44, .0047, .0100, .0028,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0010,.0013,125.6, .0019, .0016, -.0004,Chk Pass,,
Se,196.090 {472},Y1,ppm, -.0034,.0010,29.38, -.0044, -.0036, -.0024,Chk Pass,,
Si,251.611 {134},Y2R,ppm, .02578,.00763,29.594, .03351, .02556, .01826,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0009,.0009,92.03, .0017, .0011, -.0000,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0000,.0000,63.82, .0000, .0001, .0000,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0302,.0146,48.31, .0283, .0456, .0166,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .0001,.0001,193.6, -.0000, .0002, .0000,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0018,.0005,27.87, .0014, .0024, .0016,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.0012,.0002,13.35, -.0014, -.0010, -.0012,Chk Pass,,
W,207.911 {462},Y1,ppm, .0032,.0012,37.28, .0021, .0045, .0031,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0007,.0002,28.53, .0008, .0005, .0008,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.0023,.0013,54.91, -.0009, -.0029, -.0032,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 8629.7,12.779,.14809,8632.9,8640.5,8615.6
Y2A,371.030 { 91}2,Cts/S, 268500.,992.39,.36960,267350.,269060.,269080.
Y2R,371.030 { 91}3,Cts/S, 18142.,120.79,.66583,18035.,18273.,18117.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=MB 410-11136/1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 15:38:26
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0000318,.0004027,1265.481, -.000268, .0004896,
-.000126,None,,
Alum Ax,308.215 {109},Y2A,ppm, -.007257,.0025312,34.88021, -.008330, -.009075,
-.004366,None,,

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Al, 308.215 {109}2, Y2R, ppm, -.011073, .0156675, 141.4981, -.026711, .0046234,
 -.011130, None,,
 As, 189.042 {478}, Y1, ppm, .0083257, .0015089, 18.12318, .0094088, .0066022,
 .0089661, None,,
 B, 249.773 {135}, Y2A, ppm, -.000291, .0001953, 67.13503, -.000111, -.000262,
 -.000499, None,,
 Ba, 455.403 { 74}, Y2A, ppm, .0000316, .0000259, 81.97555, .0000324, .0000053,
 .0000571, None,,
 Be, 313.042 {108}, Y2A, ppm, -.000113, .0000058, 5.128740, -.000108, -.000113,
 -.000119, None,,
 Ca, 317.933 {106}, Y2R, ppm, -.005782, .0007423, 12.83732, -.006510, -.005026,
 -.005810, None,,
 Cd, 226.502 {449}, Y1, ppm, .0003322, .0001353, 40.74725, .0001759, .0004131,
 .0004074, None,,
 Co, 228.616 {447}, Y1, ppm, .0001977, .0002940, 148.7565, .0004457, .0002744,
 -.000127, None,,
 Cr, 267.716 {126}, Y2A, ppm, .0002421, .0002229, 92.04731, .0004766, .0002166,
 .0000331, None,,
 Cu, 327.396 {103}, Y2A, ppm, -.000218, .0005471, 251.4451, .0003412, -.000752,
 -.000242, None,,
 Fe, 261.187 {129}, Y2R, ppm, .0011617, .0049369, 424.9728, .0026340, .0051950,
 -.004344, None,,
 K, 766.490 { 44}, Y2R, ppm, -.022878, .0075350, 32.93567, -.016132, -.031009,
 -.021493, None,,
 Li, 670.784 { 50}, Y2R, ppm, -.000599, .0025337, 423.1862, .0012916, -.003478,
 .0003900, None,,
 Mg, 285.213 {118}, Y2R, ppm, -.002082, .0025155, 120.8069, -.000017, -.004884,
 -.001346, None,,
 Mn, 257.610 {131}, Y2A, ppm, .0000532, .0000167, 31.43768, .0000713, .0000499,
 .0000383, None,,
 Mo, 202.030 {467}, Y1, ppm, -.000105, .0002127, 202.4506, -.000345, -.000031,
 .0000604, None,,
 Na, 589.592 { 57}, Y2R, ppm, .0373582, .0049264, 13.18693, .0429203, .0356095,
 .0335447, None,,
 Ni, 231.604 {445}, Y1, ppm, .0001406, .0002808, 199.6987, .0003917, .0001926,
 -.000163, None,,
 P, 177.495 {490}, Y1, ppm, .0001795, .0016514, 920.0586, .0008060, -.001693,
 .0014259, None,,
 Pb, 220.353 {453}, Y1, ppm, -.001764, .0019721, 111.8144, -.003289, -.002465,
 .0004631, None,,
 S, 182.034 {485}, Y1, ppm, .0069205, .0027581, 39.85435, .0084182, .0037375,
 .0086057, None,,
 Sb, 206.833 {463}, Y1, ppm, -.002438, .0019805, 81.22062, -.004702, -.001587,
 -.001026, None,,
 Se, 196.090 {472}, Y1, ppm, .0014574, .0025735, 176.5757, -.001349, .0037065,
 .0020148, None,,
 Si, 251.611 {134}, Y2R, ppm, -.005869, .0036155, 61.60294, -.003415, -.004171,
 -.010021, None,,
 Sn, 189.989 {477}, Y1, ppm, -.000267, .0003680, 137.6758, -.000652, -.000232,
 .0000817, None,,
 Sr, 421.552 { 80}, Y2A, ppm, .0000199, .0000200, 100.4598, .0000306, .0000323,
 -.000003, None,,
 Th, 283.730 {119}, Y2R, ppm, .0026331, .0102500, 389.2770, .0027495, .0128243,
 -.007675, None,,
 Ti, 334.941 {101}, Y2A, ppm, .0002831, .0001576, 55.67879, .0004500, .0002625,
 .0001368, None,,
 Tl, 190.856 {477}, Y1, ppm, .0016641, .0024326, 146.1846, .0041562, .0015402,
 -.000704, None,,
 V, 292.402 {115}, Y2A, ppm, -.001185, .0002301, 19.40567, -.000937, -.001228,
 -.001391, None,,
 W, 207.911 {462}, Y1, ppm, -.000334, .0005579, 166.8849, -.000924, -.000263,
 .0001847, None,,
 Zn, 213.856 {458}, Y1, ppm, -.000156, .0001929, 123.6409, -.000367, -.000112,

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.0000111,None,,
 Zr,339.198 { 99},Y2R,ppm, .0000624,.0018460,2956.633, -.001098, -.000906,
 .0021911,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8896.057,34.52660,.3881113,8934.815,8868.588,8884.769,None,,
 Y2A,371.030 { 91}2,Cts/S,
 275407.0,3743.188,1.359148,278071.3,277022.3,271127.4,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18599.58,119.6446,.6432650,18737.59,18525.14,18536.02,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=LCS 410-11136/2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 15:41:43
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0151151,.0003077,2.035355, .0149810, .0154670,
 .0148973,None,,
 Al,308.215 {109},Y2A,ppm, .3656956,.0038148,1.043172, .3630719, .3639432,
 .3700718,None,,
 Al,308.215 {109}2,Y2R,ppm, .3595481,.0284725,7.918955, .3266711, .3760659,
 .3759074,None,,
 As,189.042 {478},Y1,ppm, .0680295,.0018758,2.757398, .0681787, .0698262,
 .0660835,None,,
 B,249.773 {135},Y2A,ppm, .0554428,.0004050,.7304827, .0550406, .0558505,
 .0554373,None,,
 Ba,455.403 { 74},Y2A,ppm, .0100112,.0000275,.2742761, .0099799, .0100313,
 .0100224,None,,
 Be,313.042 {108},Y2A,ppm, .0095676,.0000332,.3467048, .0095356, .0096019,
 .0095653,None,,
 Ca,317.933 {106},Y2R,ppm, .3897308,.0015550,.3989846, .3908243, .3904173,
 .3879507,None,,
 Cd,226.502 {449},Y1,ppm, .0106630,.0000927,.8697707, .0106674, .0105682,
 .0107535,None,,
 Co,228.616 {447},Y1,ppm, .0107636,.0001388,1.289578, .0106059, .0108181,
 .0108670,None,,
 Cr,267.716 {126},Y2A,ppm, .0294623,.0002837,.9628815, .0295415, .0296981,
 .0291475,None,,
 Cu,327.396 {103},Y2A,ppm, .0389627,.0003129,.8031450, .0392982, .0389113,
 .0386787,None,,
 Fe,261.187 {129},Y2R,ppm, .3951389,.0072366,1.831404, .4024100, .3950694,
 .3879373,None,,
 K,766.490 { 44},Y2R,ppm, 5.463079,.0151961,.2781593, 5.464496, 5.447224,
 5.477517,None,,
 Li,670.784 { 50},Y2R,ppm, .0975930,.0022220,2.276847, .0967769, .0958945,
 .1001077,None,,
 Mg,285.213 {118},Y2R,ppm, .1933953,.0019586,1.012747, .1913299, .1936300,
 .1952260,None,,
 Mn,257.610 {131},Y2A,ppm, .0199896,.0000272,.1359017, .0199973, .0199594,
 .0200121,None,,
 Mo,202.030 {467},Y1,ppm, .0184821,.0005284,2.858966, .0187232, .0188469,

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.0178761,None,,
Na,589.592 { 57},Y2R,ppm, 2.007068,.0108130,.5387451, 1.994619, 2.014124,
2.012461,None,,
Ni,231.604 {445},Y1,ppm, 2.074473,.0039490,.1903609, 2.078872, 2.071234,
2.073314,None,,
P,177.495 {490},Y1,ppm, .2051580,.0015344,.7478900, .2034029, .2058262,
.2062450,None,,
Pb,220.353 {453},Y1,ppm, .0287169,.0029547,10.28923, .0321208, .0272154,
.0268144,None,,
S,182.034 {485},Y1,ppm, .9983823,.0070632,.7074659, 1.000475, .9905092,
1.004163,None,,
Sb,206.833 {463},Y1,ppm, .0938300,.0027181,2.896841, .0968925, .0928936,
.0917038,None,,
Se,196.090 {472},Y1,ppm, .1022994,.0012907,1.261664, .1008717, .1033836,
.1026427,None,,
Si,251.611 {134},Y2R,ppm, .9934994,.0134888,1.357709, .9788748, .9961705,
1.005453,None,,
Sn,189.989 {477},Y1,ppm, .0988302,.0013770,1.393324, .0987987, .0974692,
.1002228,None,,
Sr,421.552 { 80},Y2A,ppm, .0101059,.0000264,.2611881, .0100795, .0101323,
.0101057,None,,
Th,283.730 {119},Y2R,ppm, -.001654,.0088474,534.8699, -.008524, .0083291,
-.004768,None,,
Ti,334.941 {101},Y2A,ppm, .0198777,.0001282,.6448186, .0197297, .0199513,
.0199521,None,,
Tl,190.856 {477},Y1,ppm, .0650489,.0025322,3.892825, .0637630, .0679661,
.0634176,None,,
V,292.402 {115},Y2A,ppm, .0197615,.0001228,.6216148, .0198703, .0196283,
.0197859,None,,
W,207.911 {462},Y1,ppm, .0571570,.0002723,.4764750, .0573723, .0572478,
.0568509,None,,
Zn,213.856 {458},Y1,ppm, .4486192,.0000964,.0214819, .4487132, .4486236,
.4485207,None,,
Zr,339.198 { 99},Y2R,ppm, .0863407,.0043596,5.049340, .0913564, .0842048,
.0834609,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 8877.776,7.385261,.0831882,8878.776,8884.611,8869.942,None,,
Y2A,371.030 { 91}2,Cts/S,
276677.4,923.2998,.3337099,277737.6,276049.8,276244.7,None,,
Y2R,371.030 { 91}3,Cts/S,
18710.87,80.65017,.4310337,18675.84,18803.12,18653.66,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3483-E-6-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 15:44:50
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0005623,.0001860,33.08334, .0005105, .0004077,
.0007688,None,,
Alum Ax,308.215 {109},Y2A,ppm, -.002907,.0029953,103.0312, -.003088, .0001742,

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- .005808, None, ,
 Al, 308.215 {109}2, Y2R, ppm, -.033756, .0167570, 49.64161, -.035247, -.016303,
 -.049718, None, ,
 As, 189.042 {478}, Y1, ppm, .0082614, .0018252, 22.09322, .0078782, .0102478,
 .0066582, None, ,
 B, 249.773 {135}, Y2A, ppm, .1109326, .0002161, .1948218, .1107519, .1108740,
 .1111720, None, ,
 Ba, 455.403 { 74}, Y2A, ppm, .0585946, .0002725, .4650421, .0588667, .0583217,
 .0585955, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000129, .0000144, 11.16070, -.000123, -.000146,
 -.000119, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 13.07382, .0492024, .3763432, 13.02045, 13.11738,
 13.08362, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0003548, .0000829, 23.35724, .0004291, .0003699,
 .0002654, None, ,
 Co, 228.616 {447}, Y1, ppm, .0003272, .0001386, 42.37213, .0001727, .0003680,
 .0004408, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0003623, .0002599, 71.73450, .0002369, .0001889,
 .0006611, None, ,
 Cu, 327.396 {103}, Y2A, ppm, .0001372, .0005592, 407.6125, .0005607, .0003476,
 -.000497, None, ,
 Fe, 261.187 {129}, Y2R, ppm, .0088373, .0001027, 1.162523, .0087717, .0087845,
 .0089557, None, ,
 K, 766.490 { 44}, Y2R, ppm, 1.564955, .0174417, 1.114514, 1.569555, 1.545675,
 1.579636, None, ,
 Li, 670.784 { 50}, Y2R, ppm, .0145266, .0017398, 11.97660, .0155867, .0125187,
 .0154744, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 4.924794, .0068020, .1381170, 4.916974, 4.929337,
 4.928072, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .0171386, .0000101, .0591745, .0171483, .0171394,
 .0171281, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0004539, .0003476, 76.59282, .0006643, .0000526,
 .0006447, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 42.58682, .0513158, .1204970, 42.53258, 42.63459,
 42.59330, None, ,
 Ni, 231.604 {445}, Y1, ppm, -.000414, .0001201, 29.05272, -.000303, -.000541,
 -.000397, None, ,
 P, 177.495 {490}, Y1, ppm, .0250271, .0012736, 5.089018, .0236267, .0261163,
 .0253382, None, ,
 Pb, 220.353 {453}, Y1, ppm, -.000164, .0025814, 1574.290, -.000365, .0025120,
 -.002639, None, ,
 S, 182.034 {485}, Y1, ppm, .7535807, .0142808, 1.895052, .7647132, .7585496,
 .7374793, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0014605, .0015371, 105.2458, -.000042, .0030298,
 .0013937, None, ,
 Se, 196.090 {472}, Y1, ppm, .0001023, .0035094, 3430.662, -.002103, -.001739,
 .0041491, None, ,
 Si, 251.611 {134}, Y2R, ppm, 6.236864, .0097873, .1569262, 6.227120, 6.246694,
 6.236779, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0012948, .0008719, 67.33504, .0018186, .0002884,
 .0017775, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .6363291, .0025311, .3977601, .6371182, .6334975,
 .6383716, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0306289, .0183621, 59.95028, .0325242, .0113927,
 .0479699, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0008885, .0000201, 2.263095, .0009086, .0008883,
 .0008684, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0037666, .0037024, 98.29294, .0037956, .0000499,
 .0074544, None, ,
 V, 292.402 {115}, Y2A, ppm, -.000723, .0003954, 54.70976, -.000321, -.001112,
 -.000735, None, ,
 W, 207.911 {462}, Y1, ppm, -.000705, .0009154, 129.9008, .0003354, -.001388,
 -.001062, None, ,

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Zn,213.856 {458},Y1,ppm, -.000458,.0001258,27.44855, -.000456, -.000334,
 -.000585,None,,
 Zr,339.198 { 99},Y2R,ppm, -.003092,.0000341,1.101655, -.003055, -.003100,
 -.003121,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8717.118,20.37305,.2337132,8740.604,8706.538,8704.211,None,,
 Y2A,371.030 { 91}2,Cts/S,
 271173.0,1052.749,.3882204,272148.3,271313.8,270056.9,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18504.84,76.09412,.4112119,18565.82,18419.56,18529.14,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3483-E-6-A pds
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 15:48:10
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0188514,.0004096,2.172741, .0191725, .0183901,
 .0189917,None,,
 Al,308.215 {109},Y2A,ppm, .9359187,.0018704,.1998436, .9341707, .9356943,
 .9378912,None,,
 Al,308.215 {109}2,Y2R,ppm, .9537547,.0209344,2.194949, .9775099, .9457523,
 .9380019,None,,
 As,189.042 {478},Y1,ppm, .4977981,.0023866,.4794272, .4952274, .4999433,
 .4982236,None,,
 B,249.773 {135},Y2A,ppm, .2944349,.0013791,.4683745, .2931933, .2941921,
 .2959192,None,,
 Ba,455.403 { 74},Y2A,ppm, .1068945,.0006106,.5711979, .1065004, .1065853,
 .1075978,None,,
 Be,313.042 {108},Y2A,ppm, .0190031,.0000873,.4595152, .0189396, .0189671,
 .0191027,None,,
 Ca,317.933 {106},Y2R,ppm, 13.75056,.0235881,.1715429, 13.76361, 13.76473,
 13.72333,None,,
 Cd,226.502 {449},Y1,ppm, .0496774,.0001463,.2944676, .0496536, .0498342,
 .0495446,None,,
 Co,228.616 {447},Y1,ppm, .0973872,.0001539,.1580451, .0973544, .0972523,
 .0975549,None,,
 Cr,267.716 {126},Y2A,ppm, .1922974,.0010003,.5202116, .1912813, .1932812,
 .1923299,None,,
 Cu,327.396 {103},Y2A,ppm, .4792469,.0024317,.5074116, .4780637, .4776331,
 .4820438,None,,
 Fe,261.187 {129},Y2R,ppm, .4843976,.0112589,2.324304, .4972273, .4798024,
 .4761631,None,,
 K,766.490 { 44},Y2R,ppm, 3.434352,.0123083,.3583883, 3.437937, 3.420649,
 3.444470,None,,
 Li,670.784 { 50},Y2R,ppm, .9815934,.0016987,.1730568, .9831916, .9817791,
 .9798094,None,,
 Mg,285.213 {118},Y2R,ppm, 5.771559,.0195389,.3385381, 5.784276, 5.781340,
 5.749061,None,,
 Mn,257.610 {131},Y2A,ppm, .0752717,.0007393,.9821662, .0745497, .0752383,
 .0760271,None,,

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Mo,202.030 {467},Y1,ppm, .1837303,.0012894,.7017772, .1852114, .1831212,
.1828583,None,,
Na,589.592 { 57},Y2R,ppm, 43.48585,.0862360,.1983083, 43.41444, 43.58165,
43.46144,None,,
Ni,231.604 {445},Y1,ppm, .1480111,.0007059,.4769539, .1487208, .1473090,
.1480034,None,,
P,177.495 {490},Y1,ppm, 1.020003,.0042198,.4137072, 1.015643, 1.024067,
1.020299,None,,
Pb,220.353 {453},Y1,ppm, .4749385,.0018583,.3912620, .4770837, .4738278,
.4739039,None,,
S,182.034 {485},Y1,ppm, 1.716566,.0051382,.2993323, 1.720107, 1.718918,
1.710672,None,,
Sb,206.833 {463},Y1,ppm, .3864431,.0042784,1.107113, .3911274, .3827417,
.3854603,None,,
Se,196.090 {472},Y1,ppm, .7769407,.0038504,.4955817, .7812813, .7739369,
.7756038,None,,
Si,251.611 {134},Y2R,ppm, 7.063403,.0137200,.1942410, 7.069861, 7.072702,
7.047646,None,,
Sn,189.989 {477},Y1,ppm, .5793398,.0009608,.1658430, .5803142, .5783932,
.5793120,None,,
Sr,421.552 { 80},Y2A,ppm, .6451248,.0045177,.7002763, .6415084, .6436771,
.6501888,None,,
Th,283.730 {119},Y2R,ppm, .0219513,.0043063,19.61763, .0250811, .0237328,
.0170401,None,,
Ti,334.941 {101},Y2A,ppm, .0987658,.0006970,.7057171, .0980209, .0988745,
.0994021,None,,
Tl,190.856 {477},Y1,ppm, 1.001821,.0018190,.1815715, 1.003921, 1.000803,
1.000738,None,,
V,292.402 {115},Y2A,ppm, .0985342,.0002752,.2792499, .0987727, .0985967,
.0982332,None,,
W,207.911 {462},Y1,ppm, -.000925,.0007810,84.41150, -.000706, -.000277,
-.001792,None,,
Zn,213.856 {458},Y1,ppm, .1209453,.0005165,.4270606, .1214221, .1203966,
.1210171,None,,
Zr,339.198 { 99},Y2R,ppm, .9694940,.0047380,.4887053, .9727473, .9716765,
.9640581,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Y1,224.306 {450},Cts/S, 8731.136,7.468232,.0855356,8726.109,8739.717,8727.581,None,,
Y2A,371.030 { 91}2,Cts/S,
269099.0,2036.672,.7568487,271218.2,268922.3,267156.4,None,,
Y2R,371.030 { 91}3,Cts/S,
18432.89,34.87748,.1892133,18471.48,18423.59,18403.61,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3483-E-6-B DU
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 15:51:20
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0004336,.0002272,52.39580, .0002764, .0003303,
.0006940,None,,

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Al, 308.215 {109}, Y2A, ppm, -.001418, .0007929, 55.93547, -.001808, -.001939,
 -.000505, None,,
 Al, 308.215 {109}2, Y2R, ppm, -.027620, .0153814, 55.69009, -.015301, -.044859,
 -.022699, None,,
 As, 189.042 {478}, Y1, ppm, .0068754, .0022325, 32.47104, .0087429, .0044027,
 .0074807, None,,
 B, 249.773 {135}, Y2A, ppm, .1110199, .0007807, .7031998, .1116803, .1112209,
 .1101583, None,,
 Ba, 455.403 {74}, Y2A, ppm, .0583893, .0003622, .6203776, .0584665, .0587066,
 .0579946, None,,
 Be, 313.042 {108}, Y2A, ppm, -.000121, .0000161, 13.27972, -.000136, -.000124,
 -.000104, None,,
 Ca, 317.933 {106}, Y2R, ppm, 12.98454, .0388293, .2990429, 12.94611, 13.02376,
 12.98374, None,,
 Cd, 226.502 {449}, Y1, ppm, .0002719, .0001303, 47.92873, .0004154, .0002390,
 .0001612, None,,
 Co, 228.616 {447}, Y1, ppm, .0001057, .0000645, 61.01144, .0001567, .0001273,
 .0000332, None,,
 Cr, 267.716 {126}, Y2A, ppm, .0000567, .0004077, 719.5800, .0002559, .0003264,
 -.000412, None,,
 Cu, 327.396 {103}, Y2A, ppm, .0002884, .0002442, 84.68237, .0004585, .0003982,
 .0000086, None,,
 Fe, 261.187 {129}, Y2R, ppm, .0054394, .0051591, 94.84543, .0059129, .0000600,
 .0103455, None,,
 K, 766.490 {44}, Y2R, ppm, 1.540922, .0090238, .5856082, 1.540318, 1.532215,
 1.550232, None,,
 Li, 670.784 {50}, Y2R, ppm, .0141526, .0024018, 16.97102, .0167556, .0120223,
 .0136798, None,,
 Mg, 285.213 {118}, Y2R, ppm, 4.900356, .0046781, .0954639, 4.903218, 4.902892,
 4.894957, None,,
 Mn, 257.610 {131}, Y2A, ppm, .0172411, .0001565, .9077697, .0172174, .0174081,
 .0170978, None,,
 Mo, 202.030 {467}, Y1, ppm, .0023061, .0002475, 10.73303, .0021544, .0021721,
 .0025917, None,,
 Na, 589.592 {57}, Y2R, ppm, 42.26844, .0635386, .1503217, 42.27422, 42.32890,
 42.20221, None,,
 Ni, 231.604 {445}, Y1, ppm, -.000563, .0004593, 81.53837, -.000176, -.001071,
 -.000444, None,,
 P, 177.495 {490}, Y1, ppm, .0247719, .0020697, 8.355133, .0229893, .0242846,
 .0270418, None,,
 Pb, 220.353 {453}, Y1, ppm, -.002192, .0012815, 58.47191, -.003610, -.001848,
 -.001117, None,,
 S, 182.034 {485}, Y1, ppm, .7587713, .0107227, 1.413166, .7501010, .7707613,
 .7554518, None,,
 Sb, 206.833 {463}, Y1, ppm, .0022635, .0017705, 78.22174, .0042695, .0009190,
 .0016018, None,,
 Se, 196.090 {472}, Y1, ppm, -.000369, .0024501, 664.2550, -.002792, .0021072,
 -.000422, None,,
 Si, 251.611 {134}, Y2R, ppm, 6.186330, .0193354, .3125496, 6.208504, 6.172988,
 6.177499, None,,
 Sn, 189.989 {477}, Y1, ppm, .0009334, .0004977, 53.31598, .0013881, .0010104,
 .0004018, None,,
 Sr, 421.552 {80}, Y2A, ppm, .6375855, .0021275, .3336868, .6388092, .6388184,
 .6351288, None,,
 Th, 283.730 {119}, Y2R, ppm, .0224143, .0066106, 29.49264, .0295726, .0165398,
 .0211304, None,,
 Ti, 334.941 {101}, Y2A, ppm, .0009280, .0002078, 22.39459, .0008511, .0007695,
 .0011633, None,,
 Tl, 190.856 {477}, Y1, ppm, .0022165, .0020946, 94.49695, .0011495, .0046297,
 .0008704, None,,
 V, 292.402 {115}, Y2A, ppm, -.000849, .0001666, 19.61650, -.000942, -.000657,
 -.000949, None,,
 W, 207.911 {462}, Y1, ppm, -.000397, .0008518, 214.4761, -.000025, .0002054,

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-.001372,None,,
 Zn,213.856 {458},Y1,ppm, -.000171,.0002339,136.8278, .0000481, -.000417,
 -.000144,None,,
 Zr,339.198 { 99},Y2R,ppm, -.001319,.0005477,41.50755, -.001947, -.001074,
 -.000938,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8751.922,20.00573,.2285867,8771.828,8731.818,8752.121,None,,
 Y2A,371.030 { 91}2,Cts/S,
 270725.2,1173.233,.4333665,271550.1,269382.1,271243.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18654.27,163.9319,.8787903,18796.89,18475.17,18690.75,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3483-E-6-C MS
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 15:54:38
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0137587,.0001116,.8109369, .0136462, .0137606,
 .0138694,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .3615393,.0033580,.9287989, .3593406, .3598728,
 .3654046,None,,
 Al,308.215 {109}2,Y2R,ppm, .3635171,.0229698,6.318774, .3806889, .3374252,
 .3724372,None,,
 As,189.042 {478},Y1,ppm, .0640438,.0002971,.4639583, .0643847, .0638398,
 .0639069,None,,
 B,249.773 {135},Y2A,ppm, .1622868,.0009535,.5875117, .1613773, .1632789,
 .1622041,None,,
 Ba,455.403 { 74},Y2A,ppm, .0672120,.0002541,.3779890, .0673669, .0673504,
 .0669189,None,,
 Be,313.042 {108},Y2A,ppm, .0091003,.0000180,.1979616, .0091193, .0090980,
 .0090835,None,,
 Ca,317.933 {106},Y2R,ppm, 13.29925,.0545684,.4103121, 13.32232, 13.23693,
 13.33848,None,,
 Cd,226.502 {449},Y1,ppm, .0099148,.0001096,1.105385, .0098552, .0100413,
 .0098479,None,,
 Co,228.616 {447},Y1,ppm, .0099609,.0004026,4.041466, .0096911, .0104236,
 .0097680,None,,
 Cr,267.716 {126},Y2A,ppm, .0279158,.0003943,1.412427, .0275358, .0283230,
 .0278887,None,,
 Cu,327.396 {103},Y2A,ppm, .0372515,.0002500,.6710260, .0371226, .0375396,
 .0370923,None,,
 Fe,261.187 {129},Y2R,ppm, .3734679,.0084027,2.249912, .3761240, .3802216,
 .3640582,None,,
 K,766.490 { 44},Y2R,ppm, 6.700837,.0488019,.7282952, 6.726740, 6.644546,
 6.731227,None,,
 Li,670.784 { 50},Y2R,ppm, .1090887,.0009741,.8929629, .1090535, .1081327,
 .1100800,None,,
 Mg,285.213 {118},Y2R,ppm, 5.074409,.0319458,.6295466, 5.108672, 5.045443,
 5.069113,None,,
 Mn,257.610 {131},Y2A,ppm, .0350301,.0001569,.4479093, .0352089, .0349661,

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.0349153, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0188636, .0005788, 3.068582, .0195097, .0183924,
 .0186886, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 43.36526, .0383698, .0884806, 43.33311, 43.40774,
 43.35494, None, ,
 Ni, 231.604 {445}, Y1, ppm, 1.904480, .0031462, .1652004, 1.907157, 1.905268,
 1.901014, None, ,
 P, 177.495 {490}, Y1, ppm, .2181460, .0014485, .6639988, .2173317, .2198183,
 .2172879, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0286336, .0016772, 5.857500, .0267805, .0300476,
 .0290727, None, ,
 S, 182.034 {485}, Y1, ppm, 1.710498, .0051144, .2990004, 1.716121, 1.706123,
 1.709249, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0912765, .0018679, 2.046477, .0932146, .0911271,
 .0894877, None, ,
 Se, 196.090 {472}, Y1, ppm, .0916806, .0034409, 3.753163, .0946413, .0924948,
 .0879055, None, ,
 Si, 251.611 {134}, Y2R, ppm, 7.074716, .0370871, .5242205, 7.117166, 7.048595,
 7.058388, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0939254, .0004371, .4653743, .0941931, .0941621,
 .0934210, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .6321824, .0050014, .7911361, .6377028, .6308914,
 .6279531, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0107285, .0133515, 124.4492, .0216635, -.004151,
 .0146728, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0195870, .0000559, .2853783, .0196502, .0195671,
 .0195439, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0620460, .0018433, 2.970821, .0601640, .0638480,
 .0621259, None, ,
 V, 292.402 {115}, Y2A, ppm, .0183387, .0002370, 1.292087, .0184562, .0184940,
 .0180660, None, ,
 W, 207.911 {462}, Y1, ppm, .0544971, .0002789, .5117321, .0546988, .0541788,
 .0546137, None, ,
 Zn, 213.856 {458}, Y1, ppm, .4200963, .0014478, .3446430, .4190583, .4217502,
 .4194803, None, ,
 Zr, 339.198 { 99}, Y2R, ppm, .0983915, .0036548, 3.714525, .0955184, .1025051,
 .0971512, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8743.238, 15.64759, .1789679, 8757.094, 8726.267, 8746.352, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 270924.3, 334.4221, .1234375, 270676.3, 270792.0, 271304.6, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 18619.00, 105.2514, .5652904, 18662.18, 18695.80, 18499.03, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3483-B-6-A MSD
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 15:57:51
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .0145775, .0007553, 5.181189, .0154490, .0141707,

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.0141129, None, ,
 Alum Ax, 308.215 {109}, Y2A, ppm, .3732169, .0015388, .4123030, .3744106, .3714802,
 .3737599, None, ,
 Al, 308.215 {109}2, Y2R, ppm, .3650407, .0226262, 6.198255, .3402564, .3702742,
 .3845915, None, ,
 As, 189.042 {478}, Y1, ppm, .0683717, .0004146, .6063543, .0684903, .0687140,
 .0679107, None, ,
 B, 249.773 {135}, Y2A, ppm, .1659582, .0003394, .2045227, .1657058, .1658246,
 .1663441, None, ,
 Ba, 455.403 {74}, Y2A, ppm, .0668920, .0002223, .3323276, .0671027, .0666597,
 .0669138, None, ,
 Be, 313.042 {108}, Y2A, ppm, .0094129, .0000449, .4765316, .0094635, .0093779,
 .0093973, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 13.22203, .0766287, .5795535, 13.28937, 13.23807,
 13.13866, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0101210, .0001836, 1.813629, .0102098, .0099100,
 .0102434, None, ,
 Co, 228.616 {447}, Y1, ppm, .0101295, .0001500, 1.480622, .0100162, .0100728,
 .0102996, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0288918, .0003374, 1.167986, .0292810, .0287138,
 .0286806, None, ,
 Cu, 327.396 {103}, Y2A, ppm, .0381304, .0003120, .8182386, .0384414, .0378174,
 .0381324, None, ,
 Fe, 261.187 {129}, Y2R, ppm, .3870987, .0154061, 3.979885, .3939090, .3979261,
 .3694612, None, ,
 K, 766.490 {44}, Y2R, ppm, 6.868766, .0093693, .1364044, 6.858927, 6.869789,
 6.877581, None, ,
 Li, 670.784 {50}, Y2R, ppm, .1110332, .0009340, .8411934, .1099949, .1118051,
 .1112996, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 5.058925, .0309944, .6126670, 5.073539, 5.079911,
 5.023325, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .0358063, .0001433, .4003364, .0359680, .0356950,
 .0357557, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0190902, .0002945, 1.542727, .0194126, .0190227,
 .0188353, None, ,
 Na, 589.592 {57}, Y2R, ppm, 43.64663, .0345565, .0791735, 43.68599, 43.62127,
 43.63262, None, ,
 Ni, 231.604 {445}, Y1, ppm, 1.963776, .0030308, .1543344, 1.967270, 1.962190,
 1.961867, None, ,
 P, 177.495 {490}, Y1, ppm, .2256729, .0005449, .2414572, .2258275, .2261238,
 .2250674, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0280468, .0008949, 3.190867, .0287310, .0270340,
 .0283754, None, ,
 S, 182.034 {485}, Y1, ppm, 1.724670, .0070572, .4091925, 1.731403, 1.725279,
 1.717328, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0931406, .0002055, .2206466, .0929851, .0933736,
 .0930632, None, ,
 Se, 196.090 {472}, Y1, ppm, .0970687, .0049340, 5.083036, .0968916, .0922256,
 .1020889, None, ,
 Si, 251.611 {134}, Y2R, ppm, 7.084425, .0316830, .4472206, 7.117542, 7.081330,
 7.054403, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0960667, .0011094, 1.154782, .0948722, .0970646,
 .0962634, None, ,
 Sr, 421.552 {80}, Y2A, ppm, .6296903, .0047979, .7619501, .6338330, .6308046,
 .6244332, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0190131, .0121913, 64.12060, .0213121, .0298914,
 .0058360, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0202656, .0002134, 1.052885, .0204780, .0202674,
 .0200513, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0629442, .0022279, 3.539548, .0641517, .0603731,
 .0643077, None, ,
 V, 292.402 {115}, Y2A, ppm, .0190915, .0002230, 1.167792, .0192257, .0192148,
 .0188342, None, ,

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W, 207.911 {462}, Y1, ppm, .0575057, .0007042, 1.224533, .0581808, .0567757,
 .0575605, None, ,
 Zn, 213.856 {458}, Y1, ppm, .4302822, .0006925, .1609342, .4306388, .4294841,
 .4307237, None, ,
 Zr, 339.198 {99}, Y2R, ppm, .1014796, .0014439, 1.422889, .1002586, .1011069,
 .1030734, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8733.182, 7.331498, .0839499, 8725.876, 8740.539, 8733.132, None, ,
 Y2A, 371.030 {91}2, Cts/S,
 269879.8, 347.2768, .1286783, 270183.7, 269501.3, 269954.4, None, ,
 Y2R, 371.030 {91}3, Cts/S,
 18404.04, 40.09577, .2178639, 18358.80, 18418.15, 18435.18, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3483-E-6-A sd@5
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:01:05
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .0004731, .0004240, 89.62450, .0007069, .0007287,
 -.000016, None, ,
 Al, 308.215 {109}, Y2A, ppm, -.004230, .0026204, 61.94409, -.003527, -.007131,
 -.002034, None, ,
 Al, 308.215 {109}2, Y2R, ppm, -.012064, .0195763, 162.2692, -.020199, -.026261,
 .0102680, None, ,
 As, 189.042 {478}, Y1, ppm, .0062033, .0012446, 20.06279, .0076321, .0056223,
 .0053554, None, ,
 B, 249.773 {135}, Y2A, ppm, .0216304, .0002321, 1.073011, .0214150, .0218762,
 .0216000, None, ,
 Ba, 455.403 {74}, Y2A, ppm, .0118189, .0000660, .5583682, .0118752, .0118352,
 .0117463, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000135, .0000176, 13.04927, -.000132, -.000153,
 -.000119, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 2.594086, .0104998, .4047582, 2.604614, 2.594030,
 2.583614, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0003341, .0000714, 21.36134, .0002524, .0003653,
 .0003845, None, ,
 Co, 228.616 {447}, Y1, ppm, .0005196, .0001480, 28.47530, .0006476, .0003576,
 .0005537, None, ,
 Cr, 267.716 {126}, Y2A, ppm, -.000094, .0001101, 117.6172, -.000209, .0000097,
 -.000081, None, ,
 Cu, 327.396 {103}, Y2A, ppm, -.000503, .0006592, 131.0195, -.000406, -.001205,
 .0001023, None, ,
 Fe, 261.187 {129}, Y2R, ppm, .0055573, .0048450, 87.18160, .0006193, .0057492,
 .0103035, None, ,
 K, 766.490 {44}, Y2R, ppm, .2980168, .0156945, 5.266315, .3011414, .2809950,
 .3119139, None, ,
 Li, 670.784 {50}, Y2R, ppm, .0024176, .0007275, 30.09358, .0022568, .0032121,
 .0017839, None, ,
 Mg, 285.213 {118}, Y2R, ppm, .9876469, .0085000, .8606352, .9921596, .9929389,
 .9778423, None, ,

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Mn, 257.610 {131}, Y2A, ppm, .0034914, .0000427, 1.223108, .0035190, .0035130,
 .0034422, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0003920, .0004111, 104.8594, .0005302, .0007162,
 -.000070, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 8.475737, .0179542, .2118303, 8.455762, 8.480917,
 8.490531, None, ,
 Ni, 231.604 {445}, Y1, ppm, -.000512, .0003705, 72.30680, -.000676, -.000773,
 -.000088, None, ,
 P, 177.495 {490}, Y1, ppm, .0023891, .0013473, 56.39264, .0022138, .0038154,
 .0011380, None, ,
 Pb, 220.353 {453}, Y1, ppm, -.000554, .0023914, 431.9629, -.001923, -.001945,
 .0022077, None, ,
 S, 182.034 {485}, Y1, ppm, .1444337, .0009430, .6528787, .1433756, .1451851,
 .1447405, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0014562, .0010265, 70.49409, .0026138, .0010979,
 .0006568, None, ,
 Se, 196.090 {472}, Y1, ppm, -.000163, .0013985, 858.4362, -.001190, -.000729,
 .0014300, None, ,
 Si, 251.611 {134}, Y2R, ppm, 1.234697, .0092612, .7500793, 1.242319, 1.237382,
 1.224390, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0004882, .0002708, 55.47809, .0005522, .0007213,
 .0001911, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .1281654, .0007244, .5651839, .1289010, .1281424,
 .1274528, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0190908, .0158725, 83.14182, .0184540, .0352722,
 .0035464, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0002204, .0000532, 24.12070, .0002164, .0001694,
 .0002755, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0020746, .0018125, 87.36598, .0018843, .0039748,
 .0003648, None, ,
 V, 292.402 {115}, Y2A, ppm, -.001123, .0004625, 41.17405, -.001242, -.001515,
 -.000613, None, ,
 W, 207.911 {462}, Y1, ppm, -.000345, .0003576, 103.6310, .0000355, -.000397,
 -.000674, None, ,
 Zn, 213.856 {458}, Y1, ppm, .0002267, .0000542, 23.91730, .0001883, .0002888,
 .0002032, None, ,
 Zr, 339.198 { 99}, Y2R, ppm, -.001433, .0018054, 126.0277, .0002789, -.003319,
 -.001257, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8762.173, 8.473377, .0967041, 8771.848, 8756.073, 8758.599, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 271206.3, 347.9771, .1283071, 270823.7, 271291.6, 271503.8, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 18514.19, 131.5099, .7103194, 18600.56, 18362.84, 18579.16, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3519-Q-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:04:14
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
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Ag, 328.068 {103}, Y2A, ppm, .0005707, .0004684, 82.07120, .0000314, .0008054,
 .0008754, None, ,
 Al um Ax, 308.215 {109}, Y2A, ppm, .0032684, .0027417, 83.88742, .0019572, .0064195,
 .0014284, None, ,
 Al, 308.215 {109}2, Y2R, ppm, -.023157, .0163608, 70.65144, -.006468, -.039169,
 -.023834, None, ,
 As, 189.042 {478}, Y1, ppm, .0148548, .0019816, 13.33969, .0130092, .0146065,
 .0169489, None, ,
 B, 249.773 {135}, Y2A, ppm, .3068580, .0012693, .4136465, .3064359, .3082846,
 .3058535, None, ,
 Ba, 455.403 { 74}, Y2A, ppm, .2527629, .0009942, .3933223, .2525327, .2538520,
 .2519041, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000151, .0000022, 1.448278, -.000149, -.000151,
 -.000153, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 46.11794, .2114319, .4584591, 46.17850, 46.29248,
 45.88284, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0003273, .0001089, 33.27622, .0004517, .0002807,
 .0002494, None, ,
 Co, 228.616 {447}, Y1, ppm, .0019065, .0002837, 14.87827, .0021595, .0019603,
 .0015999, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0008219, .0002312, 28.12786, .0005620, .0010046,
 .0008991, None, ,
 Cu, 327.396 {103}, Y2A, ppm, .0037413, .0007742, 20.69417, .0033618, .0046321,
 .0032301, None, ,
 Fe, 261.187 {129}, Y2R, ppm, 5.263176, .0209338, .3977399, 5.253228, 5.287229,
 5.249072, None, ,
 K, 766.490 { 44}, Y2R, ppm, 7.759057, .0479748, .6183069, 7.760533, 7.806277,
 7.710362, None, ,
 Li, 670.784 { 50}, Y2R, ppm, .0136359, .0024004, 17.60373, .0160399, .0112391,
 .0136287, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 13.48076, .1170097, .8679756, 13.50935, 13.58082,
 13.35210, None, ,
 Mn, 257.610 {131}, Y2A, ppm, 4.698644, .0080318, .1709388, 4.697507, 4.691241,
 4.707183, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0040418, .0000609, 1.507169, .0041042, .0040389,
 .0039825, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 54.71272, .0343006, .0626922, 54.75203, 54.69725,
 54.68889, None, ,
 Ni, 231.604 {445}, Y1, ppm, .0018041, .0003461, 19.18366, .0016987, .0015230,
 .0021907, None, ,
 P, 177.495 {490}, Y1, ppm, .0075997, .0032170, 42.32995, .0098214, .0090671,
 .0039107, None, ,
 Pb, 220.353 {453}, Y1, ppm, -.000659, .0019657, 298.1767, .0015845, -.002078,
 -.001484, None, ,
 S, 182.034 {485}, Y1, ppm, 14.44685, .0623431, .4315340, 14.49785, 14.46537,
 14.37735, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0012122, .0026186, 216.0174, -.000064, .0042243,
 -.000524, None, ,
 Se, 196.090 {472}, Y1, ppm, .0001367, .0028872, 2111.415, -.000398, -.002446,
 .0032539, None, ,
 Si, 251.611 {134}, Y2R, ppm, 10.75794, .0227071, .2110732, 10.76535, 10.77601,
 10.73245, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0007211, .0006141, 85.16160, .0002842, .0004559,
 .0014232, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .4252408, .0027611, .6493102, .4231856, .4283793,
 .4241575, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0050752, .0160339, 315.9296, .0138772, -.013432,
 .0147802, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0013097, .0000845, 6.456205, .0013323, .0013806,
 .0012161, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0031775, .0015529, 48.87123, .0014725, .0035491,
 .0045109, None, ,
 V, 292.402 {115}, Y2A, ppm, -.001500, .0004539, 30.26272, -.001236, -.001239,

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-.002024,None,,
 W,207.911 {462},Y1,ppm, -.000544,.0002391,43.92762, -.000815, -.000362,
 -.000455,None,,
 Zn,213.856 {458},Y1,ppm, .0016027,.0001583,9.875654, .0016463, .0014272,
 .0017346,None,,
 Zr,339.198 { 99},Y2R,ppm, .0007882,.0004733,60.04957, .0004389, .0013268,
 .0005987,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8595.216,.8993317,.0104632,8595.189,8596.129,8594.331,None,,
 Y2A,371.030 { 91}2,Cts/S,
 267663.0,843.1215,.3149937,268387.6,266737.6,267863.8,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18572.74,74.87018,.4031187,18520.96,18538.67,18658.58,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3409-L-1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:07:37
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0004533,.0001633,36.02559, .0005032, .0005859,
 .0002709,None,,
 Alum Ax,308.215 {109},Y2A,ppm, -.000491,.0018435,375.0880, -.001105, -.001950,
 .0015806,None,,
 Al,308.215 {109}2,Y2R,ppm, -.029552,.0239679,81.10531, -.004525, -.052297,
 -.031833,None,,
 As,189.042 {478},Y1,ppm, .0082769,.0021734,26.25833, .0072491, .0068081,
 .0107736,None,,
 B,249.773 {135},Y2A,ppm, .0551354,.0003395,.6157323, .0553726, .0552871,
 .0547465,None,,
 Ba,455.403 { 74},Y2A,ppm, .0423184,.0001502,.3549075, .0424197, .0423896,
 .0421458,None,,
 Be,313.042 {108},Y2A,ppm, -.000131,.0000126,9.568135, -.000118, -.000143,
 -.000133,None,,
 Ca,317.933 {106},Y2R,ppm, 62.90432,.0621660,.0988263, 62.89039, 62.85031,
 62.97227,None,,
 Cd,226.502 {449},Y1,ppm, .0002440,.0001633,66.94777, .0002639, .0003964,
 .0000716,None,,
 Co,228.616 {447},Y1,ppm, .0000253,.0002525,998.6676, -.000266, .0001634,
 .0001787,None,,
 Cr,267.716 {126},Y2A,ppm, .0004300,.0000761,17.70076, .0005061, .0003539,
 .0004299,None,,
 Cu,327.396 {103},Y2A,ppm, .0006818,.0004045,59.33158, .0002446, .0010427,
 .0007581,None,,
 Fe,261.187 {129},Y2R,ppm, 1.138321,.0073053,.6417572, 1.130260, 1.144503,
 1.140200,None,,
 K,766.490 { 44},Y2R,ppm, 4.498702,.0115870,.2575629, 4.486267, 4.509195,
 4.500644,None,,
 Li,670.784 { 50},Y2R,ppm, .0193514,.0021444,11.08143, .0189683, .0174243,
 .0216615,None,,
 Mg,285.213 {118},Y2R,ppm, 14.03989,.0196455,.1399263, 14.03131, 14.02599,

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14.06237, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .1107072, .0005473, .4943774, .1110866, .1109552,
 .1100798, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0000979, .0004888, 499.4851, .0001547, -.000417,
 .0005557, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 32.50306, .0344688, .1060479, 32.49635, 32.47243,
 32.54039, None, ,
 Ni, 231.604 {445}, Y1, ppm, -.000358, .0002691, 75.27135, -.000650, -.000120,
 -.000303, None, ,
 P, 177.495 {490}, Y1, ppm, .0094366, .0040645, 43.07113, .0057101, .0088292,
 .0137707, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0010967, .0013234, 120.6744, .0026244, .0003028,
 .0003628, None, ,
 S, 182.034 {485}, Y1, ppm, 48.73527, .1618997, .3322023, 48.80498, 48.85064,
 48.55019, None, ,
 Sb, 206.833 {463}, Y1, ppm, -.000033, .0005322, 1596.352, -.000611, .0000741,
 .0004369, None, ,
 Se, 196.090 {472}, Y1, ppm, .0005105, .0015791, 309.3229, .0007176, -.001162,
 .0019758, None, ,
 Si, 251.611 {134}, Y2R, ppm, 7.448208, .0221370, .2972120, 7.473682, 7.433637,
 7.437306, None, ,
 Sn, 189.989 {477}, Y1, ppm, -.000364, .0014737, 405.3954, .0002642, .0006924,
 -.002047, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .7296687, .0030274, .4148957, .7304285, .7263339,
 .7322439, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0299516, .0114858, 38.34800, .0338444, .0170253,
 .0389851, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0013049, .0000705, 5.405125, .0013424, .0012235,
 .0013487, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0005958, .0010221, 171.5560, -.000457, .0015845,
 .0006595, None, ,
 V, 292.402 {115}, Y2A, ppm, -.001443, .0007341, 50.88744, -.001133, -.002281,
 -.000914, None, ,
 W, 207.911 {462}, Y1, ppm, .0002910, .0006655, 228.7290, -.000469, .0005701,
 .0007714, None, ,
 Zn, 213.856 {458}, Y1, ppm, .4073185, .0015636, .3838832, .4084111, .4080170,
 .4055273, None, ,
 Zr, 339.198 { 99}, Y2R, ppm, -.002241, .0013144, 58.65751, -.003307, -.000772,
 -.002644, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8562.188, 1.995316, .0233038, 8560.974, 8564.490, 8561.099, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 267543.1, 393.2439, .1469834, 267487.2, 267961.3, 267180.8, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 18497.02, 83.63645, .4521618, 18585.58, 18419.39, 18486.08, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:10:49
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

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```

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .4825,.0008,.1599, .4832, .4825, .4817,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, 23.26,.0167,.0718, 23.28, 23.24, 23.26,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, 23.53,.0735,.3124, 23.46, 23.53, 23.60,Chk Pass,,
As,189.042 {478},Y1,ppm, .4896,.0018,.3716, .4895, .4879, .4915,Chk Pass,,
B,249.773 {135},Y2A,ppm, .4615,.0017,.3692, .4629, .4596, .4620,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .4717,.0035,.7520, .4691, .4704, .4758,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .46598,.00293,.62861, .46486, .46378, .46931,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 23.66,.1308,.5527, 23.62, 23.56, 23.81,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .4840,.0017,.3480, .4859, .4834, .4827,Chk Pass,,
Co,228.616 {447},Y1,ppm, .4758,.0005,.0950, .4756, .4763, .4755,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .4677,.0010,.2103, .4676, .4667, .4687,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .4775,.0032,.6707, .4753, .4762, .4812,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 23.41,.1039,.4438, 23.30, 23.46, 23.49,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 23.67,.1080,.4565, 23.59, 23.62, 23.79,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .4794,.0045,.9317, .4796, .4749, .4838,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 23.16,.1606,.6932, 23.07, 23.07, 23.35,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .46788,.00419,.89545, .46671, .46439, .47253,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .4784,.0020,.4244, .4802, .4786, .4762,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 23.68,.0536,.2264, 23.64, 23.66, 23.74,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .4804,.0008,.1676, .4806, .4812, .4796,Chk Pass,,
P,177.495 {490},Y1,ppm, .4922,.0031,.6385, .4940, .4940, .4885,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .4728,.0015,.3146, .4712, .4729, .4742,Chk Pass,,
S,182.034 {485},Y1,ppm, 23.85,.0815,.3417, 23.92, 23.87, 23.76,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .4840,.0042,.8697, .4888, .4812, .4819,Chk Pass,,
Se,196.090 {472},Y1,ppm, .4913,.0057,1.166, .4965, .4924, .4851,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 23.335,.14902,.63864, 23.272, 23.227, 23.505,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .4738,.0032,.6780, .4774, .4726, .4713,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .4781,.0029,.6112, .4758, .4771, .4814,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .4920,.0133,2.693, .4965, .5025, .4771,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .4754,.0040,.8499, .4732, .4730, .4801,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .4769,.0053,1.115, .4795, .4804, .4707,Chk Pass,,
V,292.402 {115},Y2A,ppm, .4877,.0011,.2169, .4885, .4882, .4865,Chk Pass,,
W,207.911 {462},Y1,ppm, .4894,.0010,.1960, .4899, .4901, .4883,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .4838,.0017,.3520, .4858, .4828, .4828,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm,W .5463,.0086,1.579, .5367, .5488, .5534,Chk
warn,.5000,8.000%

```

[Internal Standards]

```

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 8568.6,19.388,.22627,8546.4,8577.1,8582.2
Y2A,371.030 { 91}2,Cts/S, 264600.,1968.8,.74405,265080.,266290.,262440.
Y2R,371.030 { 91}3,Cts/S, 18321.,213.04,1.1628,18381.,18497.,18084.

```

[Sample Header]

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Method=New TRACE Fast(v1493)
SampleName=CCB 078331

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Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 16:13:57
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

```

[Results]

```

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0003,.0007,242.1, .0000, .0010, -.0002,Chk Pass,,
Alum Ax,308.215 {109},Y2A,ppm, -.0057,.0017,30.25, -.0038, -.0071, -.0061,Chk Pass,,

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Al,308.215 {109}2,Y2R,ppm, -.0266,.0199,74.77, -.0061, -.0458, -.0280,Chk Pass,,
As,189.042 {478},Y1,ppm, .0082,.0029,35.26, .0115, .0068, .0063,Chk Pass,,
B,249.773 {135},Y2A,ppm, .0004,.0007,168.1, .0011, .0000, -.0000,Chk Pass,,
Ba,455.403 {74},Y2A,ppm, .0000,.0000,34.89, .0000, .0000, .0000,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.00011,.00001,4.6534, -.00012, -.00011, -.00011,Chk
Pass,,
Ca,317.933 {106},Y2R,ppm, .0017,.0049,289.9, -.0025, .0071, .0005,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0003,.0001,41.65, .0004, .0002, .0003,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0001,.0002,226.0, .0003, -.0001, .0001,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, -.0003,.0001,45.48, -.0004, -.0002, -.0004,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0004,.0007,175.2, -.0005, -.0010, .0003,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0044,.0042,95.24, .0092, .0014, .0026,Chk Pass,,
K,766.490 {44},Y2R,ppm, .0353,.0116,32.74, .0329, .0251, .0479,Chk Pass,,
Li,670.784 {50},Y2R,ppm, -.0009,.0007,74.66, -.0008, -.0016, -.0003,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, -.0024,.0011,46.95, -.0029, -.0032, -.0011,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00009,.00006,68.361, .00004, .00016, .00007,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0018,.0007,38.32, .0014, .0014, .0027,Chk Pass,,
Na,589.592 {57},Y2R,ppm, .0514,.0076,14.75, .0551, .0427, .0565,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .0004,.0001,18.20, .0004, .0004, .0005,Chk Pass,,
P,177.495 {490},Y1,ppm, .0003,.0020,784.6, .0009, .0018, -.0020,Chk Pass,,
Pb,220.353 {453},Y1,ppm, -.0018,.0004,21.71, -.0017, -.0015, -.0023,Chk Pass,,
S,182.034 {485},Y1,ppm, .0031,.0031,98.70, -.0004, .0047, .0050,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .0009,.0004,43.90, .0011, .0011, .0004,Chk Pass,,
Se,196.090 {472},Y1,ppm, -.0000,.0061,48730., .0005, .0058, -.0064,Chk Pass,,
Si,251.611 {134},Y2R,ppm, -.00646,.00736,113.99, -.00047, -.01467, -.00423,Chk
Pass,,
Sn,189.989 {477},Y1,ppm, .0003,.0008,291.3, .0004, .0010, -.0006,Chk Pass,,
Sr,421.552 {80},Y2A,ppm, .0000,.0000,30.11, .0000, .0000, .0000,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0162,.0123,76.25, .0094, .0304, .0087,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, -.0000,.0001,677.9, -.0000, .0001, -.0001,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0025,.0009,37.16, .0020, .0035, .0019,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.0009,.0003,29.56, -.0006, -.0012, -.0010,Chk Pass,,
W,207.911 {462},Y1,ppm, .0007,.0006,85.62, .0006, .0013, .0001,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0000,.0001,314.7, .0001, -.0000, -.0000,Chk Pass,,
Zr,339.198 {99},Y2R,ppm, -.0021,.0025,116.3, -.0043, -.0026, .0005,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 8723.1,8.0909,.09275,8731.7,8721.9,8715.6
Y2A,371.030 {91}2,Cts/S, 274960.,4774.5,1.7364,272080.,272320.,280470.
Y2R,371.030 {91}3,Cts/S, 18384.,57.535,.31296,18336.,18448.,18369.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3221-Z-1-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 16:17:07
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0003877,.0001463,37.71845, .0003619, .0002561,
.0005452,None,,
Alum Ax,308.215 {109},Y2A,ppm, .0109270,.0027200,24.89304, .0083320, .0137569,
.0106921,None,,
Al,308.215 {109}2,Y2R,ppm, -.023227,.0304312,131.0177, -.013703, -.057281,

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.0013036, None, ,
As, 189.042 {478}, Y1, ppm, .0170330, .0008941, 5.249290, .0160189, .0173720,
.0177080, None, ,
B, 249.773 {135}, Y2A, ppm, .1717357, .0013682, .7967199, .1701694, .1726983,
.1723393, None, ,
Ba, 455.403 { 74}, Y2A, ppm, .1036692, .0004751, .4582928, .1033827, .1034073,
.1042176, None, ,
Be, 313.042 {108}, Y2A, ppm, -.000120, .0000070, 5.838792, -.000119, -.000115,
-.000128, None, ,
Ca, 317.933 {106}, Y2R, ppm, 5.889394, .0175022, .2971823, 5.894566, 5.869888,
5.903727, None, ,
Cd, 226.502 {449}, Y1, ppm, .0004715, .0001021, 21.65589, .0003841, .0004466,
.0005837, None, ,
Co, 228.616 {447}, Y1, ppm, .0003745, .0002868, 76.57277, .0000945, .0003615,
.0006676, None, ,
Cr, 267.716 {126}, Y2A, ppm, .0002505, .0003865, 154.3099, .0006925, -.000023,
.0000823, None, ,
Cu, 327.396 {103}, Y2A, ppm, -.000085, .0002379, 279.8813, .0001689, -.000303,
-.000121, None, ,
Fe, 261.187 {129}, Y2R, ppm, .0349372, .0048508, 13.88417, .0295372, .0363493,
.0389253, None, ,
K, 766.490 { 44}, Y2R, ppm, 1.250204, .0221415, 1.771035, 1.272994, 1.248843,
1.228774, None, ,
Li, 670.784 { 50}, Y2R, ppm, .1066229, .0011796, 1.106342, .1063138, .1079264,
.1056287, None, ,
Mg, 285.213 {118}, Y2R, ppm, 1.233021, .0040075, .3250149, 1.233665, 1.228730,
1.236667, None, ,
Mn, 257.610 {131}, Y2A, ppm, .0024352, .0000779, 3.201063, .0023723, .0025224,
.0024107, None, ,
Mo, 202.030 {467}, Y1, ppm, .0034711, .0001428, 4.114732, .0035572, .0035499,
.0033062, None, ,
Na, 589.592 { 57}, Y2R, ppm, 53.82475, .1289981, .2396632, 53.90650, 53.67604,
53.89171, None, ,
Ni, 231.604 {445}, Y1, ppm, -.000010, .0003109, 3147.819, -.000025, .0003081,
-.000313, None, ,
P, 177.495 {490}, Y1, ppm, .0243775, .0014956, 6.135334, .0232957, .0237525,
.0260842, None, ,
Pb, 220.353 {453}, Y1, ppm, -.001844, .0032920, 178.4829, .0003675, -.000273,
-.005628, None, ,
S, 182.034 {485}, Y1, ppm, 2.557184, .0124028, .4850195, 2.552550, 2.571237,
2.547766, None, ,
Sb, 206.833 {463}, Y1, ppm, .0010818, .0018148, 167.7598, .0003190, .0031535,
-.000227, None, ,
Se, 196.090 {472}, Y1, ppm, -.002397, .0037548, 156.6546, .0017076, -.003239,
-.005659, None, ,
Si, 251.611 {134}, Y2R, ppm, 3.443385, .0107287, .3115745, 3.445276, 3.431836,
3.453042, None, ,
Sn, 189.989 {477}, Y1, ppm, .0002802, .0009541, 340.5706, -.000630, .0001976,
.0012728, None, ,
Sr, 421.552 { 80}, Y2A, ppm, .1757058, .0007890, .4490527, .1751110, .1754056,
.1766009, None, ,
Th, 283.730 {119}, Y2R, ppm, .0149658, .0076403, 51.05200, .0232614, .0134180,
.0082178, None, ,
Ti, 334.941 {101}, Y2A, ppm, .0007448, .0000639, 8.579986, .0006744, .0007607,
.0007991, None, ,
Tl, 190.856 {477}, Y1, ppm, .0034854, .0030252, 86.79602, .0049430, .0055058,
.0000074, None, ,
V, 292.402 {115}, Y2A, ppm, -.000957, .0001415, 14.78710, -.000929, -.001110,
-.000831, None, ,
W, 207.911 {462}, Y1, ppm, -.000563, .0008234, 146.2431, -.001169, -.000894,
.0003743, None, ,
Zn, 213.856 {458}, Y1, ppm, .0019257, .0002038, 10.58478, .0018114, .0021610,
.0018046, None, ,

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Zr,339.198 { 99},Y2R,ppm, -.001289,.0009451,73.32829, -.001922, -.001743,
 -.000202,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8738.905,9.807954,.1122332,8746.108,8727.734,8742.871,None,,
 Y2A,371.030 { 91}2,Cts/S,
 273582.0,1604.039,.5863101,274563.8,274451.3,271731.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18781.06,142.8552,.7606347,18720.29,18944.25,18678.63,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3144-L-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:20:14
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007073,.0001279,18.09001, .0007737, .0005598,
 .0007883,None,,
 Alum Ax,308.215 {109},Y2A,ppm, -.001248,.0017110,137.0683, -.002493, .0007029,
 -.001955,None,,
 Al,308.215 {109}2,Y2R,ppm, -.034306,.0142036,41.40300, -.048819, -.020434,
 -.033664,None,,
 As,189.042 {478},Y1,ppm, .0102252,.0052701,51.54007, .0048568, .0153911,
 .0104277,None,,
 B,249.773 {135},Y2A,ppm, .0788857,.0004794,.6077386, .0793997, .0784506,
 .0788070,None,,
 Ba,455.403 { 74},Y2A,ppm, .1316201,.0007814,.5937116, .1324133, .1308510,
 .1315960,None,,
 Be,313.042 {108},Y2A,ppm, -.000142,.0000092,6.521549, -.000140, -.000152,
 -.000133,None,,
 Ca,317.933 {106},Y2R,ppm, 35.86811,.2533057,.7062142, 36.16053, 35.72749,
 35.71630,None,,
 Cd,226.502 {449},Y1,ppm, .0003202,.0001794,56.03866, .0004308, .0001132,
 .0004166,None,,
 Co,228.616 {447},Y1,ppm, .0000395,.0001335,337.8116, .0000484, .0001683,
 -.000098,None,,
 Cr,267.716 {126},Y2A,ppm, .0007931,.0003952,49.82524, .0004458, .0007104,
 .0012231,None,,
 Cu,327.396 {103},Y2A,ppm, .0215583,.0004649,2.156245, .0219575, .0210480,
 .0216694,None,,
 Fe,261.187 {129},Y2R,ppm, .0028350,.0016783,59.19944, .0009381, .0041271,
 .0034397,None,,
 K,766.490 { 44},Y2R,ppm, 3.523517,.0534932,1.518177, 3.568311, 3.537953,
 3.464288,None,,
 Li,670.784 { 50},Y2R,ppm, .0207711,.0012734,6.130562, .0197659, .0222031,
 .0203445,None,,
 Mg,285.213 {118},Y2R,ppm, 6.891569,.0616779,.8949767, 6.959871, 6.874892,
 6.839944,None,,
 Mn,257.610 {131},Y2A,ppm, .0002457,.0000417,16.95464, .0002019, .0002503,
 .0002848,None,,
 Mo,202.030 {467},Y1,ppm, .0015815,.0003942,24.92284, .0018415, .0017750,
 .0011280,None,,

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Na,589.592 { 57},Y2R,ppm, 20.30260,.0355387,.1750451, 20.34185, 20.27261,
 20.29334,None,,
 Ni,231.604 {445},Y1,ppm, -.000121,.0006198,513.8035, .0002466, .0002277,
 -.000836,None,,
 P,177.495 {490},Y1,ppm, .0057707,.0038886,67.38604, .0028468, .0042813,
 .0101838,None,,
 Pb,220.353 {453},Y1,ppm, -.000347,.0012701,366.0708, .0001861, .0005698,
 -.001797,None,,
 S,182.034 {485},Y1,ppm, 8.316171,.0113664,.1366778, 8.326913, 8.317329,
 8.304269,None,,
 Sb,206.833 {463},Y1,ppm, -.000510,.0013817,271.0510, .0010737, -.001471,
 -.001132,None,,
 Se,196.090 {472},Y1,ppm, -.000472,.0076796,1628.030, -.002345, -.007041,
 .0079713,None,,
 Si,251.611 {134},Y2R,ppm, 22.53972,.1224919,.5434490, 22.68072, 22.47877,
 22.45965,None,,
 Sn,189.989 {477},Y1,ppm, .0002235,.0004265,190.8546, -.000256, .0005600,
 .0003665,None,,
 Sr,421.552 { 80},Y2A,ppm, .4372411,.0044037,1.007156, .4420742, .4334558,
 .4361932,None,,
 Th,283.730 {119},Y2R,ppm, .0334546,.0071407,21.34452, .0264155, .0332556,
 .0406928,None,,
 Ti,334.941 {101},Y2A,ppm, .0012561,.0000986,7.850161, .0013147, .0011423,
 .0013114,None,,
 Tl,190.856 {477},Y1,ppm, .0011656,.0007493,64.28338, .0012591, .0003739,
 .0018637,None,,
 V,292.402 {115},Y2A,ppm, .0078503,.0004258,5.423383, .0083026, .0077909,
 .0074573,None,,
 W,207.911 {462},Y1,ppm, .0004377,.0012863,293.8526, -.000571, .0018863,
 -.000002,None,,
 Zn,213.856 {458},Y1,ppm, .0239251,.0001263,.5278255, .0240063, .0239894,
 .0237796,None,,
 Zr,339.198 { 99},Y2R,ppm, -.003514,.0011392,32.41377, -.002614, -.003134,
 -.004795,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8784.250,17.59552,.2003076,8766.396,8801.575,8784.781,None,,
 Y2A,371.030 { 91}2,Cts/S,
 271258.1,843.6747,.3110229,271105.0,272167.8,270501.5,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18633.93,91.33599,.4901596,18545.26,18727.71,18628.81,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3144-L-1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:23:30
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0000123,.0002143,1741.334, -.000185, .0002406,
 -.000019,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .0004889,.0011234,229.7639, .0008355, .0013982,
 -.000767,None,,

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Al, 308.215 {109}2, Y2R, ppm, -.013181, .0196154, 148.8132, .0080310, -.016910,
 -.030664, None,,
 As, 189.042 {478}, Y1, ppm, .0095004, .0032236, 33.93173, .0060299, .0124012,
 .0100701, None,,
 B, 249.773 {135}, Y2A, ppm, .0783904, .0005771, .7362299, .0779771, .0790498,
 .0781442, None,,
 Ba, 455.403 { 74}, Y2A, ppm, .1324013, .0008349, .6305532, .1318140, .1333570,
 .1320330, None,,
 Be, 313.042 {108}, Y2A, ppm, -.000126, .0000139, 11.05455, -.000131, -.000136,
 -.000110, None,,
 Ca, 317.933 {106}, Y2R, ppm, 35.87727, .2328200, .6489344, 35.80511, 36.13763,
 35.68908, None,,
 Cd, 226.502 {449}, Y1, ppm, .0002656, .0001173, 44.17313, .0001837, .0004000,
 .0002131, None,,
 Co, 228.616 {447}, Y1, ppm, -.000096, .0001356, 141.7717, -.000187, .0000602,
 -.000160, None,,
 Cr, 267.716 {126}, Y2A, ppm, .0009491, .0001042, 10.97496, .0008893, .0010694,
 .0008886, None,,
 Cu, 327.396 {103}, Y2A, ppm, .0158904, .0004636, 2.917331, .0156193, .0164257,
 .0156263, None,,
 Fe, 261.187 {129}, Y2R, ppm, .0062092, .0013424, 21.61891, .0069930, .0046592,
 .0069755, None,,
 K, 766.490 { 44}, Y2R, ppm, 3.555499, .0348685, .9806913, 3.515280, 3.577229,
 3.573988, None,,
 Li, 670.784 { 50}, Y2R, ppm, .0184091, .0005274, 2.865137, .0189510, .0183791,
 .0178973, None,,
 Mg, 285.213 {118}, Y2R, ppm, 6.889064, .0263626, .3826735, 6.880254, 6.918703,
 6.868235, None,,
 Mn, 257.610 {131}, Y2A, ppm, .0005081, .0000462, 9.088688, .0004944, .0005596,
 .0004704, None,,
 Mo, 202.030 {467}, Y1, ppm, .0015183, .0003111, 20.48617, .0014350, .0012575,
 .0018626, None,,
 Na, 589.592 { 57}, Y2R, ppm, 20.31871, .0536867, .2642227, 20.34257, 20.35633,
 20.25723, None,,
 Ni, 231.604 {445}, Y1, ppm, -.000648, .0003789, 58.45482, -.000211, -.000849,
 -.000884, None,,
 P, 177.495 {490}, Y1, ppm, .0049471, .0021361, 43.17992, .0053547, .0026365,
 .0068501, None,,
 Pb, 220.353 {453}, Y1, ppm, -.000711, .0011890, 167.2111, -.000050, -.002084,
 .0000004, None,,
 S, 182.034 {485}, Y1, ppm, 8.407213, .0192749, .2292662, 8.418802, 8.417874,
 8.384962, None,,
 Sb, 206.833 {463}, Y1, ppm, -.000909, .0043618, 479.7385, -.004252, .0040248,
 -.002500, None,,
 Se, 196.090 {472}, Y1, ppm, -.001703, .0039068, 229.4322, -.001233, .0019476,
 -.005823, None,,
 Si, 251.611 {134}, Y2R, ppm, 22.50875, .1017431, .4520157, 22.46905, 22.62436,
 22.43285, None,,
 Sn, 189.989 {477}, Y1, ppm, .0014703, .0006907, 46.97962, .0009665, .0011867,
 .0022577, None,,
 Sr, 421.552 { 80}, Y2A, ppm, .4401145, .0039551, .8986442, .4355619, .4427032,
 .4420785, None,,
 Th, 283.730 {119}, Y2R, ppm, .0182548, .0075976, 41.61980, .0119277, .0266814,
 .0161554, None,,
 Ti, 334.941 {101}, Y2A, ppm, .0012316, .0001398, 11.35411, .0013667, .0010875,
 .0012407, None,,
 Tl, 190.856 {477}, Y1, ppm, .0005552, .0004076, 73.40431, .0008473, .0000896,
 .0007288, None,,
 V, 292.402 {115}, Y2A, ppm, .0084112, .0002485, 2.954903, .0086963, .0082401,
 .0082971, None,,
 W, 207.911 {462}, Y1, ppm, -.000125, .0007593, 608.9906, -.000731, -.000369,
 .0007269, None,,
 Zn, 213.856 {458}, Y1, ppm, .0182072, .0001558, .8557282, .0181911, .0183704,

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.0180601,None,,
 Zr,339.198 { 99},Y2R,ppm, -.001589,.0008426,53.01876, -.000616, -.002066,
 -.002085,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8720.259,10.26518,.1177165,8729.436,8709.174,8722.167,None,,
 Y2A,371.030 { 91}2,Cts/S,
 271941.9,1874.996,.6894838,273854.1,270106.4,271865.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18691.00,80.05182,.4282907,18756.37,18601.72,18714.91,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3263-K-10-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:26:45
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0007271,.0006507,89.49914, .0008118, .0013313,
 .0000381,None,,
 Al,308.215 {109},Y2A,ppm, .0075481,.0017908,23.72549, .0081625, .0089509,
 .0055310,None,,
 Al,308.215 {109}2,Y2R,ppm, -.006417,.0173956,271.0733, -.012714, -.019788,
 .0132498,None,,
 As,189.042 {478},Y1,ppm, .0082457,.0016326,19.79961, .0066526, .0099151,
 .0081694,None,,
 B,249.773 {135},Y2A,ppm, .8119053,.0012271,.1511402, .8131182, .8119332,
 .8106644,None,,
 Ba,455.403 { 74},Y2A,ppm, .0713535,.0003062,.4291336, .0715000, .0715589,
 .0710016,None,,
 Be,313.042 {108},Y2A,ppm, -.000149,.0000154,10.32830, -.000139, -.000167,
 -.000142,None,,
 Ca,317.933 {106},Y2R,ppm, 29.30297,.1187903,.4053864, 29.42494, 29.29633,
 29.18764,None,,
 Cd,226.502 {449},Y1,ppm, .0004020,.0000820,20.38483, .0003319, .0004921,
 .0003820,None,,
 Co,228.616 {447},Y1,ppm, .0008566,.0002437,28.44303, .0007964, .0011247,
 .0006487,None,,
 Cr,267.716 {126},Y2A,ppm, .0005230,.0002639,50.45950, .0008209, .0004297,
 .0003185,None,,
 Cu,327.396 {103},Y2A,ppm, .0016269,.0002942,18.08283, .0015586, .0019492,
 .0013728,None,,
 Fe,261.187 {129},Y2R,ppm, .0089801,.0007554,8.411786, .0081084, .0094418,
 .0093901,None,,
 K,766.490 { 44},Y2R,ppm, 1.151546,.0376396,3.268619, 1.194989, 1.128700,
 1.130948,None,,
 Li,670.784 { 50},Y2R,ppm, .0039822,.0013618,34.19649, .0050586, .0044367,
 .0024513,None,,
 Mg,285.213 {118},Y2R,ppm, 40.81251,.1608482,.3941150, 40.99164, 40.76548,
 40.68043,None,,
 Mn,257.610 {131},Y2A,ppm, .6081105,.0037817,.6218730, .6096533, .6108769,
 .6038013,None,,
 Mo,202.030 {467},Y1,ppm, .0149057,.0004821,3.234697, .0153001, .0150488,

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.0143682, None, ,
Na, 589.592 { 57}, Y2R, ppm, 215.3000, 1.447201, .6721790, 214.4513, 214.4777,
216.9710, None, ,
Ni, 231.604 {445}, Y1, ppm, .0360975, .0001249, .3459661, .0360421, .0362404,
.0360098, None, ,
P, 177.495 {490}, Y1, ppm, .3450335, .0020998, .6085715, .3474418, .3435864,
.3440722, None, ,
Pb, 220.353 {453}, Y1, ppm, -.000914, .0007886, 86.28841, -.000060, -.001066,
-.001616, None, ,
S, 182.034 {485}, Y1, ppm, 45.36405, .1333142, .2938763, 45.45875, 45.42180,
45.21159, None, ,
Sb, 206.833 {463}, Y1, ppm, -.000181, .0022072, 1216.947, -.000490, .0021639,
-.002218, None, ,
Se, 196.090 {472}, Y1, ppm, -.003248, .0013796, 42.47771, -.004456, -.001745,
-.003542, None, ,
Si, 251.611 {134}, Y2R, ppm, 11.56041, .0465853, .4029724, 11.60224, 11.56878,
11.51020, None, ,
Sn, 189.989 {477}, Y1, ppm, .0020723, .0004532, 21.86863, .0018319, .0025950,
.0017900, None, ,
Sr, 421.552 { 80}, Y2A, ppm, .2619103, .0009420, .3596483, .2623181, .2625796,
.2608331, None, ,
Th, 283.730 {119}, Y2R, ppm, .0153492, .0203603, 132.6471, -.000825, .0086605,
.0382124, None, ,
Ti, 334.941 {101}, Y2A, ppm, .0015214, .0001124, 7.385565, .0016491, .0014774,
.0014376, None, ,
Tl, 190.856 {477}, Y1, ppm, .0020561, .0024626, 119.7686, .0030713, .0038489,
-.000752, None, ,
V, 292.402 {115}, Y2A, ppm, .0018508, .0004484, 24.22988, .0014283, .0018028,
.0023214, None, ,
W, 207.911 {462}, Y1, ppm, -.000936, .0002359, 25.20115, -.001178, -.000707,
-.000922, None, ,
Zn, 213.856 {458}, Y1, ppm, .0025308, .0000580, 2.291039, .0025124, .0024843,
.0025958, None, ,
Zr, 339.198 { 99}, Y2R, ppm, -.000893, .0011465, 128.3233, .0003884, -.001821,
-.001248, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
Y1, 224.306 {450}, Cts/S, 8419.750, 13.94647, .1656399, 8428.778, 8403.687, 8426.786, None, ,
Y2A, 371.030 { 91}2, Cts/S,
260468.4, 724.6493, .2782101, 260457.2, 259749.3, 261198.5, None, ,
Y2R, 371.030 { 91}3, Cts/S,
18355.06, 56.59624, .3083414, 18316.86, 18328.24, 18420.08, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3263-K-3-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 16:30:00
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
Ag, 328.068 {103}, Y2A, ppm, .0002053, .0004279, 208.4804, -.000259, .0002911,
.0005837, None, ,
Alum Ax, 308.215 {109}, Y2A, ppm, .0794902, .0036596, 4.603796, .0774760, .0772802,

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.0837144, None, ,
Al, 308.215 {109}2, Y2R, ppm, .0608261, .0039477, 6.490162, .0622192, .0563707,
.0638883, None, ,
As, 189.042 {478}, Y1, ppm, .0312773, .0034045, 10.88496, .0287831, .0351559,
.0298928, None, ,
B, 249.773 {135}, Y2A, ppm, .9332788, .0019141, .2050934, .9315935, .9353598,
.9328829, None, ,
Ba, 455.403 { 74}, Y2A, ppm, .1276506, .0002770, .2170333, .1277576, .1278583,
.1273361, None, ,
Be, 313.042 {108}, Y2A, ppm, -.000118, .0000212, 17.93926, -.000094, -.000126,
-.000135, None, ,
Ca, 317.933 {106}, Y2R, ppm, 99.33421, .6463961, .6507285, 99.90866, 99.45970,
98.63427, None, ,
Cd, 226.502 {449}, Y1, ppm, .0026482, .0001621, 6.121008, .0024749, .0026735,
.0027962, None, ,
Co, 228.616 {447}, Y1, ppm, .0006635, .0003688, 55.58754, .0008387, .0002397,
.0009121, None, ,
Cr, 267.716 {126}, Y2A, ppm, .0044363, .0000167, .3762189, .0044538, .0044206,
.0044346, None, ,
Cu, 327.396 {103}, Y2A, ppm, .0022400, .0006771, 30.22943, .0014818, .0027846,
.0024537, None, ,
Fe, 261.187 {129}, Y2R, ppm, 15.81165, .1532070, .9689500, 15.98519, 15.75463,
15.69513, None, ,
K, 766.490 { 44}, Y2R, ppm, 12.73227, .0343245, .2695865, 12.76534, 12.73465,
12.69682, None, ,
Li, 670.784 { 50}, Y2R, ppm, .0039282, .0024591, 62.59946, .0041898, .0013489,
.0062460, None, ,
Mg, 285.213 {118}, Y2R, ppm, 38.74619, .2587885, .6679071, 39.02233, 38.70702,
38.50921, None, ,
Mn, 257.610 {131}, Y2A, ppm, 3.634854, .0164536, .4526613, 3.644525, 3.644181,
3.615856, None, ,
Mo, 202.030 {467}, Y1, ppm, .0045870, .0004188, 9.129031, .0047825, .0041063,
.0048723, None, ,
Na, 589.592 { 57}, Y2R, ppm, 189.1553, 3.096333, 1.636926, 190.3547, 191.4726,
185.6387, None, ,
Ni, 231.604 {445}, Y1, ppm, .0068545, .0004171, 6.085330, .0073032, .0064785,
.0067818, None, ,
P, 177.495 {490}, Y1, ppm, 1.379607, .0025822, .1871679, 1.382044, 1.379875,
1.376901, None, ,
Pb, 220.353 {453}, Y1, ppm, .0020411, .0011806, 57.84200, .0016306, .0033722,
.0011205, None, ,
S, 182.034 {485}, Y1, ppm, 24.15482, .1362652, .5641326, 24.30927, 24.10362,
24.05158, None, ,
Sb, 206.833 {463}, Y1, ppm, .0025403, .0008390, 33.02688, .0019542, .0021653,
.0035014, None, ,
Se, 196.090 {472}, Y1, ppm, -.000306, .0026830, 876.4994, .0026404, -.000951,
-.002608, None, ,
Si, 251.611 {134}, Y2R, ppm, 14.29617, .1204214, .8423331, 14.42694, 14.27171,
14.18986, None, ,
Sn, 189.989 {477}, Y1, ppm, .0027622, .0006422, 23.24977, .0032942, .0029437,
.0020488, None, ,
Sr, 421.552 { 80}, Y2A, ppm, 1.159431, .0042290, .3647512, 1.164307, 1.157230,
1.156757, None, ,
Th, 283.730 {119}, Y2R, ppm, .0234502, .0066513, 28.36366, .0258715, .0159274,
.0285517, None, ,
Ti, 334.941 {101}, Y2A, ppm, .0022061, .0001764, 7.994858, .0023557, .0020116,
.0022509, None, ,
Tl, 190.856 {477}, Y1, ppm, .0003301, .0004527, 137.1301, .0004547, .0007076,
-.000172, None, ,
V, 292.402 {115}, Y2A, ppm, .0012461, .0001576, 12.64626, .0011296, .0011834,
.0014254, None, ,
W, 207.911 {462}, Y1, ppm, .0011869, .0011234, 94.64428, .0000235, .0012718,
.0022654, None, ,

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Zn,213.856 {458},Y1,ppm, .2792020,.0013786,.4937589, .2807719, .2781888,
 .2786453,None,,
 Zr,339.198 { 99},Y2R,ppm, .0016351,.0009608,58.75963, .0007050, .0026239,
 .0015763,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8311.099,15.88040,.1910747,8311.973,8326.525,8294.800,None,,
 Y2A,371.030 { 91}2,Cts/S,
 257637.9,1071.959,.4160720,257327.9,256755.1,258830.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18346.59,80.04344,.4362852,18281.94,18321.70,18436.12,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3196-C-27-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:33:20
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, -.000124,.0005573,449.0035, .0001144, .0002742,
 -.000761,None,,
 Al,308.215 {109},Y2A,ppm, .0152894,.0040027,26.17964, .0106689, .0176973,
 .0175021,None,,
 Al,308.215 {109}2,Y2R,ppm, -.017135,.0077288,45.10527, -.023481, -.019397,
 -.008528,None,,
 As,189.042 {478},Y1,ppm, .0174138,.0025704,14.76050, .0196021, .0145832,
 .0180560,None,,
 B,249.773 {135},Y2A,ppm, .0933681,.0009053,.9695968, .0931382, .0943662,
 .0925999,None,,
 Ba,455.403 { 74},Y2A,ppm, .5084713,.0042586,.8375297, .5132798, .5069582,
 .5051757,None,,
 Be,313.042 {108},Y2A,ppm, -.000181,.0000295,16.25036, -.000158, -.000171,
 -.000215,None,,
 Ca,317.933 {106},Y2R,ppm, 70.35872,.2335697,.3319698, 70.60637, 70.14239,
 70.32740,None,,
 Cd,226.502 {449},Y1,ppm, .0002579,.0000712,27.60496, .0003192, .0002746,
 .0001798,None,,
 Co,228.616 {447},Y1,ppm, .0023430,.0002225,9.495968, .0022101, .0025999,
 .0022190,None,,
 Cr,267.716 {126},Y2A,ppm, .0016268,.0002687,16.51788, .0015101, .0014363,
 .0019342,None,,
 Cu,327.396 {103},Y2A,ppm, -.000798,.0003383,42.41791, -.001185, -.000647,
 -.000561,None,,
 Fe,261.187 {129},Y2R,ppm, 28.06776,.1002450,.3571535, 28.09659, 28.15044,
 27.95627,None,,
 K,766.490 { 44},Y2R,ppm, 13.31940,.0309200,.2321428, 13.35510, 13.30096,
 13.30215,None,,
 Li,670.784 { 50},Y2R,ppm, .0097750,.0014624,14.96076, .0107928, .0080992,
 .0104331,None,,
 Mg,285.213 {118},Y2R,ppm, 49.36712,.1473170,.2984112, 49.52209, 49.35039,
 49.22888,None,,
 Mn,257.610 {131},Y2A,ppm, .9375650,.0011991,.1278982, .9378669, .9385844,
 .9362438,None,,

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Mo,202.030 {467},Y1,ppm, .0014394,.0003627,25.20133, .0018561, .0011944,
 .0012676,None,,
 Na,589.592 { 57},Y2R,ppm, 504.8307,1.978192,.3918525, 506.8003, 502.8440,
 504.8479,None,,
 Ni,231.604 {445},Y1,ppm, .0053971,.0010749,19.91669, .0047621, .0047909,
 .0066382,None,,
 P,177.495 {490},Y1,ppm, .0306145,.0037306,12.18586, .0347412, .0274810,
 .0296212,None,,
 Pb,220.353 {453},Y1,ppm, .0026629,.0010187,38.25326, .0025612, .0016990,
 .0037287,None,,
 S,182.034 {485},Y1,ppm, 10.43869,.0668324,.6402378, 10.49789, 10.45197,
 10.36622,None,,
 Sb,206.833 {463},Y1,ppm, .0005031,.0015511,308.2923, -.001287, .0014492,
 .0013472,None,,
 Se,196.090 {472},Y1,ppm, .0012602,.0015596,123.7554, -.000291, .0028283,
 .0012429,None,,
 Si,251.611 {134},Y2R,ppm, 3.946329,.0185439,.4699034, 3.948867, 3.926646,
 3.963473,None,,
 Sn,189.989 {477},Y1,ppm, .0021521,.0003595,16.70697, .0025532, .0020443,
 .0018587,None,,
 Sr,421.552 { 80},Y2A,ppm, .3772787,.0008036,.2129895, .3769472, .3781950,
 .3766940,None,,
 Th,283.730 {119},Y2R,ppm, .0199411,.0180652,90.59311, .0360659, .0004180,
 .0233393,None,,
 Ti,334.941 {101},Y2A,ppm, .0012749,.0000340,2.670060, .0013069, .0012787,
 .0012392,None,,
 Tl,190.856 {477},Y1,ppm, .0022443,.0027536,122.6893, .0036328, -.000927,
 .0040272,None,,
 V,292.402 {115},Y2A,ppm, -.000957,.0004363,45.57339, -.001386, -.000973,
 -.000514,None,,
 W,207.911 {462},Y1,ppm, .0034690,.0001431,4.123696, .0033076, .0035801,
 .0035192,None,,
 Zn,213.856 {458},Y1,ppm, .0233582,.0002656,1.137246, .0236097, .0233844,
 .0230804,None,,
 Zr,339.198 { 99},Y2R,ppm, .0000269,.0016714,6218.653, -.001902, .0009346,
 .0010480,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8180.629,7.361283,.0899843,8181.585,8172.837,8187.466,None,,
 Y2A,371.030 { 91}2,Cts/S,
 248467.1,575.3414,.2315564,248424.3,247914.3,249062.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 17847.48,85.46453,.4788605,17910.49,17881.75,17750.20,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3263-K-6-A
 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:36:50
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0004536,.0000502,11.05718, .0004091, .0004438,
 .0005079,None,,

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Al, 308.215 {109}, Y2A, ppm, .0086291, .0035965, 41.67920, .0098559, .0114517,
 .0045797, None,
 Al, 308.215 {109}2, Y2R, ppm, .0034794, .0128523, 369.3799, -.011058, .0133308,
 .0081660, None,
 As, 189.042 {478}, Y1, ppm, .0107957, .0029879, 27.67649, .0135386, .0076119,
 .0112365, None,
 B, 249.773 {135}, Y2A, ppm, .4217175, .0022222, .5269354, .4231854, .4228061,
 .4191609, None,
 Ba, 455.403 { 74}, Y2A, ppm, .0458033, .0002311, .5046057, .0457170, .0460651,
 .0456277, None,
 Be, 313.042 {108}, Y2A, ppm, -.000155, .0000048, 3.081748, -.000157, -.000149,
 -.000158, None,
 Ca, 317.933 {106}, Y2R, ppm, 24.06851, .0469868, .1952211, 24.03046, 24.05404,
 24.12103, None,
 Cd, 226.502 {449}, Y1, ppm, .0003876, .0000589, 15.19481, .0003566, .0003508,
 .0004556, None,
 Co, 228.616 {447}, Y1, ppm, .0005425, .0002682, 49.43619, .0003208, .0004661,
 .0008406, None,
 Cr, 267.716 {126}, Y2A, ppm, .0014731, .0005412, 36.73627, .0011160, .0012076,
 .0020958, None,
 Cu, 327.396 {103}, Y2A, ppm, .0015501, .0001687, 10.88462, .0015772, .0017036,
 .0013695, None,
 Fe, 261.187 {129}, Y2R, ppm, .0723828, .0009840, 1.359509, .0728003, .0712589,
 .0730893, None,
 K, 766.490 { 44}, Y2R, ppm, .9974736, .0140679, 1.410350, 1.000971, .9819870,
 1.009463, None,
 Li, 670.784 { 50}, Y2R, ppm, .0089294, .0015290, 17.12289, .0103988, .0090422,
 .0073471, None,
 Mg, 285.213 {118}, Y2R, ppm, 22.09592, .0483354, .2187526, 22.04016, 22.12586,
 22.12174, None,
 Mn, 257.610 {131}, Y2A, ppm, .5274163, .0025796, .4891047, .5263623, .5303560,
 .5255306, None,
 Mo, 202.030 {467}, Y1, ppm, .0010367, .0002818, 27.18085, .0010256, .0013238,
 .0007606, None,
 Na, 589.592 { 57}, Y2R, ppm, 179.6062, .2400476, .1336522, 179.3320, 179.7080,
 179.7785, None,
 Ni, 231.604 {445}, Y1, ppm, .0042032, .0003454, 8.218268, .0039583, .0040530,
 .0045983, None,
 P, 177.495 {490}, Y1, ppm, .0819452, .0021659, 2.643063, .0796990, .0821160,
 .0840206, None,
 Pb, 220.353 {453}, Y1, ppm, -.001046, .0014068, 134.4506, .0005535, -.001603,
 -.002090, None,
 S, 182.034 {485}, Y1, ppm, 26.44724, .0570485, .2157067, 26.50897, 26.43629,
 26.39645, None,
 Sb, 206.833 {463}, Y1, ppm, -.000176, .0007334, 417.2352, .0002335, -.001023,
 .0002617, None,
 Se, 196.090 {472}, Y1, ppm, -.000256, .0006284, 245.8190, -.000980, .0001417,
 .0000715, None,
 Si, 251.611 {134}, Y2R, ppm, 13.31701, .0229860, .1726062, 13.29149, 13.32346,
 13.33608, None,
 Sn, 189.989 {477}, Y1, ppm, .0020524, .0017943, 87.42535, .0002517, .0038402,
 .0020652, None,
 Sr, 421.552 { 80}, Y2A, ppm, .2151410, .0012282, .5708909, .2148378, .2164924,
 .2140928, None,
 Th, 283.730 {119}, Y2R, ppm, .0217268, .0116933, 53.81955, .0205799, .0106492,
 .0339512, None,
 Ti, 334.941 {101}, Y2A, ppm, .0013782, .0000628, 4.557872, .0014150, .0014139,
 .0013057, None,
 Tl, 190.856 {477}, Y1, ppm, .0036871, .0016175, 43.86747, .0019286, .0051112,
 .0040217, None,
 V, 292.402 {115}, Y2A, ppm, -.000199, .0003522, 177.3557, -.000411, .0002080,
 -.000393, None,
 W, 207.911 {462}, Y1, ppm, -.000726, .0007337, 101.0320, .0000854, -.000921,

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-.001342,None,,
 Zn,213.856 {458},Y1,ppm, .0010448,.0001353,12.94423, .0008940, .0011554,
 .0010852,None,,
 Zr,339.198 { 99},Y2R,ppm, -.001039,.0005119,49.27241, -.000786, -.001628,
 -.000702,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8502.156,7.222971,.0849546,8502.670,8509.108,8494.689,None,,
 Y2A,371.030 { 91}2,Cts/S,
 263007.6,501.6428,.1907332,263215.8,262435.4,263371.6,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18459.22,107.6729,.5833015,18568.12,18456.74,18352.81,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3263-K-1-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:39:55
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0002012,.0000499,24.78446, .0002179, .0002405,
 .0001451,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .1425100,.0015086,1.058587, .1409782, .1425576,
 .1439943,None,,
 Al,308.215 {109}2,Y2R,ppm, .1099172,.0119419,10.86443, .1004346, .1059885,
 .1233285,None,,
 As,189.042 {478},Y1,ppm, .0482476,.0011107,2.302083, .0488832, .0469651,
 .0488946,None,,
 B,249.773 {135},Y2A,ppm, .7386803,.0028152,.3811139, .7418255, .7378192,
 .7363962,None,,
 Ba,455.403 { 74},Y2A,ppm, .0848206,.0002514,.2963615, .0850203, .0849031,
 .0845383,None,,
 Be,313.042 {108},Y2A,ppm, .0000026,.0000173,671.7116, .0000218, -.000012,
 -.000002,None,,
 Ca,317.933 {106},Y2R,ppm, 49.45285,.2982658,.6031316, 49.79726, 49.27899,
 49.28231,None,,
 Cd,226.502 {449},Y1,ppm, .0005411,.0001345,24.86204, .0004560, .0006963,
 .0004712,None,,
 Co,228.616 {447},Y1,ppm, .0002129,.0006723,315.8155, .0007626, .0004126,
 -.000537,None,,
 Cr,267.716 {126},Y2A,ppm, .0047368,.0003149,6.647364, .0048411, .0049862,
 .0043830,None,,
 Cu,327.396 {103},Y2A,ppm, -.000021,.0005298,2521.360, .0005553, -.000487,
 -.000131,None,,
 Fe,261.187 {129},Y2R,ppm, 14.02285,.0332786,.2373169, 14.01885, 13.99175,
 14.05795,None,,
 K,766.490 { 44},Y2R,ppm, 10.74784,.0430274,.4003350, 10.75651, 10.70114,
 10.78588,None,,
 Li,670.784 { 50},Y2R,ppm, .0016210,.0017484,107.8606, .0010128, .0002579,
 .0035923,None,,
 Mg,285.213 {118},Y2R,ppm, 20.00858,.1315627,.6575313, 20.11521, 19.86156,
 20.04898,None,,
 Mn,257.610 {131},Y2A,ppm, 2.584084,.0129372,.5006498, 2.593080, 2.589915,

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2.569258, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0108559, .0004082, 3.760651, .0112184, .0104137,
 .0109356, None, ,
 Na, 589.592 {57}, Y2R, ppm, 113.9485, .1663279, .1459676, 114.1321, 113.9056,
 113.8078, None, ,
 Ni, 231.604 {445}, Y1, ppm, .0019205, .0001389, 7.230977, .0018204, .0018621,
 .0020790, None, ,
 P, 177.495 {490}, Y1, ppm, 2.026672, .0071611, .3533428, 2.028063, 2.033036,
 2.018918, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0014100, .0011966, 84.86109, .0021978, .0000331,
 .0019991, None, ,
 S, 182.034 {485}, Y1, ppm, 1.676919, .0101553, .6055909, 1.670197, 1.688601,
 1.671958, None, ,
 Sb, 206.833 {463}, Y1, ppm, -.000452, .0033231, 735.9941, .0017407, .0011797,
 -.004275, None, ,
 Se, 196.090 {472}, Y1, ppm, -.000330, .0034355, 1041.155, .0033782, -.000963,
 -.003405, None, ,
 Si, 251.611 {134}, Y2R, ppm, 15.04706, .0492884, .3275617, 15.08651, 14.99181,
 15.06286, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0000656, .0019557, 2983.255, -.001648, .0021963,
 -.000352, None, ,
 Sr, 421.552 {80}, Y2A, ppm, .8489017, .0023990, .2826005, .8488646, .8513191,
 .8465215, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0287204, .0038966, 13.56722, .0250631, .0328187,
 .0282794, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0022066, .0001111, 5.032501, .0020784, .0022688,
 .0022725, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0027736, .0032703, 117.9063, .0063354, .0020790,
 -.000094, None, ,
 V, 292.402 {115}, Y2A, ppm, .0004976, .0001536, 30.87004, .0004392, .0003818,
 .0006719, None, ,
 W, 207.911 {462}, Y1, ppm, .0006153, .0007075, 114.9858, .0007787, -.000160,
 .0012268, None, ,
 Zn, 213.856 {458}, Y1, ppm, .0004237, .0001547, 36.52024, .0004601, .0005571,
 .0002540, None, ,
 Zr, 339.198 {99}, Y2R, ppm, .0010683, .0020107, 188.2237, .0028470, -.001113,
 .0014712, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8496.953, 23.94636, .2818229, 8524.571, 8481.969, 8484.320, None, ,
 Y2A, 371.030 {91}2, Cts/S,
 261071.2, 580.1473, .2222180, 261015.2, 260521.2, 261677.4, None, ,
 Y2R, 371.030 {91}3, Cts/S,
 18440.10, 102.6830, .5568465, 18321.53, 18500.27, 18498.48, None, ,

[Sample Header]

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 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:43:09
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .0003142, .0003277, 104.3088, .0006786, .0000438,

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.0002201, None, ,
 Al, 308.215 {109}, Y2A, ppm, 1.037106, .0044173, .4259290, 1.033498, 1.042032,
 1.035787, None, ,
 Al, 308.215 {109}2, Y2R, ppm, 1.006172, .0198625, 1.974065, 1.001500, 1.027954,
 .9890619, None, ,
 As, 189.042 {478}, Y1, ppm, .0079600, .0029350, 36.87144, .0054040, .0073107,
 .0111652, None, ,
 B, 249.773 {135}, Y2A, ppm, .4920737, .0009717, .1974634, .4909698, .4927993,
 .4924520, None, ,
 Ba, 455.403 {74}, Y2A, ppm, .0287928, .0000635, .2206690, .0287781, .0288624,
 .0287379, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000117, .0000085, 7.275448, -.000112, -.000127,
 -.000113, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 26.49576, .1458580, .5504956, 26.32908, 26.60004,
 26.55816, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0006210, .0000771, 12.41064, .0005321, .0006699,
 .0006609, None, ,
 Co, 228.616 {447}, Y1, ppm, .0023139, .0000474, 2.048524, .0022802, .0023681,
 .0022935, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0055437, .0002221, 4.006657, .0056767, .0056672,
 .0052873, None, ,
 Cu, 327.396 {103}, Y2A, ppm, .0038231, .0004217, 11.03121, .0040186, .0041116,
 .0033391, None, ,
 Fe, 261.187 {129}, Y2R, ppm, 1.527720, .0067472, .4416512, 1.534767, 1.527074,
 1.521319, None, ,
 K, 766.490 {44}, Y2R, ppm, 2.092340, .0588168, 2.811053, 2.051372, 2.065913,
 2.159734, None, ,
 Li, 670.784 {50}, Y2R, ppm, .0125309, .0005721, 4.565250, .0122784, .0121285,
 .0131858, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 20.00859, .0973246, .4864143, 19.90437, 20.09711,
 20.02429, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .7950064, .0022448, .2823622, .7970194, .7954142,
 .7925857, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0006027, .0000960, 15.93013, .0005976, .0005093,
 .0007011, None, ,
 Na, 589.592 {57}, Y2R, ppm, 187.7286, .0558118, .0297300, 187.6759, 187.7230,
 187.7871, None, ,
 Ni, 231.604 {445}, Y1, ppm, .0138393, .0005514, 3.984226, .0132026, .0141607,
 .0141546, None, ,
 P, 177.495 {490}, Y1, ppm, .1505409, .0066377, 4.409255, .1533254, .1553329,
 .1429645, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0028480, .0006127, 21.51404, .0027311, .0035107,
 .0023021, None, ,
 S, 182.034 {485}, Y1, ppm, 30.51781, .0879415, .2881645, 30.61609, 30.49078,
 30.44656, None, ,
 Sb, 206.833 {463}, Y1, ppm, -.000293, .0016222, 554.2489, -.001356, .0015744,
 -.001096, None, ,
 Se, 196.090 {472}, Y1, ppm, -.000397, .0015022, 377.9426, -.001942, .0010587,
 -.000309, None, ,
 Si, 251.611 {134}, Y2R, ppm, 15.73293, .0404240, .2569387, 15.68906, 15.76867,
 15.74106, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0007698, .0002846, 36.96637, .0008555, .0010016,
 .0004522, None, ,
 Sr, 421.552 {80}, Y2A, ppm, .2314730, .0004485, .1937614, .2315723, .2318636,
 .2309832, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0240154, .0093752, 39.03840, .0315679, .0135224,
 .0269559, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0297519, .0000983, .3303007, .0296784, .0298635,
 .0297137, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0040598, .0040117, 98.81595, .0043304, -.000080,
 .0079293, None, ,
 V, 292.402 {115}, Y2A, ppm, .0039324, .0002226, 5.661368, .0041890, .0037920,
 .0038160, None, ,

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w,207.911 {462},Y1,ppm, -.001165,.0005883,50.50910, -.001768, -.001133,
 -.000593,None,,
 Zn,213.856 {458},Y1,ppm, .0098676,.0001450,1.469498, .0098159, .0100314,
 .0097556,None,,
 Zr,339.198 {99},Y2R,ppm, -.001409,.0009755,69.23274, -.002291, -.000361,
 -.001575,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8489.513,6.358713,.0749008,8494.547,8482.367,8491.625,None,,
 Y2A,371.030 {91}2,Cts/S,
 257922.1,610.8494,.2368349,257790.6,257387.7,258588.0,None,,
 Y2R,371.030 {91}3,Cts/S,
 18053.15,132.9333,.7363438,18202.95,18007.24,17949.26,None,,

[Sample Header]

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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:46:19
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0008411,.0004443,52.82138, .0006458, .0005279,
 .0013495,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .1563018,.0030320,1.939815, .1542773, .1597877,
 .1548403,None,,
 Al,308.215 {109}2,Y2R,ppm, .1074823,.0194924,18.13550, .1222384, .0853852,
 .1148231,None,,
 As,189.042 {478},Y1,ppm, .0112191,.0015546,13.85705, .0112685, .0127485,
 .0096404,None,,
 B,249.773 {135},Y2A,ppm, .4825591,.0004564,.0945742, .4823560, .4830818,
 .4822396,None,,
 Ba,455.403 {74},Y2A,ppm, .0276892,.0000733,.2645802, .0276082, .0277088,
 .0277507,None,,
 Be,313.042 {108},Y2A,ppm, -.000145,.0000067,4.636422, -.000138, -.000145,
 -.000151,None,,
 Ca,317.933 {106},Y2R,ppm, 15.07850,.0307740,.2040917, 15.09282, 15.09951,
 15.04318,None,,
 Cd,226.502 {449},Y1,ppm, .0006955,.0000974,14.01278, .0008027, .0006124,
 .0006712,None,,
 Co,228.616 {447},Y1,ppm, .0010569,.0003380,31.98289, .0011621, .0006788,
 .0013299,None,,
 Cr,267.716 {126},Y2A,ppm, .0053325,.0003809,7.142028, .0049551, .0053257,
 .0057167,None,,
 Cu,327.396 {103},Y2A,ppm, .0022050,.0007565,34.30616, .0016606, .0030688,
 .0018857,None,,
 Fe,261.187 {129},Y2R,ppm, .5502261,.0053504,.9724031, .5445182, .5510327,
 .5551274,None,,
 K,766.490 {44},Y2R,ppm, 1.086955,.0219738,2.021591, 1.063946, 1.089196,
 1.107722,None,,
 Li,670.784 {50},Y2R,ppm, .0083059,.0013560,16.32549, .0098716, .0075124,
 .0075337,None,,
 Mg,285.213 {118},Y2R,ppm, 12.51638,.0182531,.1458339, 12.51027, 12.53691,
 12.50197,None,,

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Mn, 257.610 {131}, Y2A, ppm, .2893420, .0005804, .2005990, .2898500, .2887094,
.2894666, None, ,
Mo, 202.030 {467}, Y1, ppm, .0007971, .0002272, 28.50193, .0010589, .0006513,
.0006812, None, ,
Na, 589.592 { 57}, Y2R, ppm, 225.3984, .9800862, .4348239, 224.2748, 226.0773,
225.8431, None, ,
Ni, 231.604 {445}, Y1, ppm, .0289750, .0006557, 2.262794, .0283393, .0296489,
.0289369, None, ,
P, 177.495 {490}, Y1, ppm, .1577877, .0026763, 1.696134, .1598029, .1547511,
.1588090, None, ,
Pb, 220.353 {453}, Y1, ppm, .0005774, .0027928, 483.7328, -.002530, .0013840,
.0028781, None, ,
S, 182.034 {485}, Y1, ppm, 29.11945, .0903416, .3102449, 29.16164, 29.18098,
29.01573, None, ,
Sb, 206.833 {463}, Y1, ppm, .0006057, .0013516, 223.1366, .0021603, -.000291,
-.000052, None, ,
Se, 196.090 {472}, Y1, ppm, .0023648, .0054609, 230.9249, .0082638, .0013448,
-.002514, None, ,
Si, 251.611 {134}, Y2R, ppm, 14.72193, .0186770, .1268648, 14.70037, 14.73329,
14.73212, None, ,
Sn, 189.989 {477}, Y1, ppm, .0011416, .0011629, 101.8615, .0000749, .0009687,
.0023812, None, ,
Sr, 421.552 { 80}, Y2A, ppm, .1430158, .0005091, .3559961, .1428223, .1426317,
.1435933, None, ,
Th, 283.730 {119}, Y2R, ppm, .0152176, .0163919, 107.7163, .0121102, .0006019,
.0329408, None, ,
Ti, 334.941 {101}, Y2A, ppm, .0083247, .0001405, 1.688062, .0082057, .0082886,
.0084797, None, ,
Tl, 190.856 {477}, Y1, ppm, .0007799, .0006320, 81.03651, .0004962, .0015040,
.0003394, None, ,
V, 292.402 {115}, Y2A, ppm, .0022531, .0002080, 9.230599, .0024091, .0023334,
.0020170, None, ,
W, 207.911 {462}, Y1, ppm, -.000845, .0003964, 46.92706, -.000425, -.001212,
-.000898, None, ,
Zn, 213.856 {458}, Y1, ppm, .0046216, .0002658, 5.750868, .0043168, .0047430,
.0048050, None, ,
Zr, 339.198 { 99}, Y2R, ppm, .0000037, .0014694, 39318.25, .0001201, .0014115,
-.001520, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
Y1, 224.306 {450}, Cts/S, 8504.646, 17.56956, .2065878, 8522.578, 8503.897, 8487.463, None, ,
Y2A, 371.030 { 91}2, Cts/S,
258087.3, 996.6424, .3861648, 257735.4, 259212.2, 257314.4, None, ,
Y2R, 371.030 { 91}3, Cts/S,
18202.05, 81.97593, .4503664, 18294.83, 18171.92, 18139.40, None, ,

[Sample Header]

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SampleName=CCV 095153
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 16:49:31
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
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Ag,328.068 {103},Y2A,ppm, .4852,.0005,.1108, .4847, .4857, .4852,Chk Pass,,
Al,308.215 {109},Y2A,ppm, 23.23,.0467,.2008, 23.24, 23.18, 23.27,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, 23.50,.0896,.3813, 23.43, 23.46, 23.60,Chk Pass,,
As,189.042 {478},Y1,ppm, .4909,.0039,.7992, .4936, .4927, .4864,Chk Pass,,
B,249.773 {135},Y2A,ppm, .4640,.0008,.1633, .4648, .4640, .4633,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .4742,.0012,.2573, .4748, .4750, .4728,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .46898,.00190,.40410, .47075, .46920, .46698,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 23.87,.1544,.6468, 23.70, 23.91, 24.00,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .4859,.0011,.2272, .4861, .4868, .4846,Chk Pass,,
Co,228.616 {447},Y1,ppm, .4771,.0007,.1508, .4764, .4772, .4778,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .4693,.0018,.3739, .4712, .4691, .4677,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .4793,.0015,.3231, .4810, .4780, .4789,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 23.37,.0468,.2003, 23.31, 23.40, 23.39,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 23.81,.1741,.7309, 23.63, 23.83, 23.98,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .4808,.0031,.6469, .4794, .4787, .4844,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 23.25,.1644,.7070, 23.08, 23.29, 23.40,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .46999,.00226,.48063, .47189, .47059, .46749,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .4804,.0020,.4168, .4827, .4794, .4790,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 23.62,.0552,.2338, 23.58, 23.60, 23.68,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .4823,.0007,.1371, .4819, .4831, .4820,Chk Pass,,
P,177.495 {490},Y1,ppm, .4918,.0029,.5920, .4951, .4896, .4907,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .4738,.0022,.4738, .4756, .4746, .4713,Chk Pass,,
S,182.034 {485},Y1,ppm, 23.94,.0459,.1918, 23.96, 23.88, 23.97,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .4847,.0049,1.016, .4802, .4841, .4900,Chk Pass,,
Se,196.090 {472},Y1,ppm, .4879,.0014,.2861, .4877, .4894, .4866,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 23.462,.08804,.37526, 23.362, 23.493, 23.529,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .4723,.0009,.1975, .4716, .4734, .4719,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .4813,.0005,.0951, .4813, .4808, .4817,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .4938,.0087,1.753, .4840, .5002, .4974,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .4780,.0022,.4566, .4791, .4794, .4755,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .4793,.0016,.3291, .4804, .4800, .4775,Chk Pass,,
V,292.402 {115},Y2A,ppm, .4894,.0005,.1066, .4899, .4896, .4888,Chk Pass,,
W,207.911 {462},Y1,ppm, .4906,.0027,.5433, .4926, .4916, .4876,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .4849,.0010,.2006, .4849, .4858, .4839,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .4940,.0004,.0890, .4944, .4935, .4941,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 8518.0,16.020,.18807,8536.4,8510.7,8507.0
Y2A,371.030 { 91}2,Cts/S, 264150.,488.70,.18500,263790.,263970.,264710.
Y2R,371.030 { 91}3,Cts/S, 18283.,153.44,.83926,18457.,18228.,18165.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=CCB 078331

Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 16:52:40
Sample Type=QC
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0003,.0002,71.05, .0003, .0006, .0002,Chk Pass,,
Al,308.215 {109},Y2A,ppm, -.0051,.0013,25.26, -.0062, -.0054, -.0037,Chk Pass,,
Al,308.215 {109}2,Y2R,ppm, -.0105,.0180,172.3, -.0313, -.0000, -.0001,Chk Pass,,
As,189.042 {478},Y1,ppm, .0052,.0011,21.12, .0056, .0060, .0040,Chk Pass,,

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B,249.773 {135},Y2A,ppm, .0012,.0003,28.46, .0015, .0008, .0011,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .0000,.0000,18.51, .0000, .0000, .0001,Chk Pass,,
Be,313.042 {108},Y2A,ppm, -.00013,.00002,11.598, -.00015, -.00012, -.00013,Chk
Pass,,
Ca,317.933 {106},Y2R,ppm, -.0039,.0021,53.90, -.0061, -.0020, -.0035,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .0004,.0000,8.079, .0004, .0004, .0004,Chk Pass,,
Co,228.616 {447},Y1,ppm, .0003,.0002,71.63, .0001, .0002, .0005,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .0001,.0002,292.6, .0003, .0001, -.0001,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, -.0001,.0004,393.8, -.0003, .0003, -.0003,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, .0023,.0057,243.5, -.0040, .0070, .0041,Chk Pass,,
K,766.490 { 44},Y2R,ppm, .0137,.0297,216.5, .0463, -.0120, .0068,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, -.0001,.0022,4240., .0023, -.0003, -.0021,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, -.0026,.0008,31.59, -.0020, -.0022, -.0035,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .00003,.00005,140.61, .00002, .00008, -.00000,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .0019,.0004,22.11, .0021, .0015, .0023,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, .1074,.0123,11.41, .1206, .1052, .0964,Chk Pass,,
Ni,231.604 {445},Y1,ppm, -.0001,.0005,353.1, -.0004, .0004, -.0004,Chk Pass,,
P,177.495 {490},Y1,ppm, .0001,.0012,914.2, .0010, -.0013, .0006,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .0001,.0019,1480., -.0019, .0017, .0006,Chk Pass,,
S,182.034 {485},Y1,ppm, .0109,.0022,19.69, .0121, .0123, .0085,Chk Pass,,
Sb,206.833 {463},Y1,ppm, -.0005,.0007,141.0, -.0006, .0002, -.0012,Chk Pass,,
Se,196.090 {472},Y1,ppm, .0002,.0027,1332., .0001, .0029, -.0025,Chk Pass,,
Si,251.611 {134},Y2R,ppm, -.00166,.00279,168.33, .00143, -.00241, -.00400,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .0010,.0018,184.4, -.0003, .0002, .0030,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .0000,.0000,22.55, .0000, .0000, .0000,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .0128,.0072,56.55, .0096, .0077, .0210,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, -.0001,.0001,114.4, -.0002, -.0001, .0000,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .0020,.0034,173.9, -.0015, .0021, .0053,Chk Pass,,
V,292.402 {115},Y2A,ppm, -.0011,.0005,47.28, -.0017, -.0011, -.0006,Chk Pass,,
W,207.911 {462},Y1,ppm, .0006,.0004,69.29, .0010, .0003, .0004,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .0000,.0001,405.6, .0002, .0001, -.0001,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, -.0016,.0014,91.82, -.0027, .0000, -.0020,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3
Y1,224.306 {450},Cts/S, 8680.4,18.370,.21162,8701.6,8669.7,8669.9
Y2A,371.030 { 91}2,Cts/S, 271300.,1602.8,.59079,270510.,273150.,270250.
Y2R,371.030 { 91}3,Cts/S, 18312.,154.40,.84313,18458.,18151.,18328.

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3263-K-9-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 16:55:49
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
Ag,328.068 {103},Y2A,ppm, .0003689,.0001641,44.47621, .0004371, .0004878,
.0001817,None,,
Alum Ax,308.215 {109},Y2A,ppm, .1542700,.0030750,1.993237, .1574883, .1539600,
.1513618,None,,
Al,308.215 {109}2,Y2R,ppm, .1340432,.0014340,1.069826, .1325243, .1353737,
.1342315,None,,
As,189.042 {478},Y1,ppm, .0060227,.0022036,36.58853, .0042869, .0085019,
.0052795,None,,

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B, 249.773 {135}, Y2A, ppm, .4899915, .0018973, .3872063, .4882836, .4920337,
 .4896571, None, ,
 Ba, 455.403 { 74}, Y2A, ppm, .0315773, .0003422, 1.083654, .0312097, .0318866,
 .0316358, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000145, .0000131, 9.041918, -.000135, -.000160,
 -.000139, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 7.338940, .0287735, .3920664, 7.367501, 7.309958,
 7.339363, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0003365, .0000960, 28.52073, .0002874, .0002750,
 .0004471, None, ,
 Co, 228.616 {447}, Y1, ppm, .0022904, .0002166, 9.455590, .0021178, .0025334,
 .0022200, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0010724, .0002427, 22.63479, .0011902, .0007933,
 .0012338, None, ,
 Cu, 327.396 {103}, Y2A, ppm, .0015442, .0004311, 27.91549, .0014758, .0020054,
 .0011515, None, ,
 Fe, 261.187 {129}, Y2R, ppm, .2237542, .0080701, 3.606671, .2278055, .2289960,
 .2144610, None, ,
 K, 766.490 { 44}, Y2R, ppm, .6070277, .0291425, 4.800853, .5874837, .6405233,
 .5930760, None, ,
 Li, 670.784 { 50}, Y2R, ppm, .0058861, .0006045, 10.26948, .0063653, .0052070,
 .0060860, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 10.87638, .0349962, .3217634, 10.91422, 10.84518,
 10.86974, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .6225302, .0066312, 1.065198, .6161303, .6293707,
 .6220897, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0006919, .0001784, 25.78161, .0005559, .0006260,
 .0008939, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 152.8370, .7019360, .4592709, 153.5689, 152.7727,
 152.1695, None, ,
 Ni, 231.604 {445}, Y1, ppm, .0114357, .0002083, 1.821404, .0115723, .0111959,
 .0115388, None, ,
 P, 177.495 {490}, Y1, ppm, .1140535, .0012879, 1.129196, .1132546, .1133667,
 .1155393, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0011559, .0013734, 118.8110, .0015567, .0022843,
 -.000373, None, ,
 S, 182.034 {485}, Y1, ppm, 18.14357, .0785608, .4329952, 18.15528, 18.21563,
 18.05982, None, ,
 Sb, 206.833 {463}, Y1, ppm, -.001210, .0040666, 336.1475, .0009075, .0013613,
 -.005898, None, ,
 Se, 196.090 {472}, Y1, ppm, .0002445, .0045018, 1840.912, -.004163, .0048353,
 .0000609, None, ,
 Si, 251.611 {134}, Y2R, ppm, 14.16173, .0565793, .3995225, 14.22551, 14.14210,
 14.11758, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0008980, .0011881, 132.3026, .0022308, -.000050,
 .0005133, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .0871452, .0007539, .8651709, .0864130, .0879192,
 .0871034, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0147458, .0048891, 33.15591, .0091404, .0181302,
 .0169667, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0051440, .0000484, .9412481, .0050960, .0051928,
 .0051434, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0002392, .0028129, 1176.184, .0027428, .0007794,
 -.002805, None, ,
 V, 292.402 {115}, Y2A, ppm, .0034825, .0004713, 13.53492, .0035466, .0039185,
 .0029823, None, ,
 W, 207.911 {462}, Y1, ppm, -.000864, .0005533, 64.00890, -.000623, -.001497,
 -.000473, None, ,
 Zn, 213.856 {458}, Y1, ppm, .0067242, .0000841, 1.251068, .0066691, .0068211,
 .0066825, None, ,
 Zr, 339.198 { 99}, Y2R, ppm, -.000691, .0015917, 230.2874, -.000477, -.002379,
 .0007827, None, ,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8587.727,14.39006,.1675654,8603.118,8574.608,8585.456,None,,
 Y2A,371.030 { 91}2,Cts/S,
 262995.1,2772.702,1.054279,265610.0,260087.8,263287.3,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18346.09,76.38889,.4163769,18315.12,18433.10,18290.05,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3263-K-2-A
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 16:58:53
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0001324,.0000674,50.87522, .0001864, .0001540,
 .0000569,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .0084869,.0051839,61.08156, .0110092, .0119271,
 .0025245,None,,
 Al,308.215 {109}2,Y2R,ppm, -.033922,.0223558,65.90380, -.034953, -.055744,
 -.011068,None,,
 As,189.042 {478},Y1,ppm, .0088497,.0019611,22.15962, .0069821, .0086744,
 .0108925,None,,
 B,249.773 {135},Y2A,ppm, .5734607,.0009122,.1590692, .5725382, .5734817,
 .5743622,None,,
 Ba,455.403 { 74},Y2A,ppm, .0210177,.0001290,.6138679, .0208690, .0210842,
 .0211000,None,,
 Be,313.042 {108},Y2A,ppm, -.000160,.0000186,11.65212, -.000181, -.000151,
 -.000147,None,,
 Ca,317.933 {106},Y2R,ppm, 28.60233,.0250970,.0877446, 28.61442, 28.57348,
 28.61910,None,,
 Cd,226.502 {449},Y1,ppm, .0005557,.0000964,17.34617, .0004452, .0006226,
 .0005992,None,,
 Co,228.616 {447},Y1,ppm, .0005853,.0001046,17.86965, .0005602, .0004956,
 .0007002,None,,
 Cr,267.716 {126},Y2A,ppm, .0053545,.0002649,4.947919, .0052670, .0051444,
 .0056521,None,,
 Cu,327.396 {103},Y2A,ppm, .0053031,.0002106,3.970803, .0051829, .0055463,
 .0051802,None,,
 Fe,261.187 {129},Y2R,ppm, .0352987,.0078837,22.33418, .0289497, .0441230,
 .0328233,None,,
 K,766.490 { 44},Y2R,ppm, 1.869584,.0071131,.3804654, 1.874425, 1.861417,
 1.872910,None,,
 Li,670.784 { 50},Y2R,ppm, .0141711,.0020156,14.22342, .0157789, .0119098,
 .0148247,None,,
 Mg,285.213 {118},Y2R,ppm, 24.06573,.0413529,.1718331, 24.04100, 24.11347,
 24.04272,None,,
 Mn,257.610 {131},Y2A,ppm, .0865540,.0001365,.1577489, .0863986, .0866544,
 .0866092,None,,
 Mo,202.030 {467},Y1,ppm, .0003363,.0004435,131.8928, .0003783, -.000127,
 .0007573,None,,
 Na,589.592 { 57},Y2R,ppm, 245.8718,.8172621,.3323936, 246.4513, 244.9370,
 246.2271,None,,
 Ni,231.604 {445},Y1,ppm, .0019315,.0007823,40.50221, .0015030, .0014571,

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.0028345, None, ,
P, 177.495 {490}, Y1, ppm, .1140967, .0015117, 1.324936, .1129500, .1158098,
.1135302, None, ,
Pb, 220.353 {453}, Y1, ppm, .0004720, .0016335, 346.1294, -.000673, .0023426,
-.000253, None, ,
S, 182.034 {485}, Y1, ppm, 31.50330, .0906175, .2876444, 31.56541, 31.54517,
31.39932, None, ,
Sb, 206.833 {463}, Y1, ppm, -.001932, .0028244, 146.1861, .0009304, -.004717,
-.002010, None, ,
Se, 196.090 {472}, Y1, ppm, .0017957, .0051839, 288.6908, -.003509, .0020461,
.0068498, None, ,
Si, 251.611 {134}, Y2R, ppm, 17.87972, .0271063, .1516034, 17.90322, 17.85006,
17.88588, None, ,
Sn, 189.989 {477}, Y1, ppm, .0022365, .0007141, 31.92968, .0028456, .0024134,
.0014506, None, ,
Sr, 421.552 { 80}, Y2A, ppm, .2384026, .0006823, .2862142, .2376201, .2387142,
.2388735, None, ,
Th, 283.730 {119}, Y2R, ppm, .0263486, .0150428, 57.09148, .0092739, .0321245,
.0376474, None, ,
Ti, 334.941 {101}, Y2A, ppm, .0014548, .0000298, 2.049225, .0014873, .0014486,
.0014286, None, ,
Tl, 190.856 {477}, Y1, ppm, .0046177, .0029372, 63.60691, .0062065, .0012284,
.0064183, None, ,
V, 292.402 {115}, Y2A, ppm, -.000649, .0002975, 45.83967, -.000923, -.000333,
-.000691, None, ,
W, 207.911 {462}, Y1, ppm, .0018303, .0002872, 15.69185, .0015012, .0020306,
.0019590, None, ,
Zn, 213.856 {458}, Y1, ppm, .0011696, .0000801, 6.851676, .0012621, .0011250,
.0011217, None, ,
Zr, 339.198 { 99}, Y2R, ppm, -.001044, .0011456, 109.7747, -.000531, -.000244,
-.002356, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
Y1, 224.306 {450}, Cts/S, 8388.079, 25.34787, .3021892, 8405.309, 8399.955, 8358.974, None, ,
Y2A, 371.030 { 91}2, Cts/S,
256927.3, 968.1191, .3768067, 258044.2, 256409.4, 256328.2, None, ,
Y2R, 371.030 { 91}3, Cts/S,
18096.10, 53.74938, .2970219, 18113.62, 18138.90, 18035.78, None, ,

[Sample Header]

Method=New TRACE Fast(v1493)
SampleName=410-3483-E-2-A
Username=dept 22
Comment=
Custom ID1=
Custom ID2=
Custom ID3=
Run Time=6/12/2020 17:02:06
Sample Type=Unk
Mode=CONC
CorrFactor=1.000
Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
Ag, 328.068 {103}, Y2A, ppm, .0002796, .0005101, 182.4021, .0002405, .0008082,
-.000210, None, ,
Alum Ax, 308.215 {109}, Y2A, ppm, .0062361, .0003101, 4.973088, .0060146, .0061031,
.0065905, None, ,
Al, 308.215 {109}2, Y2R, ppm, -.013647, .0083221, 60.98015, -.005628, -.013071,
-.022242, None, ,
As, 189.042 {478}, Y1, ppm, .0134209, .0026750, 19.93174, .0103558, .0146223,

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.0152847, None, ,
 B, 249.773 {135}, Y2A, ppm, .0606742, .0003986, .6569303, .0607175, .0610494,
 .0602557, None, ,
 Ba, 455.403 {74}, Y2A, ppm, .3235749, .0021112, .6524583, .3238074, .3255602,
 .3213571, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000150, .0000353, 23.52529, -.000191, -.000127,
 -.000133, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 108.2099, .2966119, .2741079, 108.5361, 107.9565,
 108.1370, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0001872, .0000976, 52.15050, .0002996, .0001385,
 .0001235, None, ,
 Co, 228.616 {447}, Y1, ppm, .0005702, .0001045, 18.32714, .0006341, .0006269,
 .0004496, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0004247, .0001908, 44.92679, .0002126, .0005825,
 .0004790, None, ,
 Cu, 327.396 {103}, Y2A, ppm, .0020532, .0002578, 12.55543, .0018253, .0020013,
 .0023329, None, ,
 Fe, 261.187 {129}, Y2R, ppm, .9696475, .0047119, .4859370, .9645245, .9737958,
 .9706222, None, ,
 K, 766.490 {44}, Y2R, ppm, 2.679124, .0137427, .5129542, 2.682482, 2.690877,
 2.664014, None, ,
 Li, 670.784 {50}, Y2R, ppm, .0209085, .0014515, 6.942362, .0204132, .0197694,
 .0225429, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 22.97463, .1276627, .5556680, 23.10868, 22.85450,
 22.96072, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .5257882, .0046644, .8871165, .5263364, .5301542,
 .5208739, None, ,
 Mo, 202.030 {467}, Y1, ppm, .0054808, .0002392, 4.364768, .0055756, .0056581,
 .0052087, None, ,
 Na, 589.592 {57}, Y2R, ppm, 57.09426, .0393307, .0688873, 57.11420, 57.04895,
 57.11962, None, ,
 Ni, 231.604 {445}, Y1, ppm, .0001432, .0006937, 484.3287, .0005422, -.000658,
 .0005452, None, ,
 P, 177.495 {490}, Y1, ppm, .0329770, .0044574, 13.51657, .0327455, .0375456,
 .0286399, None, ,
 Pb, 220.353 {453}, Y1, ppm, -.001402, .0031429, 224.1099, .0019972, -.002002,
 -.004202, None, ,
 S, 182.034 {485}, Y1, ppm, 6.547910, .0391595, .5980459, 6.573147, 6.567785,
 6.502799, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0009227, .0020547, 222.6900, .0029754, .0009266,
 -.001134, None, ,
 Se, 196.090 {472}, Y1, ppm, .0139681, .0035834, 25.65400, .0117601, .0120415,
 .0181026, None, ,
 Si, 251.611 {134}, Y2R, ppm, 15.35003, .0672109, .4378554, 15.42734, 15.30544,
 15.31732, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0003260, .0004502, 138.0987, .0005102, -.000187,
 .0006548, None, ,
 Sr, 421.552 {80}, Y2A, ppm, 1.063204, .0063694, .5990792, 1.061049, 1.070372,
 1.058192, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0044289, .0118774, 268.1774, .0064803, .0151471,
 -.008341, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0007832, .0002371, 30.27360, .0007516, .0010345,
 .0005635, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0038891, .0001113, 2.862688, .0037605, .0039527,
 .0039540, None, ,
 V, 292.402 {115}, Y2A, ppm, -.001804, .0003345, 18.53988, -.001763, -.001492,
 -.002158, None, ,
 W, 207.911 {462}, Y1, ppm, .0007991, .0012165, 152.2291, .0021649, .0004005,
 -.000168, None, ,
 Zn, 213.856 {458}, Y1, ppm, .0003045, .0001236, 40.59383, .0004471, .0002399,
 .0002266, None, ,
 Zr, 339.198 {99}, Y2R, ppm, -.000922, .0010242, 111.0869, -.000783, -.002009,
 .0000257, None, ,

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[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8399.718,32.07784,.3818918,8386.224,8376.591,8436.338,None,,
 Y2A,371.030 { 91}2,Cts/S,
 261467.6,1408.201,.5385758,262297.5,259841.7,262263.7,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18023.17,49.66339,.2755530,18065.58,17968.54,18035.40,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3483-E-3-A
 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 17:05:20
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0001415,.0001129,79.79549, .0000415, .0001190,
 .0002639,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .0010469,.0029830,284.9283, .0033619, .0020982,
 -.002319,None,,
 Al,308.215 {109}2,Y2R,ppm, -.009644,.0060220,62.44530, -.016467, -.005073,
 -.007390,None,,
 As,189.042 {478},Y1,ppm, .0075589,.0026873,35.55109, .0060496, .0059656,
 .0106615,None,,
 B,249.773 {135},Y2A,ppm, .0148388,.0005057,3.407967, .0153724, .0147773,
 .0143666,None,,
 Ba,455.403 { 74},Y2A,ppm, .1522631,.0006423,.4218653, .1528899, .1522932,
 .1516062,None,,
 Be,313.042 {108},Y2A,ppm, -.000121,.0000119,9.788835, -.000135, -.000116,
 -.000114,None,,
 Ca,317.933 {106},Y2R,ppm, 45.45488,.1636432,.3600124, 45.41698, 45.31351,
 45.63415,None,,
 Cd,226.502 {449},Y1,ppm, .0003393,.0001213,35.75688, .0002097, .0004502,
 .0003579,None,,
 Co,228.616 {447},Y1,ppm, .0003985,.0002468,61.94403, .0003623, .0001717,
 .0006614,None,,
 Cr,267.716 {126},Y2A,ppm, .0004956,.0003514,70.89385, .0000903, .0007134,
 .0006832,None,,
 Cu,327.396 {103},Y2A,ppm, .0009041,.0004807,53.16399, .0011870, .0003491,
 .0011762,None,,
 Fe,261.187 {129},Y2R,ppm, 1.217302,.0160068,1.314940, 1.216781, 1.233562,
 1.201561,None,,
 K,766.490 { 44},Y2R,ppm, 1.409666,.0104332,.7401171, 1.421640, 1.402529,
 1.404830,None,,
 Li,670.784 { 50},Y2R,ppm, .0137071,.0010625,7.751395, .0127284, .0148371,
 .0135558,None,,
 Mg,285.213 {118},Y2R,ppm, 13.32481,.0584326,.4385251, 13.27209, 13.31470,
 13.38764,None,,
 Mn,257.610 {131},Y2A,ppm, .2404711,.0015870,.6599371, .2412985, .2414734,
 .2386414,None,,
 Mo,202.030 {467},Y1,ppm, .0001213,.0003117,256.9562, .0003674, -.000229,
 .0002256,None,,
 Na,589.592 { 57},Y2R,ppm, 18.38002,.0476007,.2589804, 18.40901, 18.40596,
 18.32508,None,,

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Ni, 231.604 {445}, Y1, ppm, -.000197, .0002502, 126.7228, .0000520, -.000448,
 -.000196, None, ,
 P, 177.495 {490}, Y1, ppm, .0124942, .0017007, 13.61199, .0105671, .0137851,
 .0131304, None, ,
 Pb, 220.353 {453}, Y1, ppm, .0004154, .0017576, 423.1007, .0024337, -.000779,
 -.000409, None, ,
 S, 182.034 {485}, Y1, ppm, 3.420717, .0260243, .7607858, 3.394873, 3.446918,
 3.420359, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0010036, .0023125, 230.4142, -.001423, .0031819,
 .0012518, None, ,
 Se, 196.090 {472}, Y1, ppm, -.001196, .0013015, 108.8172, .0002839, -.001710,
 -.002162, None, ,
 Si, 251.611 {134}, Y2R, ppm, 20.32136, .0146119, .0719043, 20.32400, 20.30561,
 20.33448, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0013413, .0014269, 106.3842, .0024668, .0018208,
 -.000264, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .4654551, .0041517, .8919626, .4652924, .4696857,
 .4613871, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0106353, .0153161, 144.0117, .0204407, -.007014,
 .0184793, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0012950, .0000426, 3.289100, .0013272, .0013110,
 .0012467, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0031066, .0013839, 44.54562, .0017076, .0044748,
 .0031374, None, ,
 V, 292.402 {115}, Y2A, ppm, -.001034, .0002490, 24.09009, -.001081, -.000764,
 -.001256, None, ,
 W, 207.911 {462}, Y1, ppm, -.000315, .0008853, 281.3069, -.000823, -.000829,
 .0007076, None, ,
 Zn, 213.856 {458}, Y1, ppm, .0002202, .0000903, 41.02221, .0002573, .0001172,
 .0002860, None, ,
 Zr, 339.198 { 99}, Y2R, ppm, -.000213, .0020590, 966.0808, -.002369, .0017332,
 -.000004, None, ,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8571.492, 28.57416, .3333627, 8604.431, 8553.363, 8556.682, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 266208.6, 1227.918, .4612614, 266198.5, 264985.8, 267441.6, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 18128.07, 81.56860, .4499575, 18211.82, 18123.51, 18048.88, None, ,

[Sample Header]

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 Username=dept 22
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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 17:08:35
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .0004297, .0005960, 138.6923, .0007709, .0007766,
 -.000258, None, ,
 Alum Ax, 308.215 {109}, Y2A, ppm, -.000588, .0030990, 526.8983, -.001573, -.003075,
 .0028837, None, ,
 Al, 308.215 {109}2, Y2R, ppm, -.010873, .0103230, 94.94342, -.019151, .0006938,
 -.014161, None, ,

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As, 189.042 {478}, Y1, ppm, .0076193, .0022991, 30.17491, .0102687, .0061483,
.0064409, None,,
B, 249.773 {135}, Y2A, ppm, .0148812, .0003420, 2.298163, .0145545, .0148525,
.0152367, None,,
Ba, 455.403 { 74}, Y2A, ppm, .1529873, .0003034, .1983337, .1526382, .1531875,
.1531362, None,,
Be, 313.042 {108}, Y2A, ppm, -.000135, .0000136, 10.05741, -.000150, -.000131,
-.000124, None,,
Ca, 317.933 {106}, Y2R, ppm, 45.34122, .2735792, .6033786, 45.54180, 45.45229,
45.02958, None,,
Cd, 226.502 {449}, Y1, ppm, .0004106, .0001388, 33.80161, .0003262, .0003348,
.0005707, None,,
Co, 228.616 {447}, Y1, ppm, .0002797, .0002957, 105.7109, .0005129, .0003791,
-.000053, None,,
Cr, 267.716 {126}, Y2A, ppm, .0004345, .0003615, 83.20175, .0006634, .0006224,
.0000177, None,,
Cu, 327.396 {103}, Y2A, ppm, .0003073, .0004260, 138.6454, -.000159, .0004057,
.0006754, None,,
Fe, 261.187 {129}, Y2R, ppm, 1.236925, .0054965, .4443647, 1.242312, 1.237137,
1.231325, None,,
K, 766.490 { 44}, Y2R, ppm, 1.376308, .0316592, 2.300295, 1.412727, 1.360854,
1.355344, None,,
Li, 670.784 { 50}, Y2R, ppm, .0147992, .0011899, 8.040281, .0160976, .0137609,
.0145391, None,,
Mg, 285.213 {118}, Y2R, ppm, 13.27496, .0738496, .5563072, 13.33569, 13.29644,
13.19275, None,,
Mn, 257.610 {131}, Y2A, ppm, .2420971, .0003577, .1477485, .2420945, .2424560,
.2417407, None,,
Mo, 202.030 {467}, Y1, ppm, .0001832, .0002592, 141.5064, .0002439, -.000101,
.0004067, None,,
Na, 589.592 { 57}, Y2R, ppm, 18.44665, .0312706, .1695194, 18.47932, 18.44363,
18.41700, None,,
Ni, 231.604 {445}, Y1, ppm, -.000169, .0001654, 97.94125, -.000028, -.000127,
-.000351, None,,
P, 177.495 {490}, Y1, ppm, .0114442, .0019096, 16.68652, .0095151, .0114836,
.0133338, None,,
Pb, 220.353 {453}, Y1, ppm, -.000986, .0031364, 318.1227, -.000936, -.004147,
.0021250, None,,
S, 182.034 {485}, Y1, ppm, 3.445982, .0095207, .2762856, 3.452851, 3.449982,
3.435114, None,,
Sb, 206.833 {463}, Y1, ppm, -.001764, .0015449, 87.55921, -.003539, -.001032,
-.000722, None,,
Se, 196.090 {472}, Y1, ppm, .0011999, .0012232, 101.9387, .0026122, .0005031,
.0004844, None,,
Si, 251.611 {134}, Y2R, ppm, 20.30685, .0927731, .4568562, 20.35966, 20.36116,
20.19973, None,,
Sn, 189.989 {477}, Y1, ppm, .0011399, .0001675, 14.68975, .0012637, .0012066,
.0009494, None,,
Sr, 421.552 { 80}, Y2A, ppm, .4711264, .0043371, .9205804, .4706782, .4756701,
.4670307, None,,
Th, 283.730 {119}, Y2R, ppm, .0254353, .0032379, 12.73007, .0288421, .0250660,
.0223979, None,,
Ti, 334.941 {101}, Y2A, ppm, .0013679, .0001061, 7.754267, .0012791, .0014854,
.0013392, None,,
Tl, 190.856 {477}, Y1, ppm, .0032393, .0026339, 81.31095, .0007033, .0030533,
.0059612, None,,
V, 292.402 {115}, Y2A, ppm, -.001444, .0002242, 15.52495, -.001294, -.001336,
-.001702, None,,
W, 207.911 {462}, Y1, ppm, -.000435, .0002428, 55.78099, -.000453, -.000184,
-.000669, None,,
Zn, 213.856 {458}, Y1, ppm, .0003229, .0000878, 27.17761, .0003771, .0003700,
.0002217, None,,
Zr, 339.198 { 99}, Y2R, ppm, -.003068, .0014082, 45.90113, -.003627, -.004111,

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-.001466,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8598.505,3.567630,.0414913,8595.624,8597.395,8602.495,None,,
 Y2A,371.030 { 91}2,Cts/S,
 267489.1,417.0848,.1559259,267114.9,267413.6,267938.8,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18340.00,79.97290,.4360573,18295.92,18291.76,18432.31,None,,

[Sample Header]

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 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 17:11:50
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0003980,.0002361,59.34141, .0006689, .0002356,
 .0002894,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .0643268,.0008991,1.397671, .0641667, .0635186,
 .0652952,None,,
 Al,308.215 {109}2,Y2R,ppm, .0492741,.0086980,17.65223, .0591450, .0427326,
 .0459447,None,,
 As,189.042 {478},Y1,ppm, .0078298,.0011246,14.36255, .0088442, .0066205,
 .0080248,None,,
 B,249.773 {135},Y2A,ppm, .0876110,.0001250,.1426499, .0876576, .0877060,
 .0874694,None,,
 Ba,455.403 { 74},Y2A,ppm, .3779730,.0013154,.3480203, .3786483, .3788136,
 .3764571,None,,
 Be,313.042 {108},Y2A,ppm, -.000026,.0000138,52.46048, -.000014, -.000041,
 -.000023,None,,
 Ca,317.933 {106},Y2R,ppm, 179.9566,1.094433,.6081651, 181.2146, 179.2229,
 179.4324,None,,
 Cd,226.502 {449},Y1,ppm, .0029540,.0000994,3.364665, .0029800, .0030377,
 .0028442,None,,
 Co,228.616 {447},Y1,ppm, .0021331,.0000244,1.141883, .0021123, .0021599,
 .0021269,None,,
 Cr,267.716 {126},Y2A,ppm, .0007166,.0003097,43.21805, .0010355, .0006971,
 .0004171,None,,
 Cu,327.396 {103},Y2A,ppm, .0053368,.0008766,16.42592, .0062578, .0052399,
 .0045126,None,,
 Fe,261.187 {129},Y2R,ppm, .0079651,.0048979,61.49168, .0135968, .0055988,
 .0046997,None,,
 K,766.490 { 44},Y2R,ppm, 15.85205,.1126554,.7106681, 15.98196, 15.78137,
 15.79280,None,,
 Li,670.784 { 50},Y2R,ppm, .0077726,.0020649,26.56565, .0081897, .0095971,
 .0055311,None,,
 Mg,285.213 {118},Y2R,ppm, 52.04892,.4022200,.7727730, 52.51162, 51.78276,
 51.85238,None,,
 Mn,257.610 {131},Y2A,ppm, .5118554,.0009982,.1950244, .5121689, .5107380,
 .5126593,None,,
 Mo,202.030 {467},Y1,ppm, .0004209,.0001323,31.42340, .0005393, .0002782,
 .0004454,None,,
 Na,589.592 { 57},Y2R,ppm, 61.34325,.0391686,.0638516, 61.35110, 61.30076,

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61.37790, None,,
 Ni, 231.604 {445}, Y1, ppm, .0169707, .0001234, .7270228, .0169649, .0168502,
 .0170968, None,,
 P, 177.495 {490}, Y1, ppm, .0027845, .0031694, 113.8207, .0059124, .0028661,
 -.000425, None,,
 Pb, 220.353 {453}, Y1, ppm, .0012226, .0019205, 157.0861, .0030823, -.000753,
 .0013388, None,,
 S, 182.034 {485}, Y1, ppm, 8.666242, .0154601, .1783944, 8.665366, 8.682122,
 8.651239, None,,
 Sb, 206.833 {463}, Y1, ppm, .0011900, .0008902, 74.80794, .0021351, .0003674,
 .0010675, None,,
 Se, 196.090 {472}, Y1, ppm, .0045835, .0048326, 105.4346, .0080871, -.000930,
 .0065930, None,,
 Si, 251.611 {134}, Y2R, ppm, 7.293104, .0323102, .4430234, 7.328257, 7.286351,
 7.264704, None,,
 Sn, 189.989 {477}, Y1, ppm, .0000372, .0006645, 1785.691, -.000357, .0008043,
 -.000335, None,,
 Sr, 421.552 { 80}, Y2A, ppm, 1.199386, .0117646, .9808870, 1.186302, 1.209093,
 1.202763, None,,
 Th, 283.730 {119}, Y2R, ppm, .0265632, .0171156, 64.43347, .0078275, .0304837,
 .0413784, None,,
 Ti, 334.941 {101}, Y2A, ppm, -.000708, .0001287, 18.18407, -.000760, -.000802,
 -.000561, None,,
 Tl, 190.856 {477}, Y1, ppm, .0001559, .0028835, 1849.845, .0032233, -.002499,
 -.000256, None,,
 V, 292.402 {115}, Y2A, ppm, -.001592, .0003018, 18.95462, -.001930, -.001500,
 -.001347, None,,
 W, 207.911 {462}, Y1, ppm, .0010948, .0005229, 47.75975, .0006788, .0016818,
 .0009239, None,,
 Zn, 213.856 {458}, Y1, ppm, .0317827, .0003402, 1.070373, .0319669, .0319911,
 .0313901, None,,
 Zr, 339.198 { 99}, Y2R, ppm, -.001701, .0007312, 42.98644, -.001514, -.001081,
 -.002507, None,,

[Internal Standards]

Elem, WL, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Y1, 224.306 {450}, Cts/S, 8319.994, 23.51455, .2826269, 8335.883, 8331.118, 8292.982, None, ,
 Y2A, 371.030 { 91}2, Cts/S,
 257654.5, 756.1087, .2934583, 258526.1, 257174.1, 257263.5, None, ,
 Y2R, 371.030 { 91}3, Cts/S,
 18150.13, 58.97307, .3249181, 18088.31, 18205.77, 18156.31, None, ,

[Sample Header]

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 Custom ID1=
 Custom ID2=
 Custom ID3=
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 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem, WL, ISRef, Units, Avg, Stddev, RSD, Rep1, Rep2, Rep3, chk_Pass/Fail, chk_Low, chk_High
 Ag, 328.068 {103}, Y2A, ppm, .0004853, .0004372, 90.09783, .0002309, .0002348,
 .0009901, None,,
 Al, 308.215 {109}, Y2A, ppm, -.005591, .0027056, 48.39377, -.006397, -.007802,
 -.002574, None,,
 Al, 308.215 {109}2, Y2R, ppm, -.038580, .0141488, 36.67441, -.031877, -.054834,

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-.029027, None, ,
 As, 189.042 {478}, Y1, ppm, .0067480, .0024638, 36.51174, .0095313, .0058666,
 .0048461, None, ,
 B, 249.773 {135}, Y2A, ppm, .0033414, .0007020, 21.01033, .0025547, .0039041,
 .0035653, None, ,
 Ba, 455.403 { 74}, Y2A, ppm, .0722724, .0002824, .3906773, .0725961, .0721438,
 .0720772, None, ,
 Be, 313.042 {108}, Y2A, ppm, -.000119, .0000101, 8.527447, -.000113, -.000113,
 -.000131, None, ,
 Ca, 317.933 {106}, Y2R, ppm, 2.742638, .0010102, .0368332, 2.743796, 2.741936,
 2.742182, None, ,
 Cd, 226.502 {449}, Y1, ppm, .0003975, .0000687, 17.28679, .0004090, .0003238,
 .0004598, None, ,
 Co, 228.616 {447}, Y1, ppm, .0003617, .0004391, 121.4202, .0008687, .0001068,
 .0001095, None, ,
 Cr, 267.716 {126}, Y2A, ppm, .0009121, .0002510, 27.52388, .0009292, .0011541,
 .0006529, None, ,
 Cu, 327.396 {103}, Y2A, ppm, -.000075, .0002531, 339.0100, -.000235, .0002171,
 -.000206, None, ,
 Fe, 261.187 {129}, Y2R, ppm, .0015009, .0074163, 494.1078, .0027506, .0082129,
 -.006461, None, ,
 K, 766.490 { 44}, Y2R, ppm, 1.430065, .0332199, 2.322965, 1.468248, 1.407794,
 1.414153, None, ,
 Li, 670.784 { 50}, Y2R, ppm, .0027231, .0007366, 27.04998, .0034877, .0026633,
 .0020182, None, ,
 Mg, 285.213 {118}, Y2R, ppm, 1.222752, .0033678, .2754237, 1.221560, 1.226554,
 1.220143, None, ,
 Mn, 257.610 {131}, Y2A, ppm, .0006948, .0000671, 9.659322, .0007206, .0006186,
 .0007452, None, ,
 Mo, 202.030 {467}, Y1, ppm, -.000279, .0002104, 75.33643, -.000246, -.000088,
 -.000504, None, ,
 Na, 589.592 { 57}, Y2R, ppm, 3.506330, .0027653, .0788661, 3.509296, 3.505871,
 3.503823, None, ,
 Ni, 231.604 {445}, Y1, ppm, .0023680, .0002509, 10.59297, .0022963, .0026469,
 .0021609, None, ,
 P, 177.495 {490}, Y1, ppm, .0110954, .0003236, 2.916439, .0107290, .0113421,
 .0112151, None, ,
 Pb, 220.353 {453}, Y1, ppm, -.000802, .0020405, 254.3483, .0015360, -.002222,
 -.001720, None, ,
 S, 182.034 {485}, Y1, ppm, .4280105, .0038483, .8991105, .4235719, .4300468,
 .4304127, None, ,
 Sb, 206.833 {463}, Y1, ppm, .0000578, .0020215, 3499.895, .0015741, .0008365,
 -.002237, None, ,
 Se, 196.090 {472}, Y1, ppm, -.001146, .0030785, 268.5632, .0024017, -.002731,
 -.003110, None, ,
 Si, 251.611 {134}, Y2R, ppm, 7.748482, .0094722, .1222462, 7.746362, 7.740249,
 7.758834, None, ,
 Sn, 189.989 {477}, Y1, ppm, .0003949, .0012481, 316.0577, .0014184, -.000996,
 .0007618, None, ,
 Sr, 421.552 { 80}, Y2A, ppm, .0404734, .0001678, .4144649, .0406541, .0403227,
 .0404433, None, ,
 Th, 283.730 {119}, Y2R, ppm, .0228554, .0127555, 55.80944, .0375842, .0154959,
 .0154862, None, ,
 Ti, 334.941 {101}, Y2A, ppm, .0001068, .0000956, 89.49224, .0001947, .0000050,
 .0001207, None, ,
 Tl, 190.856 {477}, Y1, ppm, .0015817, .0017970, 113.6141, -.000011, .0035298,
 .0012262, None, ,
 V, 292.402 {115}, Y2A, ppm, -.000954, .0002933, 30.72883, -.000617, -.001101,
 -.001145, None, ,
 W, 207.911 {462}, Y1, ppm, -.001473, .0002381, 16.16820, -.001267, -.001418,
 -.001734, None, ,
 Zn, 213.856 {458}, Y1, ppm, .0105643, .0000974, .9220589, .0106169, .0106241,
 .0104519, None, ,

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Zr,339.198 { 99},Y2R,ppm, -.001016,.0012534,123.3539, .0001567, -.002337,
 -.000868,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8784.212,17.68055,.2012765,8804.101,8778.258,8770.277,None,,
 Y2A,371.030 { 91}2,Cts/S,
 275552.0,523.8448,.1901074,275831.1,275877.3,274947.8,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18535.31,17.69282,.0954547,18530.90,18554.79,18520.24,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=410-3328-c-6-a @5
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 17:18:25
 Sample Type=Unk
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .0002566,.0005038,196.3587, -.000304, .0004021,
 .0006717,None,,
 Alum Ax,308.215 {109},Y2A,ppm, .0006804,.0031399,461.4599, -.000763, .0042824,
 -.001479,None,,
 Al,308.215 {109}2,Y2R,ppm, -.028271,.0312873,110.6698, -.062592, -.020878,
 -.001342,None,,
 As,189.042 {478},Y1,ppm, .0151202,.0029328,19.39632, .0139745, .0184528,
 .0129331,None,,
 B,249.773 {135},Y2A,ppm, .0117542,.0004634,3.941992, .0118056, .0112672,
 .0121896,None,,
 Ba,455.403 { 74},Y2A,ppm, .0033591,.0000377,1.122152, .0033768, .0033158,
 .0033847,None,,
 Be,313.042 {108},Y2A,ppm, -.000125,.0000116,9.302255, -.000114, -.000137,
 -.000123,None,,
 Ca,317.933 {106},Y2R,ppm, 19.59968,.0510282,.2603524, 19.55383, 19.65466,
 19.59056,None,,
 Cd,226.502 {449},Y1,ppm, .0002070,.0001650,79.72922, .0003964, .0000941,
 .0001304,None,,
 Co,228.616 {447},Y1,ppm, -.000767,.0003623,47.24166, -.000458, -.001165,
 -.000678,None,,
 Cr,267.716 {126},Y2A,ppm, 9.140999,.0371876,.4068222, 9.177791, 9.103428,
 9.141777,None,,
 Cu,327.396 {103},Y2A,ppm, .0006075,.0002014,33.15727, .0004066, .0008094,
 .0006065,None,,
 Fe,261.187 {129},Y2R,ppm, .0029564,.0036158,122.3030, .0053864, -.001199,
 .0046817,None,,
 K,766.490 { 44},Y2R,ppm, 1.508108,.0234530,1.555130, 1.484418, 1.508588,
 1.531317,None,,
 Li,670.784 { 50},Y2R,ppm, .0018273,.0017136,93.77375, .0023563, .0032140,
 -.000088,None,,
 Mg,285.213 {118},Y2R,ppm, 10.55508,.0415156,.3933237, 10.51683, 10.59923,
 10.54918,None,,
 Mn,257.610 {131},Y2A,ppm, .0004283,.0000390,9.098898, .0004722, .0003978,
 .0004148,None,,
 Mo,202.030 {467},Y1,ppm, .0009535,.0003551,37.24428, .0006193, .0009149,
 .0013264,None,,

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Na,589.592 { 57},Y2R,ppm, 8.148691,.0162685,.1996451, 8.130553, 8.161993,
 8.153528,None,,
 Ni,231.604 {445},Y1,ppm, -.000090,.0003077,342.7963, -.000433, .0000026,
 .0001612,None,,
 P,177.495 {490},Y1,ppm, .0118881,.0021510,18.09406, .0105426, .0143690,
 .0107528,None,,
 Pb,220.353 {453},Y1,ppm, -.002800,.0012295,43.90817, -.001525, -.003979,
 -.002896,None,,
 S,182.034 {485},Y1,ppm, 10.88765,.0281673,.2587091, 10.86093, 10.91707,
 10.88495,None,,
 Sb,206.833 {463},Y1,ppm, -.092262,.0027520,2.982816, -.094344, -.089142,
 -.093302,None,,
 Se,196.090 {472},Y1,ppm, .0029356,.0014919,50.82112, .0020121, .0046568,
 .0021380,None,,
 Si,251.611 {134},Y2R,ppm, 1.036226,.0021350,.2060398, 1.036998, 1.033813,
 1.037868,None,,
 Sn,189.989 {477},Y1,ppm, -.000371,.0006179,166.5213, .0002365, -.000999,
 -.000351,None,,
 Sr,421.552 { 80},Y2A,ppm, .0690336,.0004014,.5814457, .0694379, .0686352,
 .0690277,None,,
 Th,283.730 {119},Y2R,ppm, .0100443,.0055664,55.41878, .0164062, .0060697,
 .0076571,None,,
 Ti,334.941 {101},Y2A,ppm, .0029820,.0000832,2.789730, .0028868, .0030187,
 .0030406,None,,
 Tl,190.856 {477},Y1,ppm, .0043780,.0017393,39.72787, .0025339, .0059890,
 .0046110,None,,
 V,292.402 {115},Y2A,ppm, -.001260,.0003836,30.44679, -.000820, -.001437,
 -.001523,None,,
 W,207.911 {462},Y1,ppm, -.000749,.0006441,86.00145, -.000303, -.000457,
 -.001487,None,,
 Zn,213.856 {458},Y1,ppm, .0013962,.0001991,14.26173, .0011797, .0015715,
 .0014372,None,,
 Zr,339.198 { 99},Y2R,ppm, -.007050,.0001771,2.512079, -.007172, -.006847,
 -.007131,None,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Y1,224.306 {450},Cts/S, 8485.105,5.975321,.0704213,8491.480,8479.632,8484.202,None,,
 Y2A,371.030 { 91}2,Cts/S,
 265931.0,941.2990,.3539636,264906.1,266756.9,266130.0,None,,
 Y2R,371.030 { 91}3,Cts/S,
 18210.26,52.91848,.2905970,18271.36,18180.59,18178.83,None,,

[Sample Header]

Method=New TRACE Fast(v1493)
 SampleName=CCV 095153
 Username=dept 22
 Comment=
 Custom ID1=
 Custom ID2=
 Custom ID3=
 Run Time=6/12/2020 17:21:31
 Sample Type=QC
 Mode=CONC
 CorrFactor=1.000
 Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High
 Ag,328.068 {103},Y2A,ppm, .4860,.0040,.8211, .4880, .4814, .4886,Chk Pass,,
 Al,308.215 {109},Y2A,ppm, 23.12,.1594,.6896, 23.29, 22.97, 23.10,Chk Pass,,
 Al,308.215 {109}2,Y2R,ppm, 23.47,.0955,.4069, 23.57, 23.46, 23.38,Chk Pass,,
 As,189.042 {478},Y1,ppm, .4929,.0018,.3630, .4908, .4936, .4942,Chk Pass,,

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B,249.773 {135},Y2A,ppm, .4652,.0031,.6747, .4664, .4616, .4676,Chk Pass,,
Ba,455.403 { 74},Y2A,ppm, .4797,.0031,.6482, .4829, .4767, .4797,Chk Pass,,
Be,313.042 {108},Y2A,ppm, .47193,.00229,.48484, .47431, .46975, .47172,Chk Pass,,
Ca,317.933 {106},Y2R,ppm, 23.92,.0140,.0584, 23.92, 23.90, 23.93,Chk Pass,,
Cd,226.502 {449},Y1,ppm, .4881,.0022,.4584, .4896, .4891, .4855,Chk Pass,,
Co,228.616 {447},Y1,ppm, .4751,.0010,.2142, .4753, .4761, .4741,Chk Pass,,
Cr,267.716 {126},Y2A,ppm, .4743,.0030,.6410, .4773, .4712, .4742,Chk Pass,,
Cu,327.396 {103},Y2A,ppm, .4816,.0017,.3625, .4836, .4809, .4804,Chk Pass,,
Fe,261.187 {129},Y2R,ppm, 23.25,.0401,.1723, 23.24, 23.22, 23.30,Chk Pass,,
K,766.490 { 44},Y2R,ppm, 23.78,.0491,.2066, 23.76, 23.84, 23.75,Chk Pass,,
Li,670.784 { 50},Y2R,ppm, .4844,.0010,.2081, .4856, .4838, .4840,Chk Pass,,
Mg,285.213 {118},Y2R,ppm, 23.09,.0386,.1673, 23.08, 23.05, 23.13,Chk Pass,,
Mn,257.610 {131},Y2A,ppm, .47270,.00226,.47731, .47529, .47163, .47118,Chk Pass,,
Mo,202.030 {467},Y1,ppm, .4797,.0021,.4393, .4821, .4788, .4781,Chk Pass,,
Na,589.592 { 57},Y2R,ppm, 23.92,.0145,.0607, 23.92, 23.90, 23.93,Chk Pass,,
Ni,231.604 {445},Y1,ppm, .4811,.0012,.2450, .4804, .4825, .4804,Chk Pass,,
P,177.495 {490},Y1,ppm, .4881,.0085,.1.752, .4932, .4928, .4782,Chk Pass,,
Pb,220.353 {453},Y1,ppm, .4676,.0022,.4793, .4651, .4689, .4690,Chk Pass,,
S,182.034 {485},Y1,ppm, 23.80,.1014,.4261, 23.88, 23.84, 23.69,Chk Pass,,
Sb,206.833 {463},Y1,ppm, .4817,.0043,.8938, .4862, .4776, .4814,Chk Pass,,
Se,196.090 {472},Y1,ppm, .4802,.0033,.6911, .4837, .4771, .4797,Chk Pass,,
Si,251.611 {134},Y2R,ppm, 23.513,.04085,.17373, 23.473, 23.513, 23.554,Chk Pass,,
Sn,189.989 {477},Y1,ppm, .4702,.0015,.3218, .4697, .4719, .4690,Chk Pass,,
Sr,421.552 { 80},Y2A,ppm, .4886,.0014,.2889, .4902, .4879, .4877,Chk Pass,,
Th,283.730 {119},Y2R,ppm, .5133,.0021,.4115, .5153, .5134, .5111,Chk Pass,,
Ti,334.941 {101},Y2A,ppm, .4802,.0025,.5123, .4830, .4790, .4785,Chk Pass,,
Tl,190.856 {477},Y1,ppm, .4781,.0088,.1.833, .4834, .4828, .4680,Chk Pass,,
V,292.402 {115},Y2A,ppm, .4923,.0038,.7795, .4946, .4879, .4945,Chk Pass,,
W,207.911 {462},Y1,ppm, .4947,.0027,.5482, .4977, .4939, .4925,Chk Pass,,
Zn,213.856 {458},Y1,ppm, .4858,.0025,.5077, .4878, .4866, .4831,Chk Pass,,
Zr,339.198 { 99},Y2R,ppm, .4868,.0037,.7609, .4827, .4878, .4898,Chk Pass,,

[Internal Standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 8593.0,8.0236,.09337,8600.9,8584.8,8593.3

Y2A,371.030 { 91}2,Cts/S, 264610.879.68,.33245,263590.,265170.,265060.

Y2R,371.030 { 91}3,Cts/S, 18323.,51.592,.28157,18355.,18351.,18264.

[Sample Header]

Method=New TRACE Fast(v1493)

SampleName=CCB 078331

Username=dept 22

Comment=

Custom ID1=

Custom ID2=

Custom ID3=

Run Time=6/12/2020 17:24:39

Sample Type=QC

Mode=CONC

CorrFactor=1.000

Repeats=3

[Results]

Elem,WL,ISRef,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3,chk_Pass/Fail,chk_Low,chk_High

Ag,328.068 {103},Y2A,ppm, .0007,.0002,33.01, .0007, .0005, .0010,Chk Pass,,

Alum Ax,308.215 {109},Y2A,ppm, -.0011,.0035,331.7, -.0044, -.0015, .0027,Chk Pass,,

Al,308.215 {109}2,Y2R,ppm, -.0295,.0241,81.72, -.0188, -.0570, -.0126,Chk Pass,,

As,189.042 {478},Y1,ppm, .0065,.0016,25.20, .0084, .0057, .0055,Chk Pass,,

B,249.773 {135},Y2A,ppm, .0002,.0004,182.8, .0007, .0001, -.0001,Chk Pass,,

Ba,455.403 { 74},Y2A,ppm, .0001,.0000,38.31, .0000, .0001, .0001,Chk Pass,,

Be,313.042 {108},Y2A,ppm, -.00008,.00001,9.7361, -.00008, -.00007, -.00009,Chk Pass,,

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Ca,317.933 {106},Y2R,ppm, .0057,.0026,45.61, .0086, .0044, .0040,chk Pass,,
 Cd,226.502 {449},Y1,ppm, .0003,.0001,22.06, .0004, .0003, .0003,chk Pass,,
 Co,228.616 {447},Y1,ppm, -.0000,.0003,3289., -.0000, -.0002, .0003,chk Pass,,
 Cr,267.716 {126},Y2A,ppm, .0006,.0002,36.29, .0007, .0006, .0003,chk Pass,,
 Cu,327.396 {103},Y2A,ppm, -.0002,.0003,137.6, -.0002, .0001, -.0004,chk Pass,,
 Fe,261.187 {129},Y2R,ppm, .0092,.0060,65.08, .0150, .0096, .0030,chk Pass,,
 K,766.490 { 44},Y2R,ppm, -.0128,.0142,110.7, -.0290, -.0066, -.0028,chk Pass,,
 Li,670.784 { 50},Y2R,ppm, .0003,.0017,671.2, .0016, -.0017, .0009,chk Pass,,
 Mg,285.213 {118},Y2R,ppm, .0016,.0013,79.78, .0029, .0018, .0003,chk Pass,,
 Mn,257.610 {131},Y2A,ppm, .00010,.00002,19.451, .00013, .00010, .00009,chk Pass,,
 Mo,202.030 {467},Y1,ppm, .0016,.0002,10.26, .0018, .0017, .0014,chk Pass,,
 Na,589.592 { 57},Y2R,ppm, .0587,.0029,4.941, .0571, .0621, .0570,chk Pass,,
 Ni,231.604 {445},Y1,ppm, .0001, .0005,372.2, .0005, -.0004, .0002,chk Pass,,
 P,177.495 {490},Y1,ppm, .0016,.0013,82.08, .0032, .0008, .0009,chk Pass,,
 Pb,220.353 {453},Y1,ppm, -.0013,.0012,90.19, -.0017, -.0022, .0000,chk Pass,,
 S,182.034 {485},Y1,ppm, .0086,.0057,66.66, .0020, .0111, .0127,chk Pass,,
 Sb,206.833 {463},Y1,ppm, .0003,.0016,559.6, .0005, -.0014, .0017,chk Pass,,
 Se,196.090 {472},Y1,ppm, -.0043,.0031,72.79, -.0016, -.0036, -.0077,chk Pass,,
 Si,251.611 {134},Y2R,ppm, .00199,.00124,62.177, .00188, .00328, .00081,chk Pass,,
 Sn,189.989 {477},Y1,ppm, -.0003,.0001,46.07, -.0001, -.0003, -.0003,chk Pass,,
 Sr,421.552 { 80},Y2A,ppm, .0001,.0000,6.313, .0001, .0001, .0001,chk Pass,,
 Th,283.730 {119},Y2R,ppm, .0162,.0199,122.9, .0391, .0062, .0032,chk Pass,,
 Ti,334.941 {101},Y2A,ppm, -.0001,.0001,155.8, -.0002, -.0000, -.0000,chk Pass,,
 Tl,190.856 {477},Y1,ppm, .0003,.0015,578.5, .0011, .0011, -.0014,chk Pass,,
 V,292.402 {115},Y2A,ppm, -.0009,.0005,52.18, -.0005, -.0014, -.0009,chk Pass,,
 W,207.911 {462},Y1,ppm, .0003,.0008,263.1, .0004, .0010, -.0005,chk Pass,,
 Zn,213.856 {458},Y1,ppm, .0001,.0002,113.8, -.0000, .0003, .0002,chk Pass,,
 Zr,339.198 { 99},Y2R,ppm, -.0006,.0006,93.93, .0000, -.0008, -.0011,chk Pass,,

[Internal standards]

Elem,WL,Units,Avg,Stddev,RSD,Rep1,Rep2,Rep3

Y1,224.306 {450},Cts/S, 8763.7,28.739,.32793,8794.3,8759.4,8737.3

Y2A,371.030 { 91}2,Cts/S, 270810.,1108.1,.40920,269600.,271780.,271030.

Y2R,371.030 { 91}3,Cts/S, 18293.,11.983,.06551,18285.,18307.,18287.

Quantitation Report

Data File Name 007CALB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:36:04 AM
Sample Name icis
Sample Type CalBlk
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

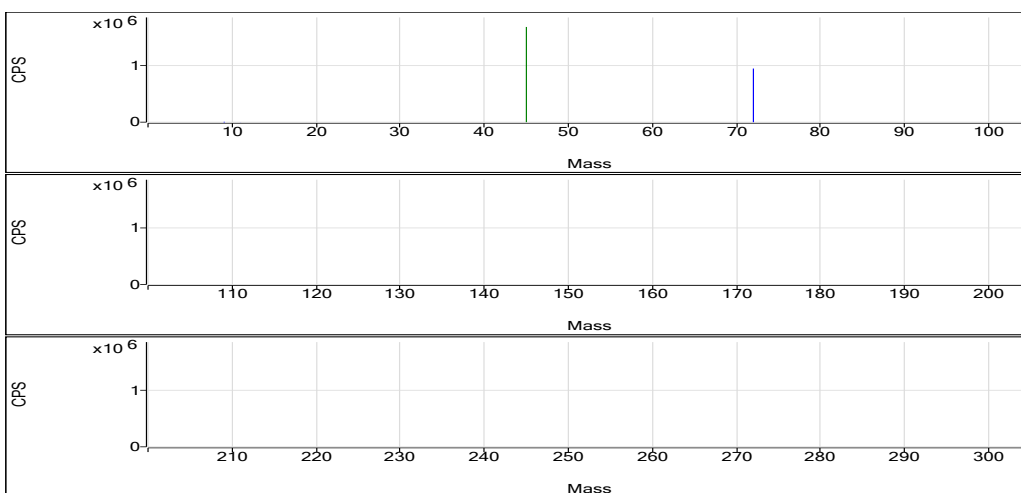
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.000	ppb	N/A	9.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	0.000	ppb	N/A	1305.40	0.0008	Pulse	0.5000	3
Se	78	115	H2	0.000	ppb	N/A	0.45	0.0000	Pulse	1.5000	3
Na	23	45	He	0.000	ppb	N/A	32257.78	0.2950	Pulse	0.1000	3
Mg	24	45	He	0.000	ppb	N/A	356.68	0.0033	Pulse	0.1000	3
Al	27	45	He	0.000	ppb	N/A	86.67	0.0008	Pulse	0.1000	3
K	39	45	He	0.000	ppb	N/A	53909.41	0.4930	Pulse	0.1000	3
Ca	44	45	He	0.000	ppb	N/A	283.34	0.0026	Pulse	0.1000	3
Ti	47	45	He	0.000	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.000	ppb	N/A	586.70	0.0054	Pulse	0.1000	3
Cr	52	45	He	0.000	ppb	N/A	2586.98	0.0237	Pulse	0.1000	3
Mn	55	45	He	0.000	ppb	N/A	513.36	0.0047	Pulse	0.1000	3
Fe	57	45	He	0.000	ppb	N/A	256.68	0.0023	Pulse	0.1000	3
Co	59	115	He	0.000	ppb	N/A	56.67	0.0005	Pulse	0.1000	3
Ni	60	115	He	0.000	ppb	N/A	5524.56	0.0451	Pulse	0.1000	3
Cu	63	115	He	0.000	ppb	N/A	2973.75	0.0243	Pulse	0.1000	3
Zn	66	115	He	0.000	ppb	N/A	853.39	0.0070	Pulse	0.1000	3
As	75	115	He	0.000	ppb	N/A	59.33	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.000	ppb	N/A	26.67	0.0002	Pulse	0.1000	3
Mo	98	115	He	0.285	ppb	6.5	456.69	0.0037	Pulse	0.1000	3
Ag	107	115	He	0.000	ppb	N/A	23.33	0.0002	Pulse	0.1000	3
Cd	111	115	He	0.000	ppb	N/A	2.67	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	N/A	1603.50	0.0131	Pulse	0.1000	3
Sb	121	72	He	0.000	ppb	N/A	43.33	0.0002	Pulse	0.1000	3
Ba	137	115	He	0.000	ppb	N/A	23.33	0.0002	Pulse	0.1000	3
Tl	205	209	He	0.000	ppb	N/A	126.67	0.0007	Pulse	0.1000	3
Pb	208	209	He	0.000	ppb	N/A	400.02	0.0024	Pulse	0.1000	3
U	238	209	He	0.000	ppb	N/A	10.00	0.0001	Pulse	0.1000	3

Quantitation Report

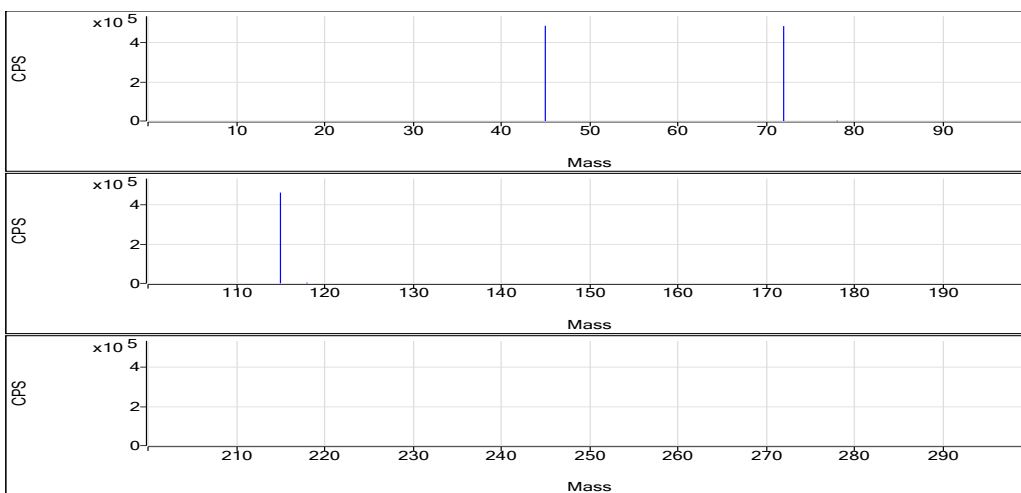
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1673292.84	1.0	100.0	Analog	0.1000	3
No Gas	Ge	72	942300.27	1.1	100.0	Pulse	0.1000	3
H2	Sc	45	486366.35	2.0	100.0	Pulse	0.1000	3
H2	Ge	72	484738.69	1.4	100.0	Pulse	0.1000	3
H2	In	115	463510.07	1.7	100.0	Pulse	0.1000	3
He	Sc	45	109345.92	0.4	100.0	Pulse	0.1000	3
He	Ge	72	237069.73	1.4	100.0	Pulse	0.1000	3
He	In	115	122419.89	0.6	100.0	Pulse	0.1000	3
He	Tb	159	283794.99	0.7	100.0	Pulse	0.1000	3
He	Bi	209	169732.75	0.7	100.0	Pulse	0.1000	3

No Gas

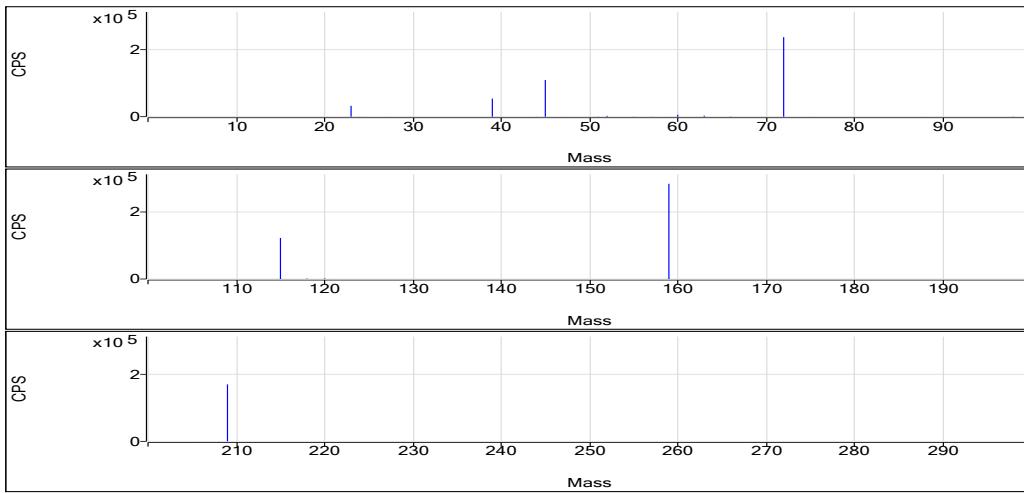


H2



Quantitation Report

He



Quantitation Report

Data File Name 008CAL.S.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:38:11 AM
Sample Name std1
Sample Type CalStd
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Callb 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

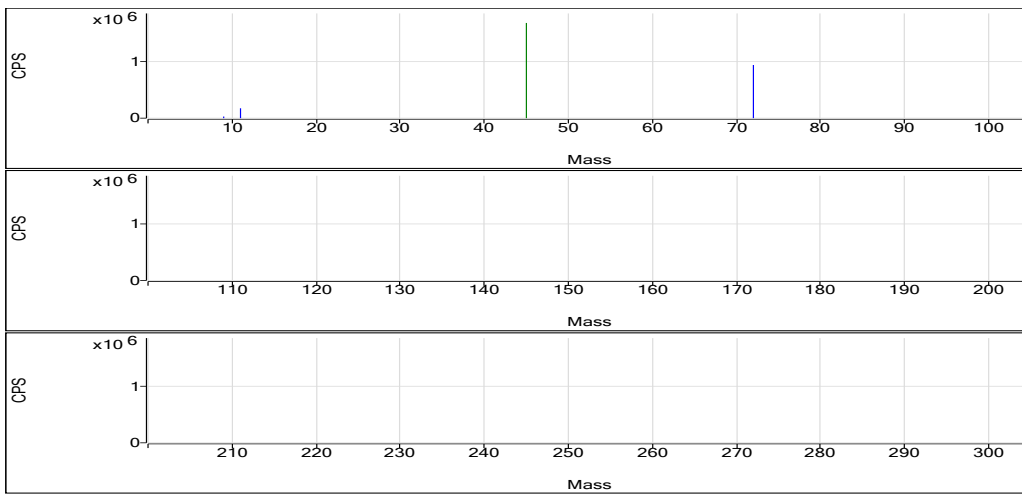
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	24.847	ppb	1.1	28628.47	0.0170	Pulse	0.5000	3
B	11	45	No Gas	246.337	ppb	2.0	174599.47	0.1038	Pulse	0.5000	3
Se	78	115	H2	25.080	ppb	2.1	2964.98	0.0063	Pulse	1.5000	3
Na	23	45	He	2395.968	ppb	1.5	695529.44	6.3687	Pulse	0.1000	3
Mg	24	45	He	2408.220	ppb	1.6	341529.02	3.1272	Pulse	0.1000	3
Al	27	45	He	2502.208	ppb	0.8	143864.59	1.3172	Pulse	0.1000	3
K	39	45	He	2324.808	ppb	1.4	481457.90	4.4083	Pulse	0.1000	3
Ca	44	45	He	2527.585	ppb	3.6	21196.01	0.1941	Pulse	0.1000	3
Ti	47	45	He	250.533	ppb	2.2	13226.32	0.1211	Pulse	0.1000	3
V	51	45	He	233.124	ppb	0.2	398974.74	3.6528	Pulse	0.1000	3
Cr	52	45	He	235.418	ppb	1.6	468681.80	4.2916	Pulse	0.1000	3
Mn	55	45	He	251.748	ppb	1.4	284223.76	2.6025	Pulse	0.1000	3
Fe	57	45	He	2484.229	ppb	1.8	96012.54	0.8792	Pulse	0.1000	3
Co	59	115	He	239.247	ppb	1.6	707249.68	5.7040	Pulse	0.1000	3
Ni	60	115	He	251.323	ppb	1.3	186879.34	1.5071	Pulse	0.1000	3
Cu	63	115	He	243.173	ppb	0.7	482370.86	3.8902	Pulse	0.1000	3
Zn	66	115	He	257.367	ppb	0.8	83487.77	0.6733	Pulse	0.1000	3
As	75	115	He	249.764	ppb	0.7	68559.27	0.5529	Pulse	0.5000	3
Sr	88	115	He	24.984	ppb	2.3	40919.68	0.3300	Pulse	0.1000	3
Mo	98	115	He	25.304	ppb	1.6	41077.04	0.3313	Pulse	0.1000	3
Ag	107	115	He	25.293	ppb	1.7	73763.95	0.5949	Pulse	0.1000	3
Cd	111	115	He	25.049	ppb	1.2	11139.79	0.0898	Pulse	0.5000	3
Sn	120	115	He	24.740	ppb	2.8	40987.97	0.3306	Pulse	0.1000	3
Sb	121	72	He	23.920	ppb	1.5	36167.71	0.1541	Pulse	0.1000	3
Ba	137	115	He	250.550	ppb	0.7	143659.27	1.1586	Pulse	0.1000	3
Tl	205	209	He	24.800	ppb	0.5	118853.95	0.6978	Pulse	0.1000	3
Pb	208	209	He	24.925	ppb	0.9	161288.88	0.9469	Pulse	0.1000	3
U	238	209	He	24.413	ppb	1.2	117006.31	0.6870	Pulse	0.1000	3

Quantitation Report

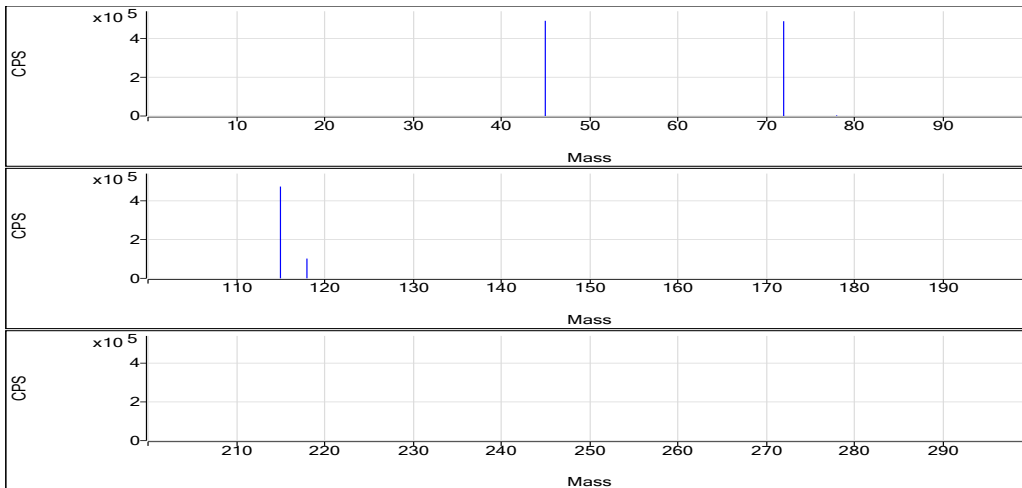
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1681634.35	1.2	100.5	Analog	0.1000	3
No Gas	Ge	72	938933.01	0.7	99.6	Pulse	0.1000	3
H2	Sc	45	490102.62	1.6	100.8	Pulse	0.1000	3
H2	Ge	72	487898.81	1.9	100.7	Pulse	0.1000	3
H2	In	115	472440.24	2.3	101.9	Pulse	0.1000	3
He	Sc	45	109224.94	1.4	99.9	Pulse	0.1000	3
He	Ge	72	234774.79	1.0	99.0	Pulse	0.1000	3
He	In	115	123999.11	0.5	101.3	Pulse	0.1000	3
He	Tb	159	284165.17	1.1	100.1	Pulse	0.1000	3
He	Bi	209	170338.51	0.9	100.4	Pulse	0.1000	3

No Gas

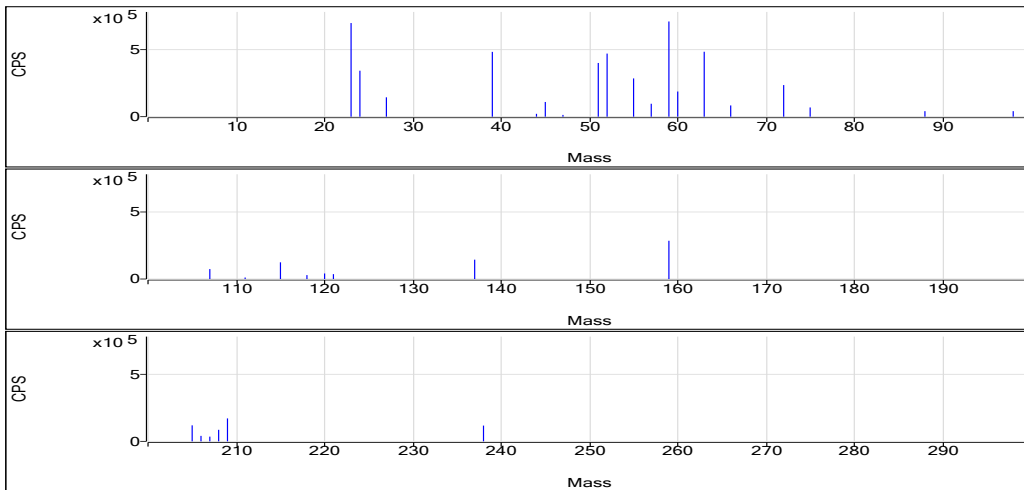


H2



Quantitation Report

He



Quantitation Report

Data File Name 009CAL.S.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:40:16 AM
Sample Name std2
Sample Type CalStd
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

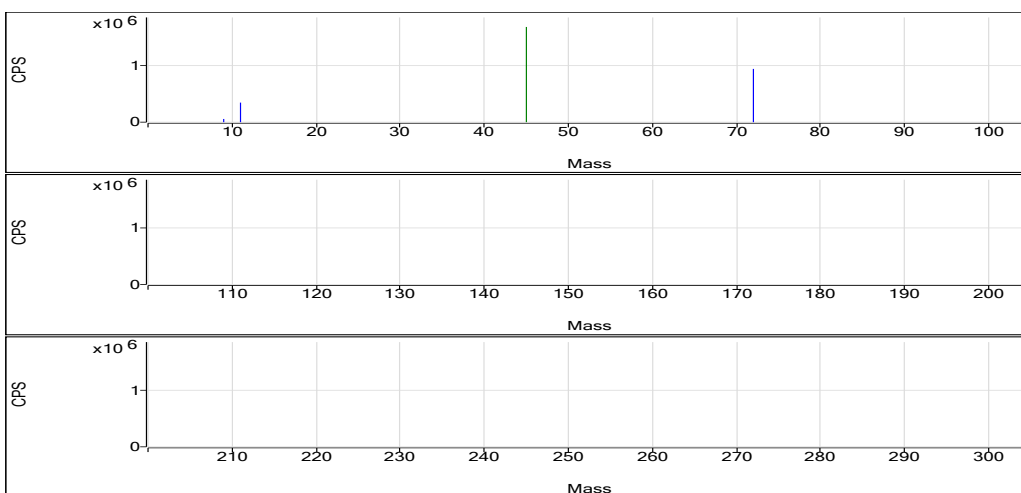
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	48.965	ppb	0.8	56590.19	0.0335	Pulse	0.5000	3
B	11	45	No Gas	489.102	ppb	1.3	346452.24	0.2054	Pulse	0.5000	3
Se	78	115	H2	50.101	ppb	2.5	5892.77	0.0125	Pulse	1.5000	3
Na	23	45	He	5030.707	ppb	1.3	1424683.10	13.0478	Analog	0.1000	3
Mg	24	45	He	4737.140	ppb	1.5	671262.02	6.1482	Pulse	0.1000	3
Al	27	45	He	4915.785	ppb	2.0	282444.48	2.5871	Pulse	0.1000	3
K	39	45	He	4595.771	ppb	1.5	898895.04	8.2330	Pulse	0.1000	3
Ca	44	45	He	4944.684	ppb	3.0	41185.32	0.3773	Pulse	0.1000	3
Ti	47	45	He	488.724	ppb	0.5	25783.49	0.2361	Pulse	0.1000	3
V	51	45	He	463.422	ppb	0.7	792290.64	7.2561	Pulse	0.1000	3
Cr	52	45	He	469.428	ppb	1.9	931705.90	8.5340	Pulse	0.1000	3
Mn	55	45	He	495.593	ppb	1.9	558849.26	5.1188	Pulse	0.1000	3
Fe	57	45	He	4927.168	ppb	1.5	190125.05	1.7414	Pulse	0.1000	3
Co	59	115	He	474.891	ppb	4.0	1418315.55	11.3216	Mix	0.1000	3
Ni	60	115	He	492.307	ppb	1.2	364513.72	2.9090	Pulse	0.1000	3
Cu	63	115	He	476.832	ppb	1.6	952892.80	7.6049	Pulse	0.1000	3
Zn	66	115	He	497.525	ppb	1.9	162275.91	1.2951	Pulse	0.1000	3
As	75	115	He	492.298	ppb	1.7	136494.74	1.0894	Pulse	0.5000	3
Sr	88	115	He	49.291	ppb	1.5	81560.03	0.6508	Pulse	0.1000	3
Mo	98	115	He	49.839	ppb	2.0	81746.28	0.6524	Pulse	0.1000	3
Ag	107	115	He	49.605	ppb	1.7	146164.65	1.1665	Pulse	0.1000	3
Cd	111	115	He	49.257	ppb	1.6	22133.44	0.1766	Pulse	0.5000	3
Sn	120	115	He	49.469	ppb	2.8	81172.28	0.6479	Pulse	0.1000	3
Sb	121	72	He	47.898	ppb	2.0	72160.88	0.3083	Pulse	0.1000	3
Ba	137	115	He	494.228	ppb	0.9	286353.26	2.2852	Pulse	0.1000	3
Tl	205	209	He	49.739	ppb	0.6	236159.95	1.3987	Pulse	0.1000	3
Pb	208	209	He	49.345	ppb	0.9	316130.45	1.8723	Pulse	0.1000	3
U	238	209	He	49.676	ppb	0.4	236007.20	1.3978	Pulse	0.1000	3

Quantitation Report

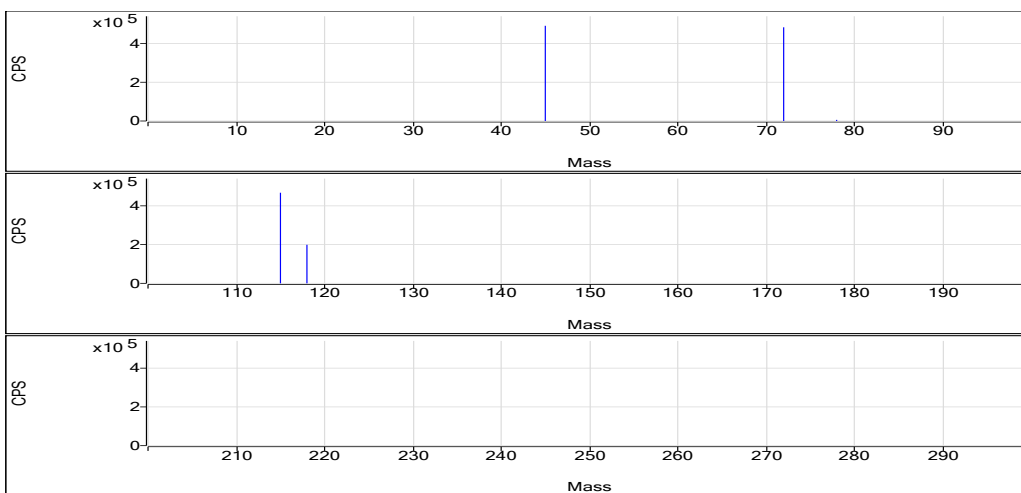
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1687188.10	0.9	100.8	Analog	0.1000	3
No Gas	Ge	72	943731.47	1.3	100.2	Pulse	0.1000	3
H2	Sc	45	493724.34	2.5	101.5	Pulse	0.1000	3
H2	Ge	72	485929.19	2.9	100.2	Pulse	0.1000	3
H2	In	115	469828.85	2.1	101.4	Pulse	0.1000	3
He	Sc	45	109198.28	1.7	99.9	Pulse	0.1000	3
He	Ge	72	234053.43	0.6	98.7	Pulse	0.1000	3
He	In	115	125321.13	1.6	102.4	Pulse	0.1000	3
He	Tb	159	281978.60	0.3	99.4	Pulse	0.1000	3
He	Bi	209	168844.28	0.2	99.5	Pulse	0.1000	3

No Gas

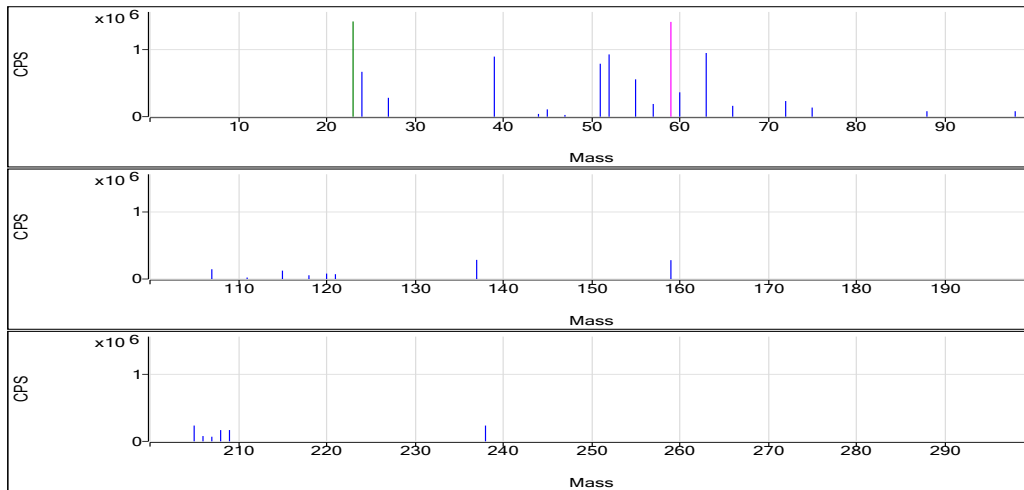


H2



Quantitation Report

He



Quantitation Report

Data File Name 010CAL.S.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:42:19 AM
Sample Name std3
Sample Type CalStd
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

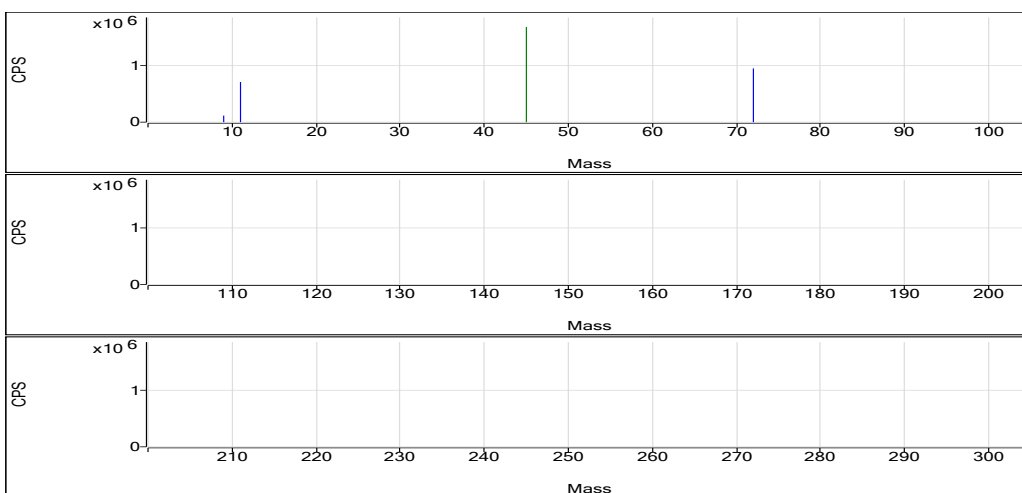
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	100.556	ppb	0.4	115447.79	0.0689	Pulse	0.5000	3
B	11	45	No Gas	1006.365	ppb	0.4	706837.79	0.4217	Pulse	0.5000	3
Se	78	115	H2	99.929	ppb	0.5	11698.31	0.0250	Pulse	1.5000	3
Na	23	45	He	10010.655	ppb	1.5	2793820.69	25.6719	Analog	0.1000	3
Mg	24	45	He	10154.375	ppb	0.7	1434003.10	13.1754	Analog	0.1000	3
Al	27	45	He	10041.556	ppb	0.9	575049.46	5.2838	Pulse	0.1000	3
K	39	45	He	10245.912	ppb	1.7	1931598.09	17.7486	Analog	0.1000	3
Ca	44	45	He	10020.762	ppb	1.9	82932.03	0.7619	Pulse	0.1000	3
Ti	47	45	He	1005.505	ppb	1.9	52863.05	0.4857	Pulse	0.1000	3
V	51	45	He	1022.508	ppb	1.8	1741695.49	16.0036	Analog	0.1000	3
Cr	52	45	He	1018.932	ppb	1.1	2012965.44	18.4960	Analog	0.1000	3
Mn	55	45	He	1001.766	ppb	1.0	1125545.14	10.3421	Pulse	0.1000	3
Fe	57	45	He	10040.359	ppb	1.4	385919.14	3.5461	Pulse	0.1000	3
Co	59	115	He	1015.243	ppb	0.3	3002610.58	24.2032	Analog	0.1000	3
Ni	60	115	He	1003.516	ppb	0.7	729812.36	5.8828	Pulse	0.1000	3
Cu	63	115	He	1013.291	ppb	0.8	2001436.12	16.1334	Analog	0.1000	3
Zn	66	115	He	999.395	ppb	1.0	321864.07	2.5945	Pulse	0.1000	3
As	75	115	He	1003.910	ppb	0.5	275521.86	2.2209	Pulse	0.5000	3
Sr	88	115	He	100.359	ppb	0.9	164371.78	1.3249	Pulse	0.1000	3
Mo	98	115	He	100.004	ppb	0.7	162407.74	1.3091	Pulse	0.1000	3
Ag	107	115	He	100.124	ppb	1.7	292069.16	2.3544	Pulse	0.1000	3
Cd	111	115	He	100.359	ppb	0.9	44644.51	0.3599	Pulse	0.5000	3
Sn	120	115	He	100.330	ppb	1.1	161344.61	1.3006	Pulse	0.1000	3
Sb	121	72	He	101.321	ppb	2.2	150068.62	0.6520	Pulse	0.1000	3
Ba	137	115	He	1002.748	ppb	0.6	575156.03	4.6363	Pulse	0.1000	3
Tl	205	209	He	100.180	ppb	1.5	473617.49	2.8163	Pulse	0.1000	3
Pb	208	209	He	100.346	ppb	1.0	639908.30	3.8051	Pulse	0.1000	3
U	238	209	He	100.309	ppb	1.1	474654.72	2.8225	Pulse	0.1000	3

Quantitation Report

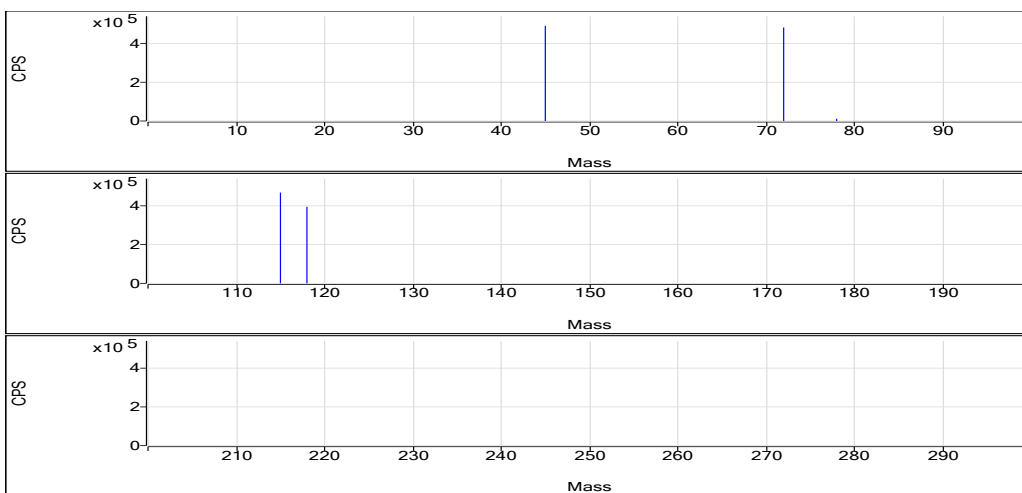
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1676148.78	0.2	100.2	Analog	0.1000	3
No Gas	Ge	72	946083.68	1.1	100.4	Pulse	0.1000	3
H2	Sc	45	490817.48	0.6	100.9	Pulse	0.1000	3
H2	Ge	72	482084.77	1.3	99.5	Pulse	0.1000	3
H2	In	115	467793.87	0.7	100.9	Pulse	0.1000	3
He	Sc	45	108838.72	1.0	99.5	Pulse	0.1000	3
He	Ge	72	230188.80	0.9	97.1	Pulse	0.1000	3
He	In	115	124058.12	0.4	101.3	Pulse	0.1000	3
He	Tb	159	280840.26	0.5	99.0	Pulse	0.1000	3
He	Bi	209	168186.13	1.2	99.1	Pulse	0.1000	3

No Gas

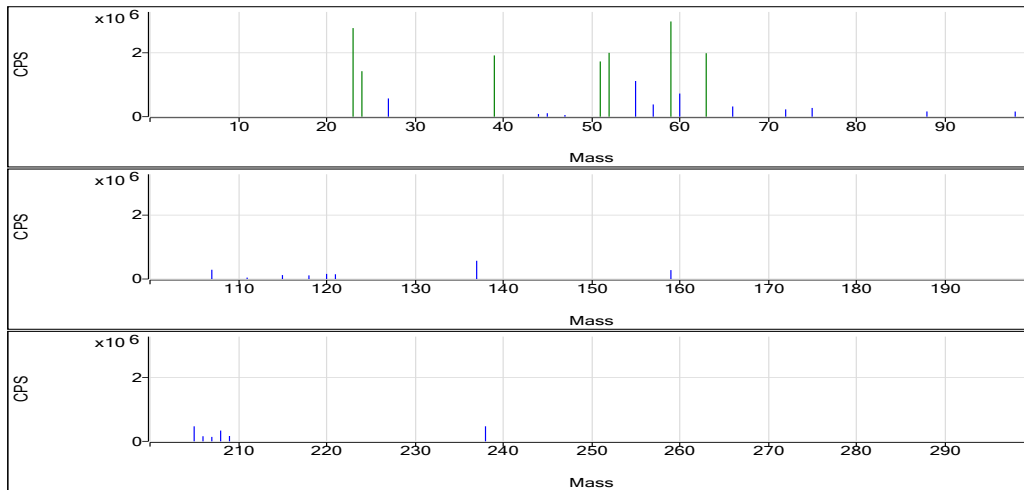


H2



Quantitation Report

He



Quantitation Report

Data File Name 011_ICV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:44:20 AM
Sample Name icv 62091
Sample Type ICV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

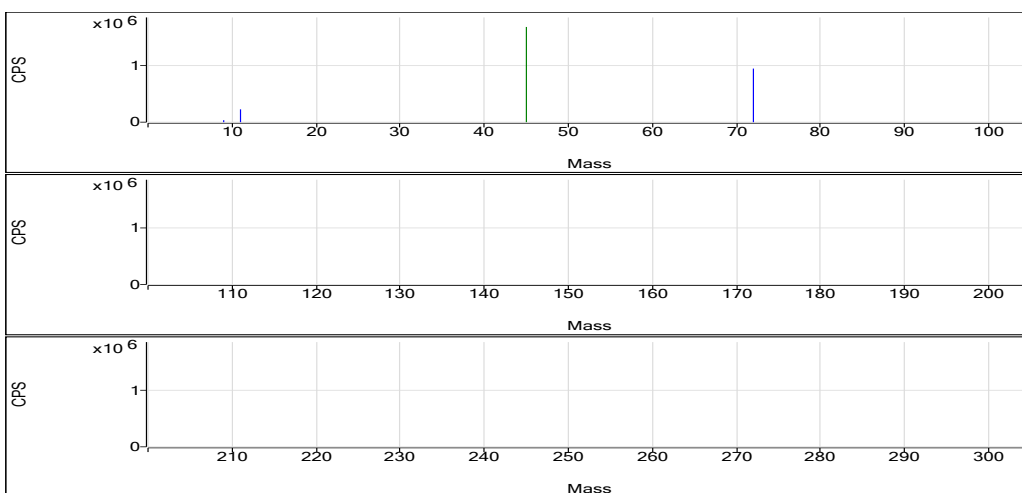
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	30.091	ppb	2.0	34620.30	0.0206	Pulse	0.5000	3
B	11	45	No Gas	320.209	ppb	1.6	226240.98	0.1347	Pulse	0.5000	3
Se	78	115	H2	30.252	ppb	0.3	3481.98	0.0076	Pulse	1.5000	3
Na	23	45	He	4966.879	ppb	1.6	1392247.38	12.8860	Analog	0.1000	3
Mg	24	45	He	4740.852	ppb	2.0	664761.45	6.1531	Pulse	0.1000	3
Al	27	45	He	4951.683	ppb	1.6	281551.13	2.6059	Pulse	0.1000	3
K	39	45	He	4598.574	ppb	2.4	889941.83	8.2377	Pulse	0.1000	3
Ca	44	45	He	4823.847	ppb	2.3	39771.64	0.3681	Pulse	0.1000	3
Ti	47	45	He	304.493	ppb	2.4	15895.80	0.1471	Pulse	0.1000	3
V	51	45	He	281.522	ppb	2.2	476441.98	4.4101	Pulse	0.1000	3
Cr	52	45	He	288.468	ppb	1.9	567564.89	5.2533	Pulse	0.1000	3
Mn	55	45	He	303.355	ppb	1.2	338739.36	3.1351	Pulse	0.1000	3
Fe	57	45	He	4935.562	ppb	1.8	188460.04	1.7443	Pulse	0.1000	3
Co	59	115	He	288.033	ppb	0.9	850400.66	6.8670	Pulse	0.1000	3
Ni	60	115	He	299.624	ppb	0.6	221449.14	1.7881	Pulse	0.1000	3
Cu	63	115	He	290.490	ppb	0.7	574923.86	4.6424	Pulse	0.1000	3
Zn	66	115	He	303.177	ppb	1.7	98065.44	0.7919	Pulse	0.1000	3
As	75	115	He	301.496	ppb	0.6	82643.71	0.6673	Pulse	0.5000	3
Sr	88	115	He	30.206	ppb	1.1	49403.32	0.3989	Pulse	0.1000	3
Mo	98	115	He	30.534	ppb	0.9	49500.48	0.3997	Pulse	0.1000	3
Ag	107	115	He	29.956	ppb	0.8	87250.27	0.7045	Pulse	0.1000	3
Cd	111	115	He	30.161	ppb	0.9	13396.42	0.1082	Pulse	0.5000	3
Sn	120	115	He	29.704	ppb	2.2	48822.94	0.3943	Pulse	0.1000	3
Sb	121	72	He	30.399	ppb	2.3	45401.39	0.1958	Pulse	0.1000	3
Ba	137	115	He	302.128	ppb	1.0	173006.95	1.3970	Pulse	0.1000	3
Tl	205	209	He	29.976	ppb	1.5	142134.62	0.8432	Pulse	0.1000	3
Pb	208	209	He	29.660	ppb	0.5	189864.91	1.1264	Pulse	0.1000	3
U	238	209	He	389.160	ppb	1.7	1845747.21	10.9498	Analog	0.1000	3

Quantitation Report

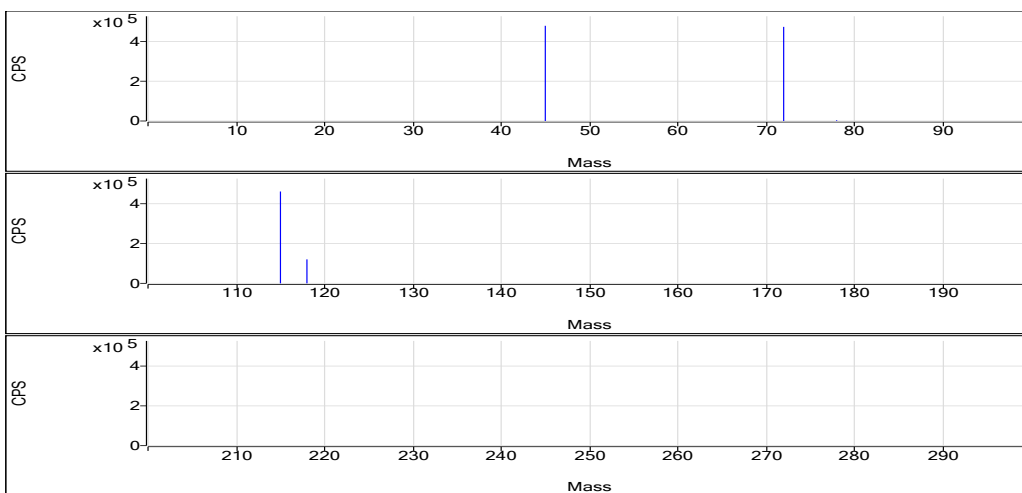
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1679545.13	0.8	100.4	Analog	0.1000	3
No Gas	Ge	72	945166.81	0.7	100.3	Pulse	0.1000	3
H2	Sc	45	476799.93	1.4	98.0	Pulse	0.1000	3
H2	Ge	72	471390.27	1.1	97.2	Pulse	0.1000	3
H2	In	115	459906.36	0.7	99.2	Pulse	0.1000	3
He	Sc	45	108066.85	2.1	98.8	Pulse	0.1000	3
He	Ge	72	231940.58	0.2	97.8	Pulse	0.1000	3
He	In	115	123844.86	0.8	101.2	Pulse	0.1000	3
He	Tb	159	280564.05	0.5	98.9	Pulse	0.1000	3
He	Bi	209	168563.84	0.4	99.3	Pulse	0.1000	3

No Gas

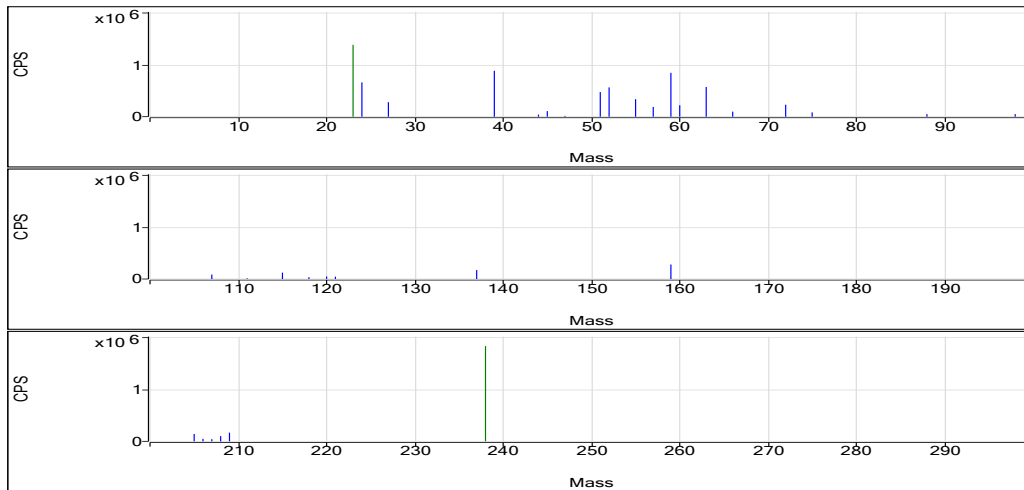


H2



Quantitation Report

He



Quantitation Report

Data File Name 012_ICB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:46:13 AM
Sample Name icb 58667
Sample Type ICB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

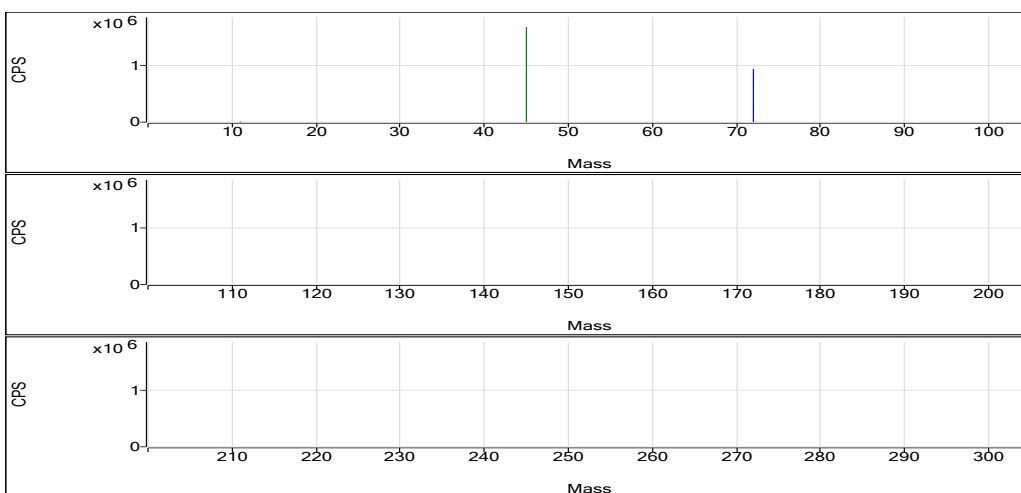
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.065	ppb	2.3	84.67	0.0000	Pulse	0.5000	3
B	11	45	No Gas	13.546	ppb	2.6	10923.33	0.0064	Pulse	0.5000	3
Se	78	115	H2	0.052	ppb	31.5	6.44	0.0000	Pulse	1.5000	3
Na	23	45	He	9.850	ppb	32.2	34426.96	0.3200	Pulse	0.1000	3
Mg	24	45	He	1.804	ppb	47.6	603.37	0.0056	Pulse	0.1000	3
Al	27	45	He	3.673	ppb	6.6	293.35	0.0027	Pulse	0.1000	3
K	39	45	He	23.220	ppb	69.8	57255.55	0.5321	Pulse	0.1000	3
Ca	44	45	He	23.458	ppb	30.3	470.02	0.0044	Pulse	0.1000	3
Ti	47	45	He	0.385	ppb	103.0	26.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.231	ppb	7.4	966.73	0.0090	Pulse	0.1000	3
Cr	52	45	He	0.522	ppb	16.0	3563.88	0.0331	Pulse	0.1000	3
Mn	55	45	He	0.326	ppb	11.4	866.73	0.0081	Pulse	0.1000	3
Fe	57	45	He	4.063	ppb	36.9	406.69	0.0038	Pulse	0.1000	3
Co	59	115	He	0.185	ppb	17.7	596.70	0.0049	Pulse	0.1000	3
Ni	60	115	He	0.521	ppb	65.6	5894.73	0.0482	Pulse	0.1000	3
Cu	63	115	He	0.021	ppb	212.6	3013.75	0.0246	Pulse	0.1000	3
Zn	66	115	He	1.947	ppb	20.6	1470.13	0.0120	Pulse	0.1000	3
As	75	115	He	0.256	ppb	8.1	128.67	0.0011	Pulse	0.5000	3
Sr	88	115	He	0.033	ppb	32.8	80.00	0.0007	Pulse	0.1000	3
Mo	98	115	He	0.341	ppb	11.1	546.70	0.0045	Pulse	0.1000	3
Ag	107	115	He	0.038	ppb	25.9	133.34	0.0011	Pulse	0.1000	3
Cd	111	115	He	0.027	ppb	10.1	14.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.041	ppb	141.6	1666.83	0.0136	Pulse	0.1000	3
Sb	121	72	He	0.780	ppb	15.1	1213.43	0.0052	Pulse	0.1000	3
Ba	137	115	He	0.165	ppb	37.4	116.67	0.0010	Pulse	0.1000	3
Tl	205	209	He	0.046	ppb	8.4	340.02	0.0020	Pulse	0.1000	3
Pb	208	209	He	0.026	ppb	42.4	556.69	0.0033	Pulse	0.1000	3
U	238	209	He	0.202	ppb	13.1	956.74	0.0057	Pulse	0.1000	3

Quantitation Report

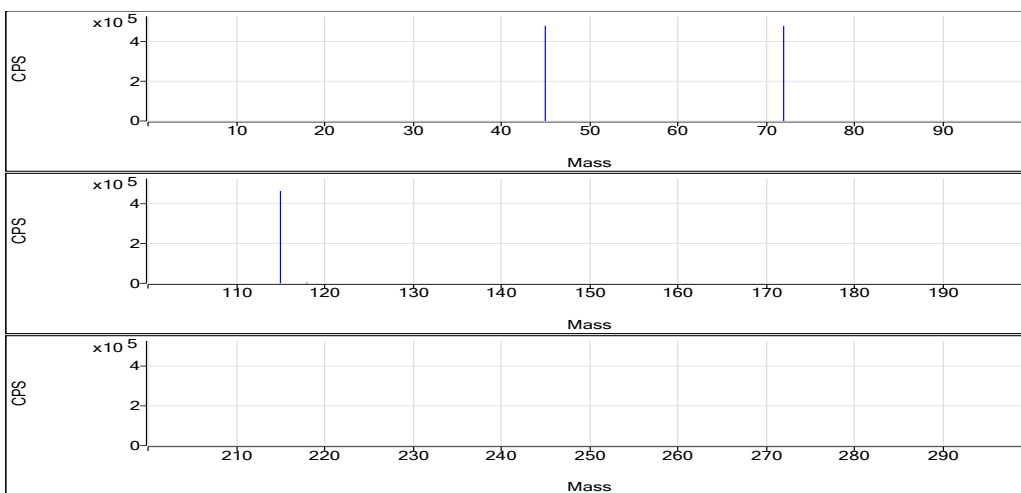
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1694881.90	1.1	101.3	Analog	0.1000	3
No Gas	Ge	72	947321.91	0.8	100.5	Pulse	0.1000	3
H2	Sc	45	477751.66	1.9	98.2	Pulse	0.1000	3
H2	Ge	72	477449.09	1.6	98.5	Pulse	0.1000	3
H2	In	115	463606.44	1.0	100.0	Pulse	0.1000	3
He	Sc	45	107603.53	0.6	98.4	Pulse	0.1000	3
He	Ge	72	233225.08	0.8	98.4	Pulse	0.1000	3
He	In	115	122412.97	0.4	100.0	Pulse	0.1000	3
He	Tb	159	279032.96	0.1	98.3	Pulse	0.1000	3
He	Bi	209	166655.95	0.9	98.2	Pulse	0.1000	3

No Gas

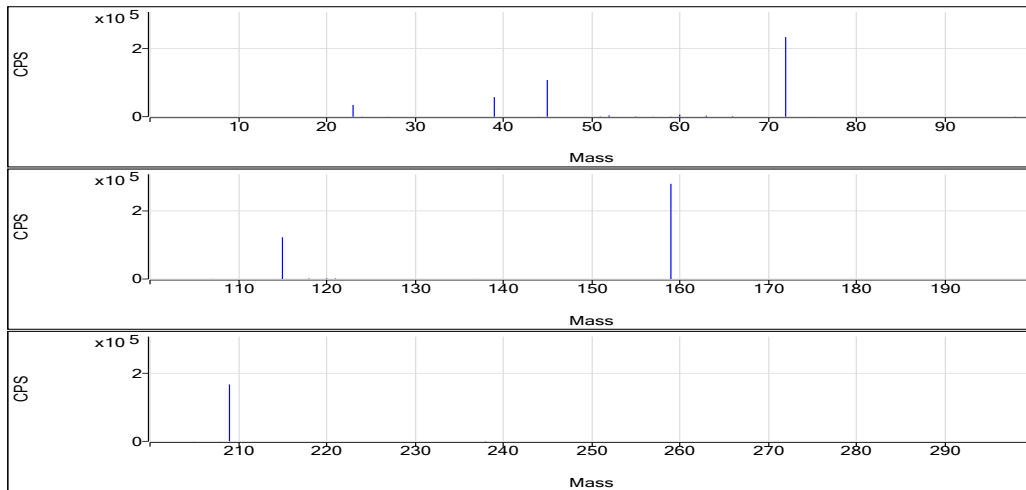


H2



Quantitation Report

He



Quantitation Report

Data File Name 013_LLC.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:48:07 AM
Sample Name cri 58687
Sample Type LLC
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Callb 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

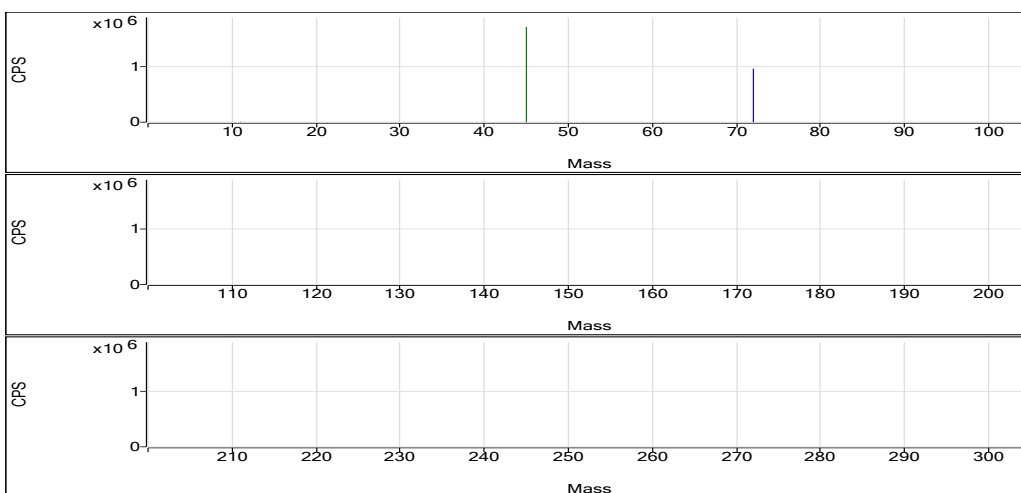
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.530	ppb	7.2	627.35	0.0004	Pulse	0.5000	3
B	11	45	No Gas	6.821	ppb	2.7	6178.63	0.0036	Pulse	0.5000	3
Se	78	115	H2	1.101	ppb	7.4	129.11	0.0003	Pulse	1.5000	3
Na	23	45	He	185.347	ppb	2.6	84047.02	0.7648	Pulse	0.1000	3
Mg	24	45	He	44.686	ppb	4.3	6728.43	0.0612	Pulse	0.1000	3
Al	27	45	He	28.994	ppb	4.0	1763.50	0.0160	Pulse	0.1000	3
K	39	45	He	199.367	ppb	5.2	91077.05	0.8288	Pulse	0.1000	3
Ca	44	45	He	98.301	ppb	0.7	1103.41	0.0100	Pulse	0.1000	3
Ti	47	45	He	10.860	ppb	19.2	583.37	0.0053	Pulse	0.1000	3
V	51	45	He	0.545	ppb	5.5	1526.80	0.0139	Pulse	0.1000	3
Cr	52	45	He	1.958	ppb	4.5	6501.68	0.0592	Pulse	0.1000	3
Mn	55	45	He	2.247	ppb	6.7	3063.77	0.0279	Pulse	0.1000	3
Fe	57	45	He	46.891	ppb	13.3	2076.91	0.0189	Pulse	0.1000	3
Co	59	115	He	0.581	ppb	14.2	1750.17	0.0143	Pulse	0.1000	3
Ni	60	115	He	1.890	ppb	18.3	6848.51	0.0561	Pulse	0.1000	3
Cu	63	115	He	0.915	ppb	9.6	4744.28	0.0388	Pulse	0.1000	3
Zn	66	115	He	10.726	ppb	2.8	4240.77	0.0347	Pulse	0.1000	3
As	75	115	He	2.094	ppb	2.0	624.69	0.0051	Pulse	0.5000	3
Sr	88	115	He	1.047	ppb	3.7	1713.50	0.0140	Pulse	0.1000	3
Mo	98	115	He	0.811	ppb	8.6	1296.77	0.0106	Pulse	0.1000	3
Ag	107	115	He	0.488	ppb	5.7	1423.46	0.0117	Pulse	0.1000	3
Cd	111	115	He	0.523	ppb	6.8	232.00	0.0019	Pulse	0.5000	3
Sn	120	115	He	2.091	ppb	4.2	4874.38	0.0399	Pulse	0.1000	3
Sb	121	72	He	1.245	ppb	8.0	1926.87	0.0082	Pulse	0.1000	3
Ba	137	115	He	2.174	ppb	1.2	1250.10	0.0102	Pulse	0.1000	3
Tl	205	209	He	0.452	ppb	3.0	2246.95	0.0134	Pulse	0.1000	3
Pb	208	209	He	0.469	ppb	6.0	3363.64	0.0201	Pulse	0.1000	3
U	238	209	He	1.306	ppb	6.5	6151.70	0.0368	Pulse	0.1000	3

Quantitation Report

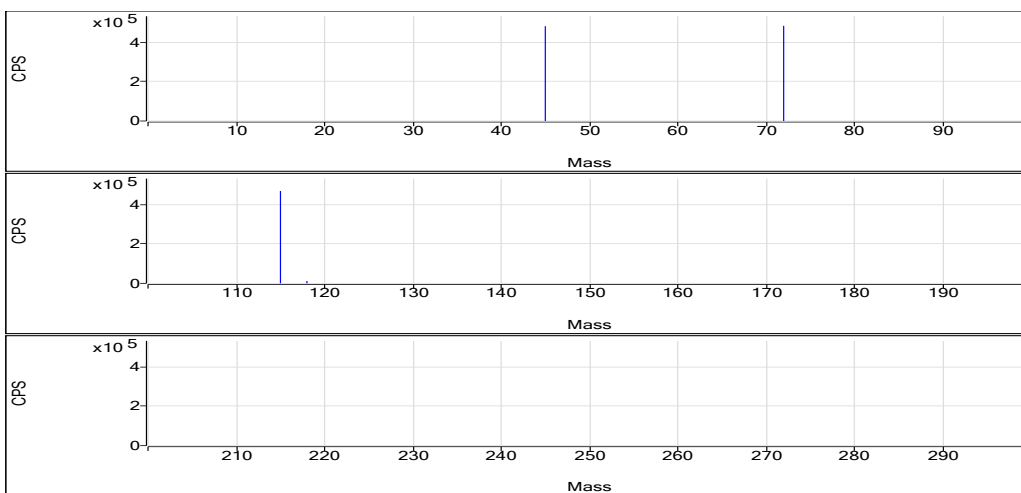
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1700877.16	0.8	101.6	Analog	0.1000	3
No Gas	Ge	72	955239.47	1.2	101.4	Pulse	0.1000	3
H2	Sc	45	479614.28	0.7	98.6	Pulse	0.1000	3
H2	Ge	72	481700.66	0.8	99.4	Pulse	0.1000	3
H2	In	115	467165.19	0.8	100.8	Pulse	0.1000	3
He	Sc	45	109887.38	0.3	100.5	Pulse	0.1000	3
He	Ge	72	235248.26	1.3	99.2	Pulse	0.1000	3
He	In	115	122097.07	2.1	99.7	Pulse	0.1000	3
He	Tb	159	278840.70	0.4	98.3	Pulse	0.1000	3
He	Bi	209	167144.92	0.4	98.5	Pulse	0.1000	3

No Gas

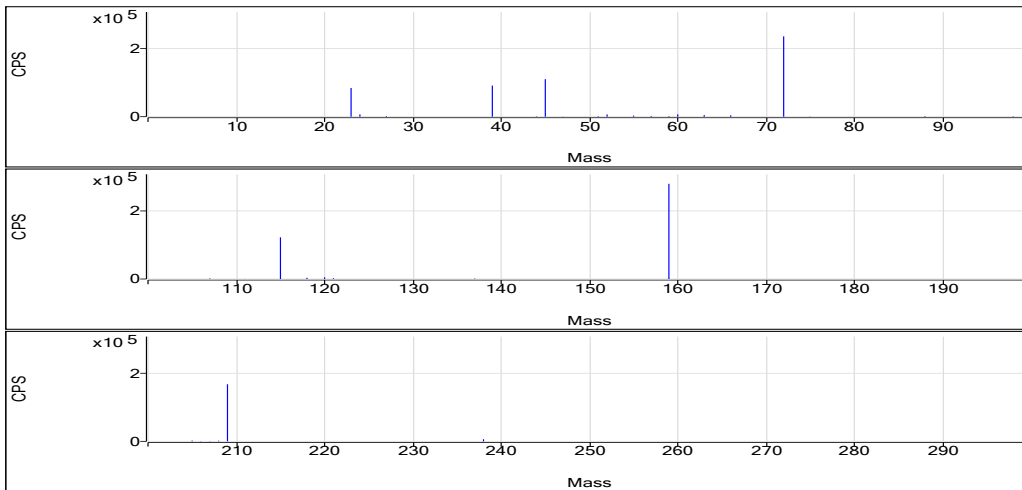


H2



Quantitation Report

He



Quantitation Report

Data File Name 014ICSA.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:50:00 AM
Sample Name icsa 57131
Sample Type ICSA
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

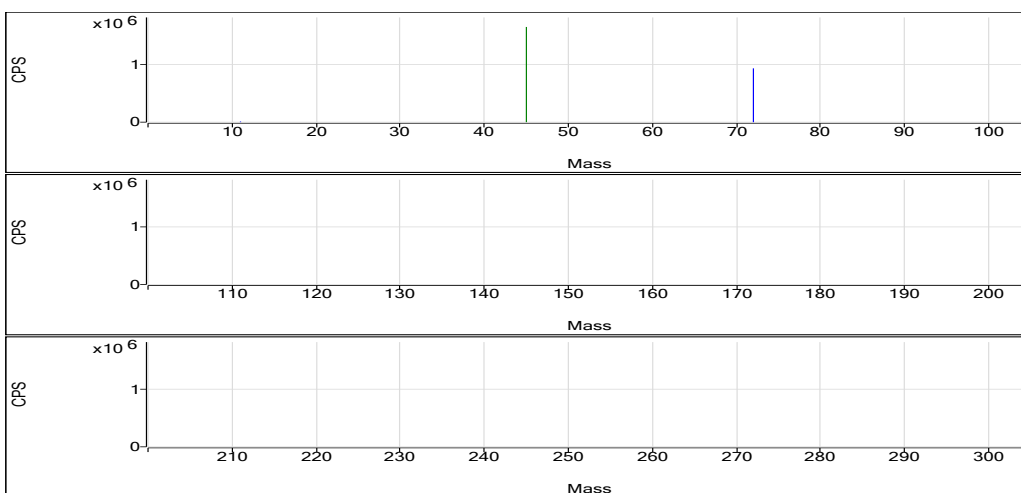
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.027	ppb	38.0	40.00	0.0000	Pulse	0.5000	3
B	11	45	No Gas	14.119	ppb	0.1	11061.44	0.0067	Pulse	0.5000	3
Se	78	115	H2	0.051	ppb	35.5	6.00	0.0000	Pulse	1.5000	3
Na	23	45	He	225904.047	ppb	1.3	60386884.10	572.9587	Analog	0.1000	3
Mg	24	45	He	91842.223	ppb	1.4	12556863.56	119.1401	Analog	0.1000	3
Al	27	45	He	98145.054	ppb	0.9	5442280.96	51.6362	Analog	0.1000	3
K	39	45	He	92867.966	ppb	0.6	16536779.33	156.8959	Analog	0.1000	3
Ca	44	45	He	296167.295	ppb	0.7	2365657.26	22.4450	Analog	0.1000	3
Ti	47	45	He	1931.916	ppb	0.8	98356.05	0.9332	Pulse	0.1000	3
V	51	45	He	0.092	ppb	24.7	716.71	0.0068	Pulse	0.1000	3
Cr	52	45	He	0.876	ppb	8.9	4167.41	0.0395	Pulse	0.1000	3
Mn	55	45	He	3.650	ppb	6.6	4464.17	0.0424	Pulse	0.1000	3
Fe	57	45	He	239880.080	ppb	0.7	8923805.91	84.6676	Analog	0.1000	3
Co	59	115	He	1.205	ppb	9.9	3330.50	0.0292	Pulse	0.1000	3
Ni	60	115	He	-0.249	ppb	N/A	4987.66	0.0437	Pulse	0.1000	3
Cu	63	115	He	0.641	ppb	10.1	3937.32	0.0345	Pulse	0.1000	3
Zn	66	115	He	1.567	ppb	16.9	1260.11	0.0110	Pulse	0.1000	3
As	75	115	He	0.425	ppb	3.9	162.67	0.0014	Pulse	0.5000	3
Sr	88	115	He	8.978	ppb	4.0	13563.61	0.1187	Pulse	0.1000	3
Mo	98	115	He	2164.090	ppb	1.7	3235463.49	28.3299	Analog	0.1000	3
Ag	107	115	He	0.090	ppb	24.6	263.35	0.0023	Pulse	0.1000	3
Cd	111	115	He	0.567	ppb	4.2	234.67	0.0021	Pulse	0.5000	3
Sn	120	115	He	-0.136	ppb	N/A	1296.78	0.0114	Pulse	0.1000	3
Sb	121	72	He	0.636	ppb	5.5	963.40	0.0043	Pulse	0.1000	3
Ba	137	115	He	1.101	ppb	7.2	603.37	0.0053	Pulse	0.1000	3
Tl	205	209	He	-0.003	ppb	N/A	100.00	0.0006	Pulse	0.1000	3
Pb	208	209	He	0.084	ppb	3.0	853.38	0.0055	Pulse	0.1000	3
U	238	209	He	0.036	ppb	22.3	166.68	0.0011	Pulse	0.1000	3

Quantitation Report

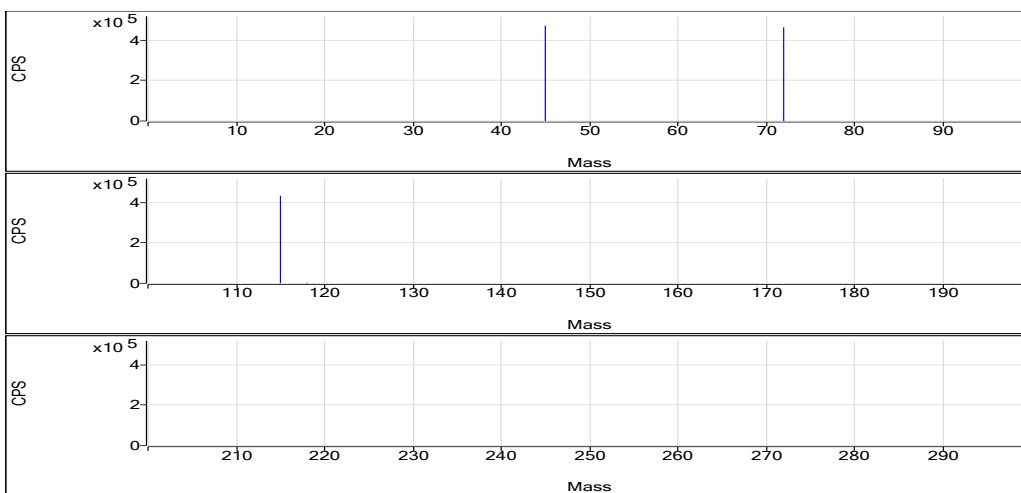
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1654552.01	1.0	98.9	Analog	0.1000	3
No Gas	Ge	72	935263.58	0.4	99.3	Pulse	0.1000	3
H2	Sc	45	471798.92	1.1	97.0	Pulse	0.1000	3
H2	Ge	72	464163.55	1.4	95.8	Pulse	0.1000	3
H2	In	115	433933.91	1.2	93.6	Pulse	0.1000	3
He	Sc	45	105400.89	0.7	96.4	Pulse	0.1000	3
He	Ge	72	225372.97	0.7	95.1	Pulse	0.1000	3
He	In	115	114220.63	1.5	93.3	Pulse	0.1000	3
He	Tb	159	269696.17	0.6	95.0	Pulse	0.1000	3
He	Bi	209	154101.57	0.4	90.8	Pulse	0.1000	3

No Gas

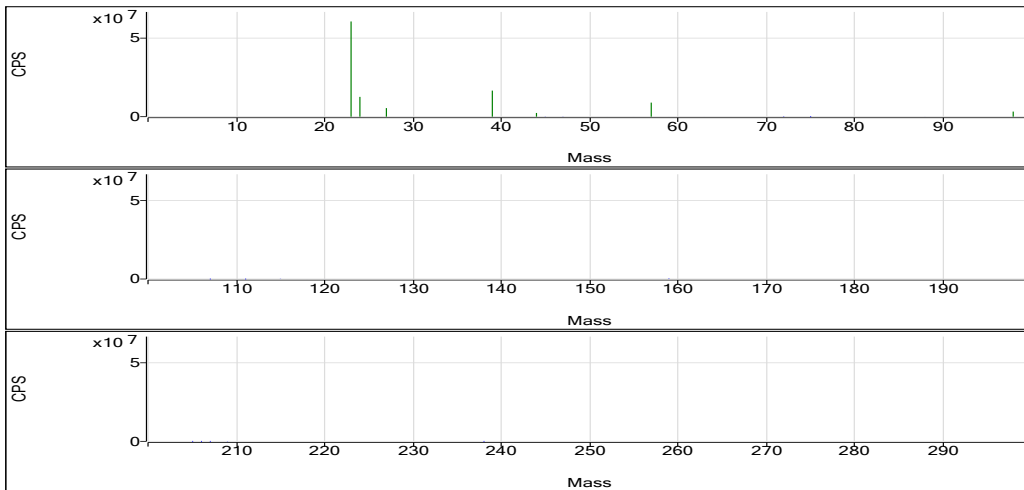


H2



Quantitation Report

He



Quantitation Report

Data File Name 015ICSB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:51:51 AM
Sample Name icsab 57533
Sample Type IC SAB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

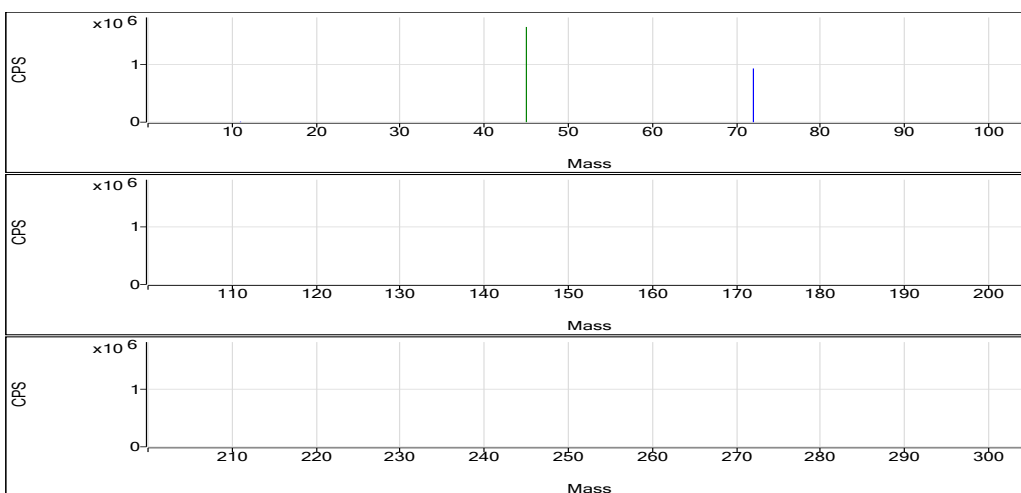
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.018	ppb	52.0	29.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	11.173	ppb	0.7	9093.44	0.0055	Pulse	0.5000	3
Se	78	115	H2	104.854	ppb	0.6	11413.85	0.0262	Pulse	1.5000	3
Na	23	45	He	235032.354	ppb	0.7	62973609.06	596.0989	Analog	0.1000	3
Mg	24	45	He	94315.978	ppb	1.0	12924719.81	122.3491	Analog	0.1000	3
Al	27	45	He	101684.050	ppb	1.0	5651554.08	53.4981	Analog	0.1000	3
K	39	45	He	97540.408	ppb	1.2	17405092.24	164.7650	Analog	0.1000	3
Ca	44	45	He	313407.972	ppb	0.7	2509135.64	23.7514	Analog	0.1000	3
Ti	47	45	He	2063.662	ppb	0.7	105303.81	0.9968	Pulse	0.1000	3
V	51	45	He	189.298	ppb	1.1	313461.84	2.9671	Pulse	0.1000	3
Cr	52	45	He	187.869	ppb	0.7	362302.32	3.4296	Pulse	0.1000	3
Mn	55	45	He	203.855	ppb	1.5	222717.96	2.1083	Pulse	0.1000	3
Fe	57	45	He	248513.529	ppb	0.6	9266447.36	87.7148	Analog	0.1000	3
Co	59	115	He	190.196	ppb	1.6	529254.78	4.5346	Pulse	0.1000	3
Ni	60	115	He	198.148	ppb	2.1	139795.12	1.1978	Pulse	0.1000	3
Cu	63	115	He	191.962	ppb	1.8	359019.75	3.0761	Pulse	0.1000	3
Zn	66	115	He	101.903	ppb	1.8	31608.50	0.2708	Pulse	0.1000	3
As	75	115	He	105.053	ppb	0.9	27177.61	0.2328	Pulse	0.5000	3
Sr	88	115	He	9.126	ppb	1.4	14087.48	0.1207	Pulse	0.1000	3
Mo	98	115	He	2206.428	ppb	1.8	3371112.24	28.8841	Analog	0.1000	3
Ag	107	115	He	48.901	ppb	0.9	134226.84	1.1500	Pulse	0.1000	3
Cd	111	115	He	100.854	ppb	1.1	42212.38	0.3616	Pulse	0.5000	3
Sn	120	115	He	0.072	ppb	148.2	1636.88	0.0140	Pulse	0.1000	3
Sb	121	72	He	0.609	ppb	2.5	956.74	0.0041	Pulse	0.1000	3
Ba	137	115	He	1.246	ppb	20.5	693.38	0.0059	Pulse	0.1000	3
Tl	205	209	He	-0.002	ppb	N/A	103.34	0.0007	Pulse	0.1000	3
Pb	208	209	He	0.079	ppb	22.6	813.37	0.0053	Pulse	0.1000	3
U	238	209	He	0.026	ppb	64.7	120.00	0.0008	Pulse	0.1000	3

Quantitation Report

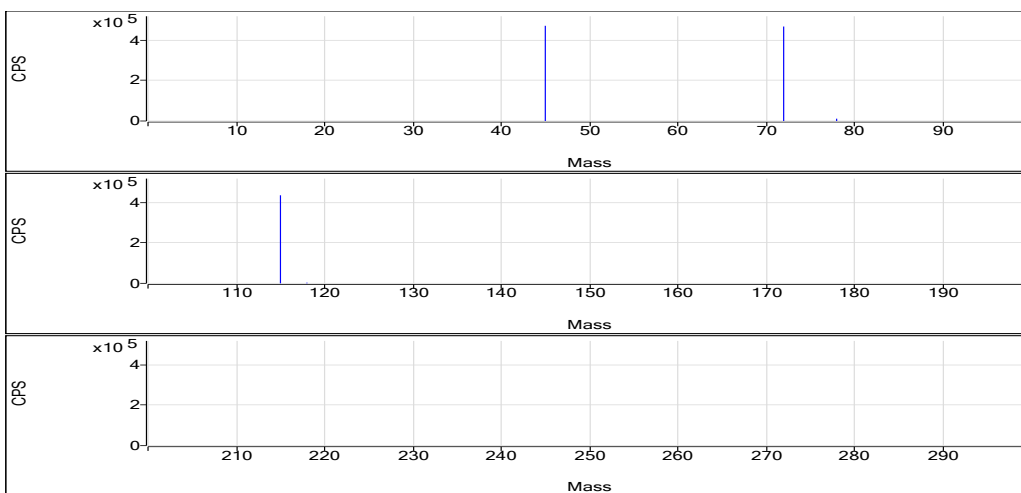
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1667577.27	0.8	99.7	Analog	0.1000	3
No Gas	Ge	72	940414.91	0.1	99.8	Pulse	0.1000	3
H2	Sc	45	470354.82	0.8	96.7	Pulse	0.1000	3
H2	Ge	72	466757.91	1.4	96.3	Pulse	0.1000	3
H2	In	115	434990.27	0.5	93.8	Pulse	0.1000	3
He	Sc	45	105643.17	0.9	96.6	Pulse	0.1000	3
He	Ge	72	233408.34	1.4	98.5	Pulse	0.1000	3
He	In	115	116727.38	1.1	95.4	Pulse	0.1000	3
He	Tb	159	271458.82	0.8	95.7	Pulse	0.1000	3
He	Bi	209	152305.74	0.4	89.7	Pulse	0.1000	3

No Gas

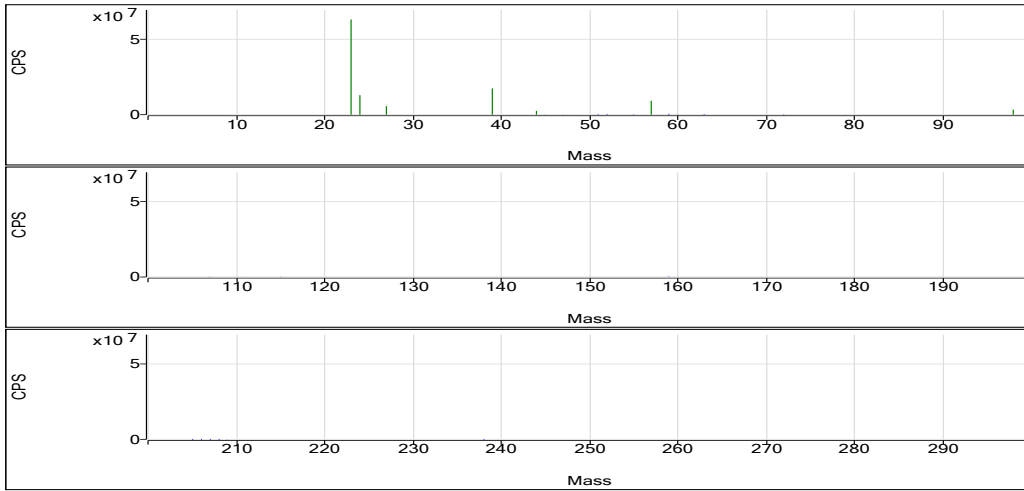


H2



Quantitation Report

He



Quantitation Report

Data File Name 016_QC5.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:53:42 AM
Sample Name Irc 57581
Sample Type LRS3 (QC5)
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

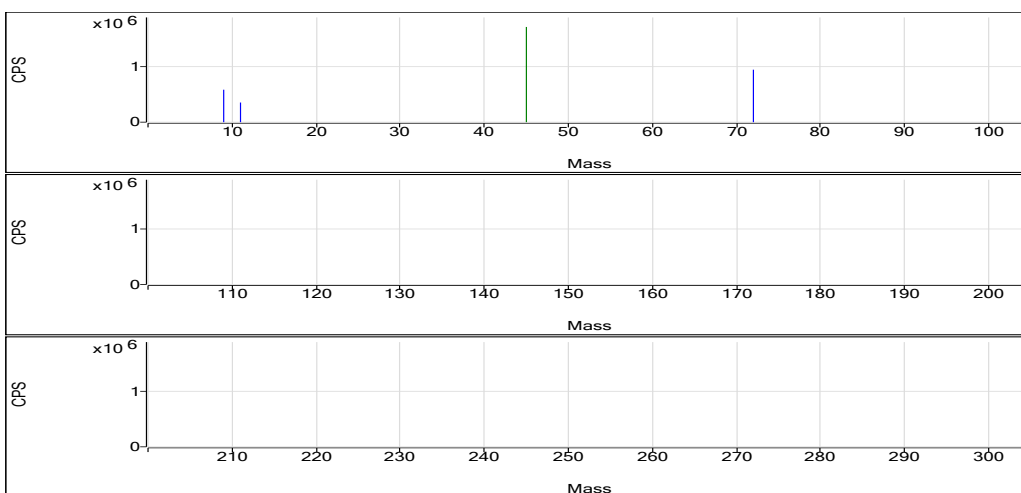
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	497.694	ppb	3.1	588701.13	0.3409	Pulse	0.5000	3
B	11	45	No Gas	491.377	ppb	3.4	356288.20	0.2063	Pulse	0.5000	3
Se	78	115	H2	483.762	ppb	0.1	58942.63	0.1211	Pulse	1.5000	3
Na	23	45	He	46111.102	ppb	1.2	12901658.14	117.1860	Analog	0.1000	3
Mg	24	45	He	46107.411	ppb	1.1	6584587.82	59.8134	Analog	0.1000	3
Al	27	45	He	50521.934	ppb	0.4	2926350.27	26.5811	Analog	0.1000	3
K	39	45	He	48156.920	ppb	1.5	8982646.53	81.5962	Analog	0.1000	3
Ca	44	45	He	48762.982	ppb	0.6	407085.58	3.6977	Pulse	0.1000	3
Ti	47	45	He	507.541	ppb	3.9	26992.29	0.2452	Pulse	0.1000	3
V	51	45	He	473.151	ppb	0.9	815555.53	7.4083	Pulse	0.1000	3
Cr	52	45	He	469.080	ppb	0.1	938828.63	8.5277	Pulse	0.1000	3
Mn	55	45	He	496.918	ppb	1.6	565049.22	5.1325	Pulse	0.1000	3
Fe	57	45	He	50420.162	ppb	0.7	1959353.98	17.7981	Analog	0.1000	3
Co	59	115	He	480.321	ppb	5.4	1473975.34	11.4510	Analog	0.1000	3
Ni	60	115	He	476.435	ppb	0.9	362641.84	2.8167	Pulse	0.1000	3
Cu	63	115	He	467.405	ppb	1.4	959794.99	7.4550	Pulse	0.1000	3
Zn	66	115	He	478.209	ppb	1.4	160297.63	1.2451	Pulse	0.1000	3
As	75	115	He	489.385	ppb	1.1	139420.94	1.0829	Pulse	0.5000	3
Sr	88	115	He	481.229	ppb	1.7	817827.85	6.3524	Pulse	0.1000	3
Mo	98	115	He	487.568	ppb	1.1	821757.07	6.3827	Pulse	0.1000	3
Ag	107	115	He	290.620	ppb	0.7	879813.84	6.8335	Pulse	0.1000	3
Cd	111	115	He	475.927	ppb	1.1	219710.32	1.7065	Pulse	0.5000	3
Sn	120	115	He	474.081	ppb	1.2	784951.78	6.0967	Pulse	0.1000	3
Sb	121	72	He	509.285	ppb	0.7	771269.00	3.2766	Pulse	0.1000	3
Ba	137	115	He	479.464	ppb	1.7	285416.27	2.2169	Pulse	0.1000	3
Tl	205	209	He	514.695	ppb	0.7	2309760.17	14.4663	Analog	0.1000	3
Pb	208	209	He	504.031	ppb	1.3	3049972.79	19.1030	Pulse	0.1000	3
U	238	209	He	651.958	ppb	1.6	2928988.29	18.3442	Analog	0.1000	3

Quantitation Report

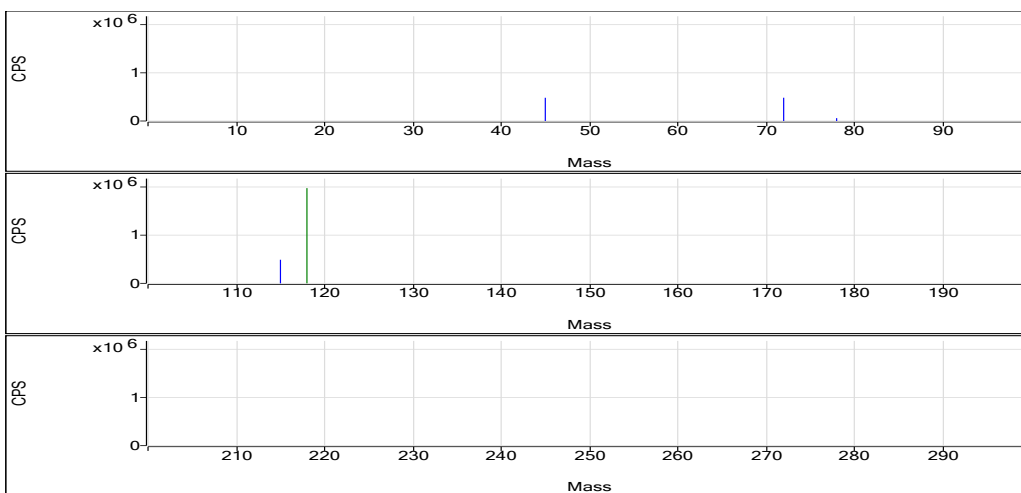
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1727274.04	0.9	103.2	Analog	0.1000	3
No Gas	Ge	72	951768.55	0.6	101.0	Pulse	0.1000	3
H2	Sc	45	479788.30	1.5	98.6	Pulse	0.1000	3
H2	Ge	72	480477.67	1.8	99.1	Pulse	0.1000	3
H2	In	115	486897.74	1.4	105.0	Pulse	0.1000	3
He	Sc	45	110091.56	0.7	100.7	Pulse	0.1000	3
He	Ge	72	235390.71	0.3	99.3	Pulse	0.1000	3
He	In	115	128755.13	0.9	105.2	Pulse	0.1000	3
He	Tb	159	275891.58	1.1	97.2	Pulse	0.1000	3
He	Bi	209	159671.24	0.9	94.1	Pulse	0.1000	3

No Gas

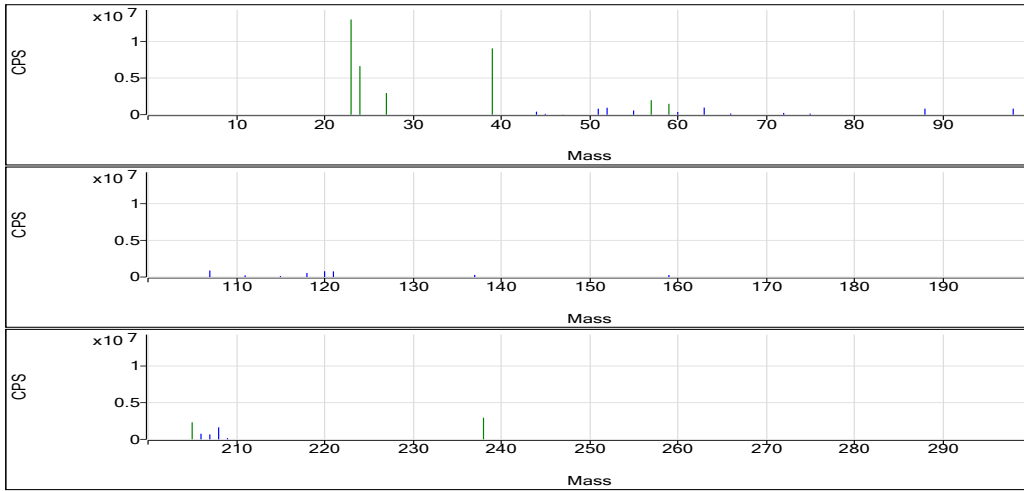


H2



Quantitation Report

He



Quantitation Report

Data File Name 017SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:55:33 AM
Sample Name ccs 58667
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

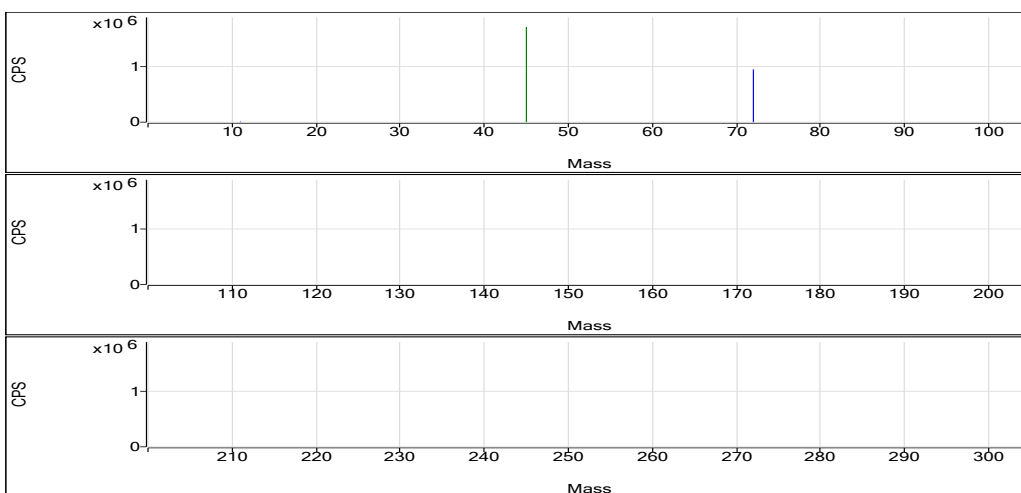
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.369	ppb	18.9	445.34	0.0003	Pulse	0.5000	3
B	11	45	No Gas	12.506	ppb	3.9	10375.63	0.0060	Pulse	0.5000	3
Se	78	115	H2	0.286	ppb	6.2	34.22	0.0001	Pulse	1.5000	3
Na	23	45	He	25.018	ppb	11.9	39546.58	0.3584	Pulse	0.1000	3
Mg	24	45	He	16.125	ppb	15.2	2666.99	0.0242	Pulse	0.1000	3
Al	27	45	He	18.195	ppb	8.0	1143.42	0.0104	Pulse	0.1000	3
K	39	45	He	29.745	ppb	90.3	59885.90	0.5431	Pulse	0.1000	3
Ca	44	45	He	40.033	ppb	26.1	620.04	0.0056	Pulse	0.1000	3
Ti	47	45	He	0.122	ppb	176.9	13.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.146	ppb	23.1	843.39	0.0076	Pulse	0.1000	3
Cr	52	45	He	0.523	ppb	13.6	3657.26	0.0332	Pulse	0.1000	3
Mn	55	45	He	0.284	ppb	39.4	843.38	0.0076	Pulse	0.1000	3
Fe	57	45	He	26.153	ppb	14.2	1276.77	0.0116	Pulse	0.1000	3
Co	59	115	He	0.131	ppb	37.6	443.36	0.0036	Pulse	0.1000	3
Ni	60	115	He	-1.917	ppb	N/A	4190.75	0.0340	Pulse	0.1000	3
Cu	63	115	He	-0.219	ppb	N/A	2566.98	0.0208	Pulse	0.1000	3
Zn	66	115	He	0.447	ppb	35.7	1003.41	0.0081	Pulse	0.1000	3
As	75	115	He	0.213	ppb	8.4	118.00	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.106	ppb	16.3	200.01	0.0016	Pulse	0.1000	3
Mo	98	115	He	1.461	ppb	4.4	2360.29	0.0191	Pulse	0.1000	3
Ag	107	115	He	0.107	ppb	5.8	333.35	0.0027	Pulse	0.1000	3
Cd	111	115	He	0.116	ppb	15.0	54.00	0.0004	Pulse	0.5000	3
Sn	120	115	He	1.006	ppb	14.9	3210.48	0.0260	Pulse	0.1000	3
Sb	121	72	He	2.132	ppb	10.9	3290.52	0.0139	Pulse	0.1000	3
Ba	137	115	He	0.099	ppb	35.2	80.00	0.0006	Pulse	0.1000	3
Tl	205	209	He	0.191	ppb	10.5	1013.42	0.0061	Pulse	0.1000	3
Pb	208	209	He	0.099	ppb	34.4	1013.39	0.0061	Pulse	0.1000	3
U	238	209	He	0.271	ppb	19.3	1273.44	0.0077	Pulse	0.1000	3

Quantitation Report

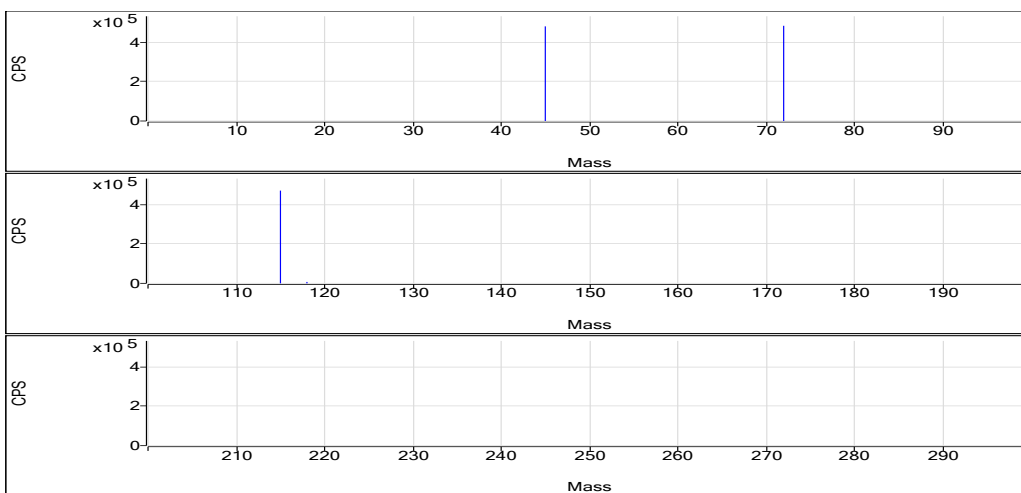
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1726212.53	0.1	103.2	Analog	0.1000	3
No Gas	Ge	72	956549.51	1.0	101.5	Pulse	0.1000	3
H2	Sc	45	481015.71	0.7	98.9	Pulse	0.1000	3
H2	Ge	72	483947.36	1.4	99.8	Pulse	0.1000	3
H2	In	115	471274.72	1.2	101.7	Pulse	0.1000	3
He	Sc	45	110363.82	2.0	100.9	Pulse	0.1000	3
He	Ge	72	236717.59	1.0	99.9	Pulse	0.1000	3
He	In	115	123425.12	1.0	100.8	Pulse	0.1000	3
He	Tb	159	278396.49	0.8	98.1	Pulse	0.1000	3
He	Bi	209	165889.83	0.9	97.7	Pulse	0.1000	3

No Gas

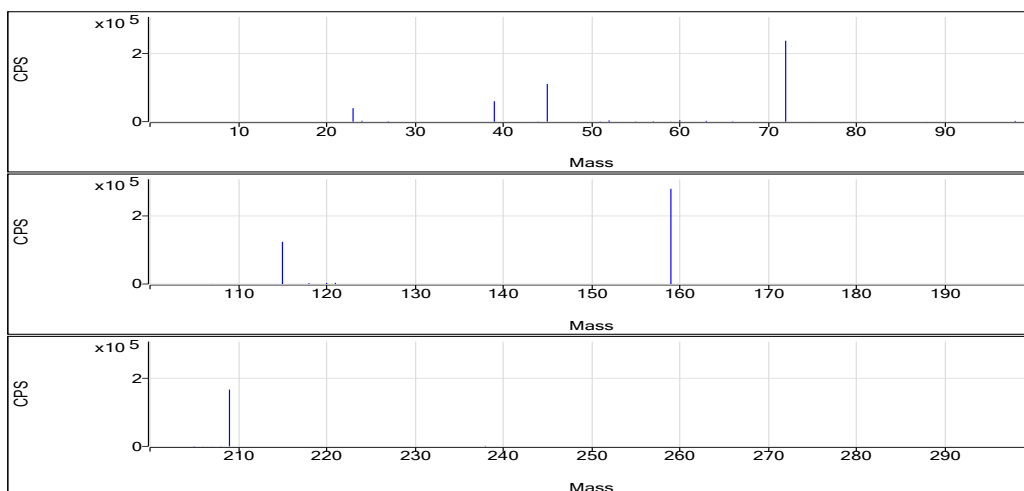


H2



Quantitation Report

He



Quantitation Report

Data File Name 018SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:57:26 AM
Sample Name ccs 58667
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

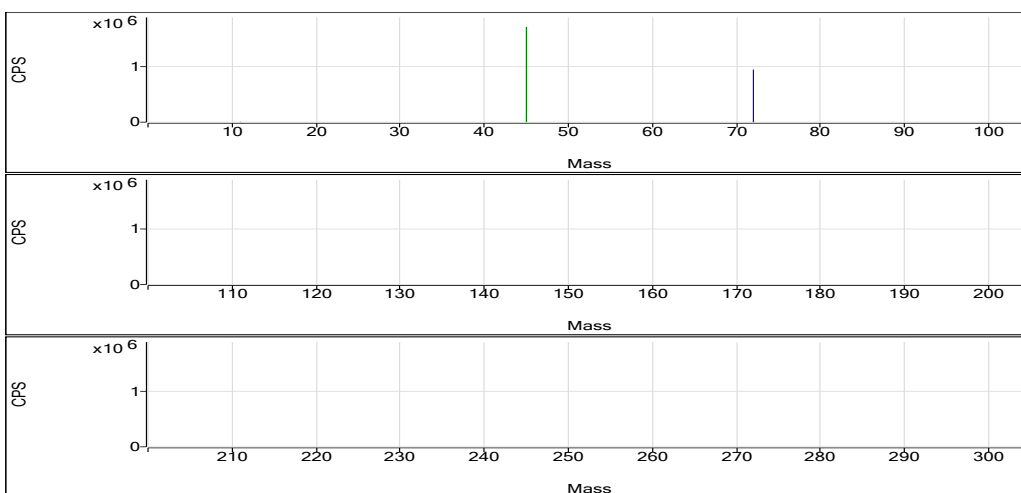
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.085	ppb	0.6	109.33	0.0001	Pulse	0.5000	3
B	11	45	No Gas	5.131	ppb	3.7	5034.87	0.0029	Pulse	0.5000	3
Se	78	115	H2	0.075	ppb	44.2	9.33	0.0000	Pulse	1.5000	3
Na	23	45	He	9.502	ppb	19.1	34918.27	0.3191	Pulse	0.1000	3
Mg	24	45	He	4.834	ppb	4.8	1043.40	0.0095	Pulse	0.1000	3
Al	27	45	He	5.325	ppb	4.2	393.35	0.0036	Pulse	0.1000	3
K	39	45	He	18.264	ppb	73.2	57319.44	0.5238	Pulse	0.1000	3
Ca	44	45	He	15.244	ppb	60.6	410.02	0.0037	Pulse	0.1000	3
Ti	47	45	He	0.062	ppb	304.0	10.00	0.0001	Pulse	0.1000	3
V	51	45	He	0.148	ppb	82.8	840.06	0.0077	Pulse	0.1000	3
Cr	52	45	He	0.417	ppb	25.4	3417.20	0.0312	Pulse	0.1000	3
Mn	55	45	He	0.082	ppb	30.2	606.70	0.0055	Pulse	0.1000	3
Fe	57	45	He	13.371	ppb	3.9	773.38	0.0071	Pulse	0.1000	3
Co	59	115	He	0.063	ppb	30.3	240.01	0.0020	Pulse	0.1000	3
Ni	60	115	He	-1.357	ppb	N/A	4574.21	0.0372	Pulse	0.1000	3
Cu	63	115	He	-0.214	ppb	N/A	2566.98	0.0209	Pulse	0.1000	3
Zn	66	115	He	0.188	ppb	35.7	916.73	0.0075	Pulse	0.1000	3
As	75	115	He	0.058	ppb	86.6	75.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	0.051	ppb	43.7	110.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.641	ppb	9.3	1030.07	0.0084	Pulse	0.1000	3
Ag	107	115	He	0.036	ppb	28.2	126.67	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.029	ppb	7.6	15.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.145	ppb	32.2	1836.85	0.0150	Pulse	0.1000	3
Sb	121	72	He	0.450	ppb	35.2	730.05	0.0031	Pulse	0.1000	3
Ba	137	115	He	0.041	ppb	87.8	46.67	0.0004	Pulse	0.1000	3
Tl	205	209	He	0.053	ppb	29.5	370.02	0.0022	Pulse	0.1000	3
Pb	208	209	He	0.013	ppb	140.4	473.36	0.0029	Pulse	0.1000	3
U	238	209	He	0.054	ppb	21.8	260.01	0.0016	Pulse	0.1000	3

Quantitation Report

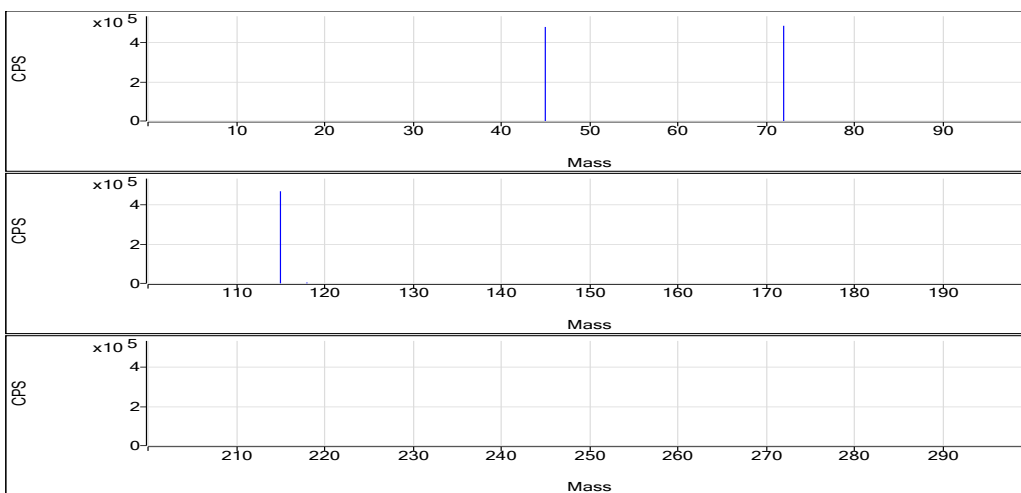
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1720730.76	0.6	102.8	Analog	0.1000	3
No Gas	Ge	72	949839.47	1.1	100.8	Pulse	0.1000	3
H2	Sc	45	480759.41	1.5	98.8	Pulse	0.1000	3
H2	Ge	72	486722.22	1.4	100.4	Pulse	0.1000	3
H2	In	115	470732.21	1.4	101.6	Pulse	0.1000	3
He	Sc	45	109441.28	0.4	100.1	Pulse	0.1000	3
He	Ge	72	237909.46	1.1	100.4	Pulse	0.1000	3
He	In	115	122859.28	1.3	100.4	Pulse	0.1000	3
He	Tb	159	278138.25	0.1	98.0	Pulse	0.1000	3
He	Bi	209	166075.00	1.2	97.8	Pulse	0.1000	3

No Gas

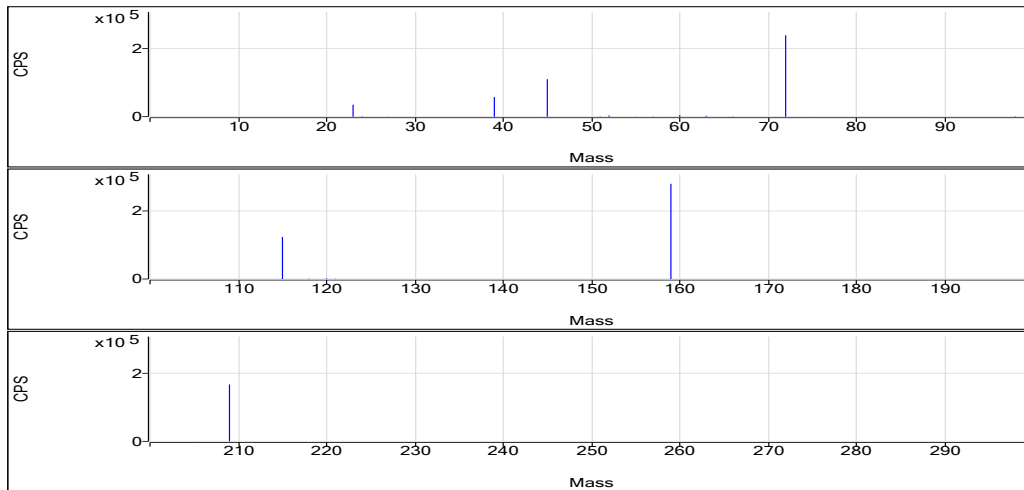


H2



Quantitation Report

He



Quantitation Report

Data File Name 019_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 11:59:19 AM
Sample Name ccv 64982
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

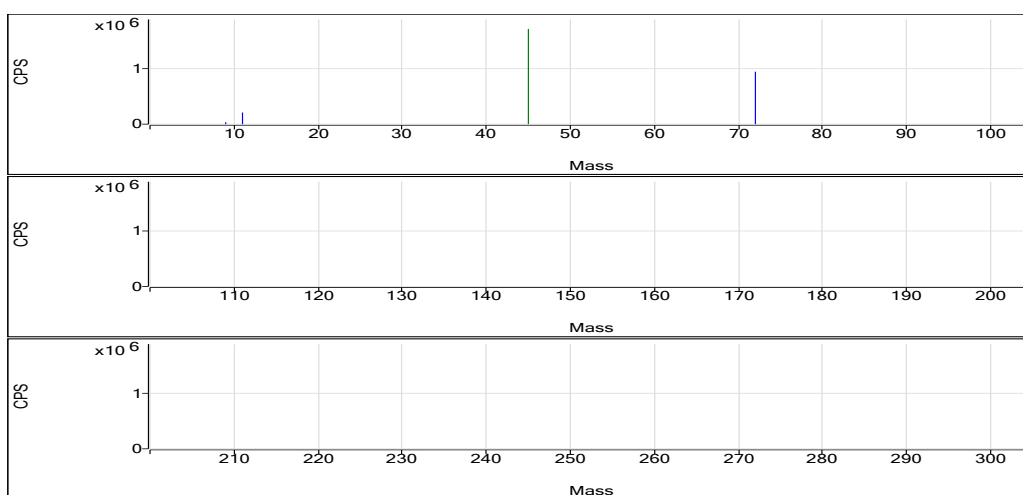
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	29.235	ppb	1.7	34533.48	0.0200	Pulse	0.5000	3
B	11	45	No Gas	290.869	ppb	2.3	211122.08	0.1224	Pulse	0.5000	3
Se	78	115	H2	30.299	ppb	0.4	3565.11	0.0076	Pulse	1.5000	3
Na	23	45	He	5057.056	ppb	0.6	1447325.76	13.1146	Analog	0.1000	3
Mg	24	45	He	4750.246	ppb	0.7	680394.65	6.1652	Pulse	0.1000	3
Al	27	45	He	4914.715	ppb	1.1	285442.14	2.5865	Pulse	0.1000	3
K	39	45	He	4709.667	ppb	0.1	929765.17	8.4248	Pulse	0.1000	3
Ca	44	45	He	4995.478	ppb	1.2	42061.27	0.3811	Pulse	0.1000	3
Ti	47	45	He	301.781	ppb	2.8	16092.62	0.1458	Pulse	0.1000	3
V	51	45	He	282.102	ppb	0.5	487693.37	4.4192	Pulse	0.1000	3
Cr	52	45	He	285.766	ppb	0.9	574342.20	5.2044	Pulse	0.1000	3
Mn	55	45	He	300.481	ppb	1.1	342706.06	3.1054	Pulse	0.1000	3
Fe	57	45	He	4995.590	ppb	2.4	194832.79	1.7655	Pulse	0.1000	3
Co	59	115	He	294.413	ppb	0.9	858146.37	7.0191	Pulse	0.1000	3
Ni	60	115	He	307.950	ppb	0.9	224536.64	1.8365	Pulse	0.1000	3
Cu	63	115	He	298.454	ppb	0.6	583073.22	4.7691	Pulse	0.1000	3
Zn	66	115	He	313.859	ppb	1.5	100202.78	0.8196	Pulse	0.1000	3
As	75	115	He	310.906	ppb	0.9	84134.15	0.6881	Pulse	0.5000	3
Sr	88	115	He	30.925	ppb	2.2	49928.37	0.4084	Pulse	0.1000	3
Mo	98	115	He	31.122	ppb	0.9	49811.63	0.4074	Pulse	0.1000	3
Ag	107	115	He	30.338	ppb	1.8	87230.05	0.7135	Pulse	0.1000	3
Cd	111	115	He	30.372	ppb	0.7	13317.70	0.1089	Pulse	0.5000	3
Sn	120	115	He	30.475	ppb	1.9	49408.27	0.4042	Pulse	0.1000	3
Sb	121	72	He	29.257	ppb	2.0	44638.96	0.1884	Pulse	0.1000	3
Ba	137	115	He	306.219	ppb	2.2	173108.02	1.4160	Pulse	0.1000	3
Tl	205	209	He	29.696	ppb	1.5	138230.22	0.8354	Pulse	0.1000	3
Pb	208	209	He	29.757	ppb	1.2	186997.38	1.1300	Pulse	0.1000	3
U	238	209	He	49.709	ppb	0.6	231467.04	1.3987	Pulse	0.1000	3

Quantitation Report

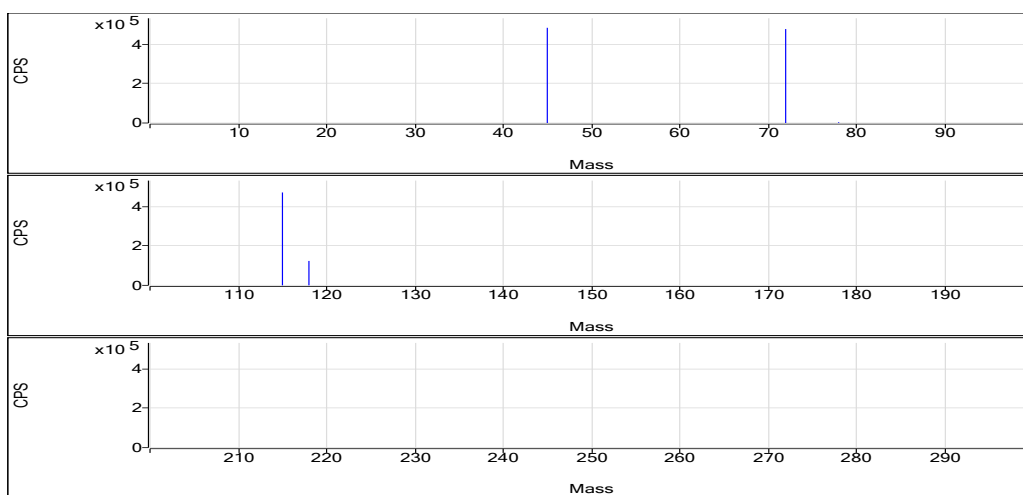
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1724125.86	1.1	103.0	Analog	0.1000	3
No Gas	Ge	72	949484.39	1.3	100.8	Pulse	0.1000	3
H2	Sc	45	481980.89	1.2	99.1	Pulse	0.1000	3
H2	Ge	72	475594.66	2.4	98.1	Pulse	0.1000	3
H2	In	115	470122.52	1.5	101.4	Pulse	0.1000	3
He	Sc	45	110360.45	0.4	100.9	Pulse	0.1000	3
He	Ge	72	236953.33	0.6	100.0	Pulse	0.1000	3
He	In	115	122267.92	1.2	99.9	Pulse	0.1000	3
He	Tb	159	281419.50	0.5	99.2	Pulse	0.1000	3
He	Bi	209	165491.14	1.1	97.5	Pulse	0.1000	3

No Gas

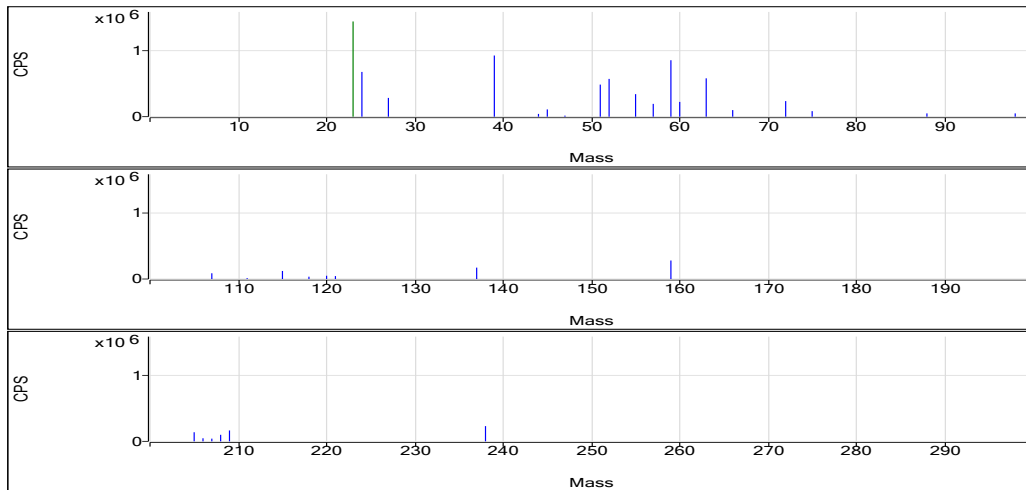


H2



Quantitation Report

He



Quantitation Report

Data File Name 020_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:01:12 PM
Sample Name ccb 58667
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

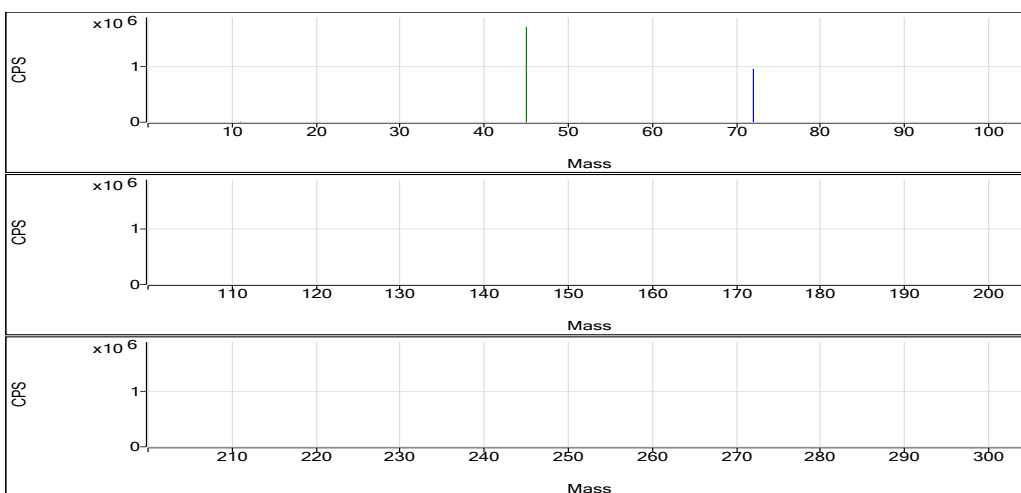
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.060	ppb	15.6	80.00	0.0000	Pulse	0.5000	3
B	11	45	No Gas	9.708	ppb	3.7	8256.98	0.0048	Pulse	0.5000	3
Se	78	115	H2	0.095	ppb	54.4	11.56	0.0000	Pulse	1.5000	3
Na	23	45	He	17.415	ppb	7.0	36929.69	0.3391	Pulse	0.1000	3
Mg	24	45	He	8.200	ppb	5.2	1513.47	0.0139	Pulse	0.1000	3
Al	27	45	He	6.985	ppb	23.3	486.69	0.0045	Pulse	0.1000	3
K	39	45	He	27.207	ppb	57.9	58688.04	0.5389	Pulse	0.1000	3
Ca	44	45	He	40.857	ppb	45.3	620.04	0.0057	Pulse	0.1000	3
Ti	47	45	He	0.443	ppb	42.8	30.00	0.0003	Pulse	0.1000	3
V	51	45	He	0.146	ppb	45.3	833.38	0.0077	Pulse	0.1000	3
Cr	52	45	He	0.561	ppb	2.4	3683.91	0.0338	Pulse	0.1000	3
Mn	55	45	He	0.325	ppb	4.5	876.72	0.0081	Pulse	0.1000	3
Fe	57	45	He	15.382	ppb	23.8	846.72	0.0078	Pulse	0.1000	3
Co	59	115	He	0.145	ppb	13.0	480.02	0.0039	Pulse	0.1000	3
Ni	60	115	He	-1.187	ppb	N/A	4694.25	0.0382	Pulse	0.1000	3
Cu	63	115	He	-0.254	ppb	N/A	2490.30	0.0203	Pulse	0.1000	3
Zn	66	115	He	1.780	ppb	27.3	1423.46	0.0116	Pulse	0.1000	3
As	75	115	He	0.212	ppb	23.1	117.33	0.0010	Pulse	0.5000	3
Sr	88	115	He	0.058	ppb	55.0	120.00	0.0010	Pulse	0.1000	3
Mo	98	115	He	0.491	ppb	11.9	790.06	0.0064	Pulse	0.1000	3
Ag	107	115	He	0.035	ppb	48.7	123.34	0.0010	Pulse	0.1000	3
Cd	111	115	He	0.024	ppb	29.6	13.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.020	ppb	135.8	1640.16	0.0133	Pulse	0.1000	3
Sb	121	72	He	0.647	ppb	17.2	1026.74	0.0043	Pulse	0.1000	3
Ba	137	115	He	0.147	ppb	29.2	106.67	0.0009	Pulse	0.1000	3
Tl	205	209	He	0.060	ppb	26.3	406.69	0.0024	Pulse	0.1000	3
Pb	208	209	He	0.034	ppb	33.3	606.69	0.0036	Pulse	0.1000	3
U	238	209	He	0.059	ppb	13.3	286.68	0.0017	Pulse	0.1000	3

Quantitation Report

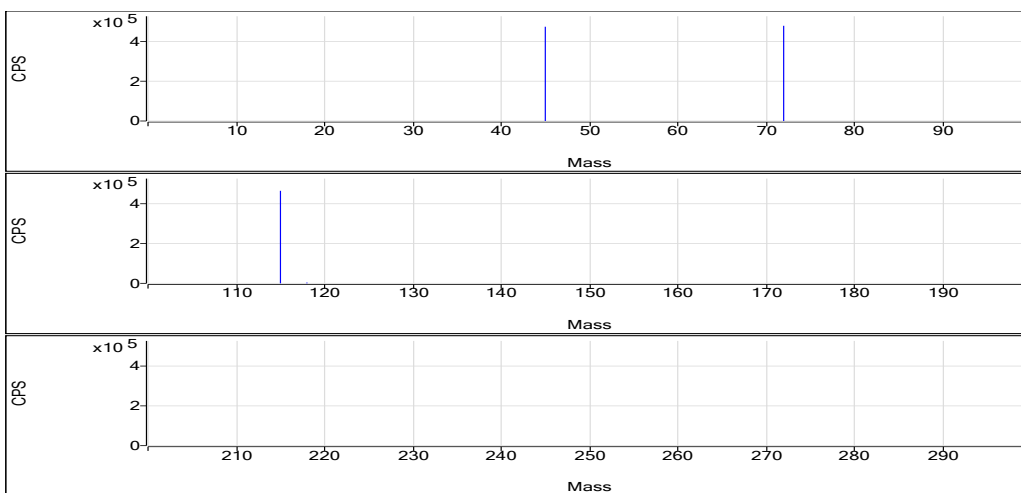
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1706001.38	0.4	102.0	Analog	0.1000	3
No Gas	Ge	72	955106.18	0.7	101.4	Pulse	0.1000	3
H2	Sc	45	474234.33	2.0	97.5	Pulse	0.1000	3
H2	Ge	72	478970.51	1.1	98.8	Pulse	0.1000	3
H2	In	115	465475.08	2.1	100.4	Pulse	0.1000	3
He	Sc	45	108892.67	0.7	99.6	Pulse	0.1000	3
He	Ge	72	236197.38	0.8	99.6	Pulse	0.1000	3
He	In	115	122876.71	1.6	100.4	Pulse	0.1000	3
He	Tb	159	276253.12	0.9	97.3	Pulse	0.1000	3
He	Bi	209	166463.58	0.7	98.1	Pulse	0.1000	3

No Gas

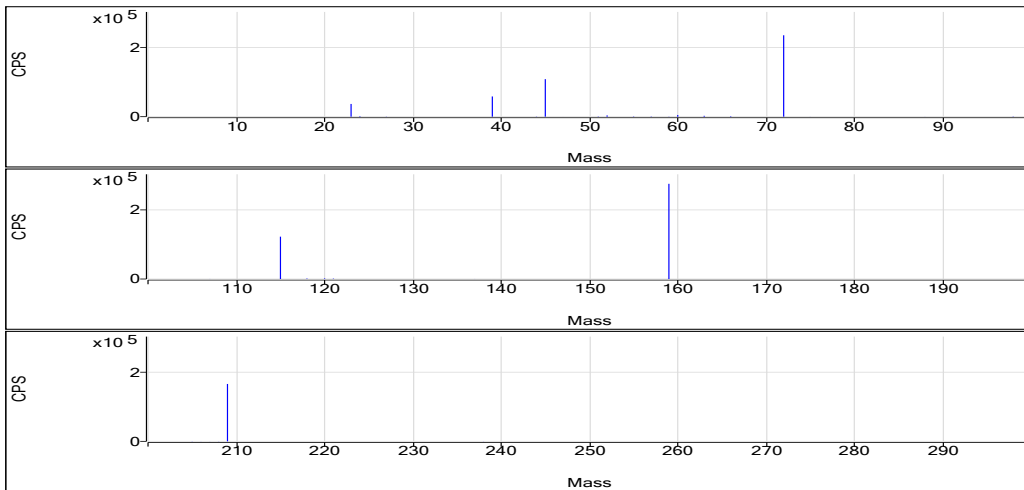


H2



Quantitation Report

He



Quantitation Report

Data File Name 021SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:03:04 PM
Sample Name MB 410-10576/1-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

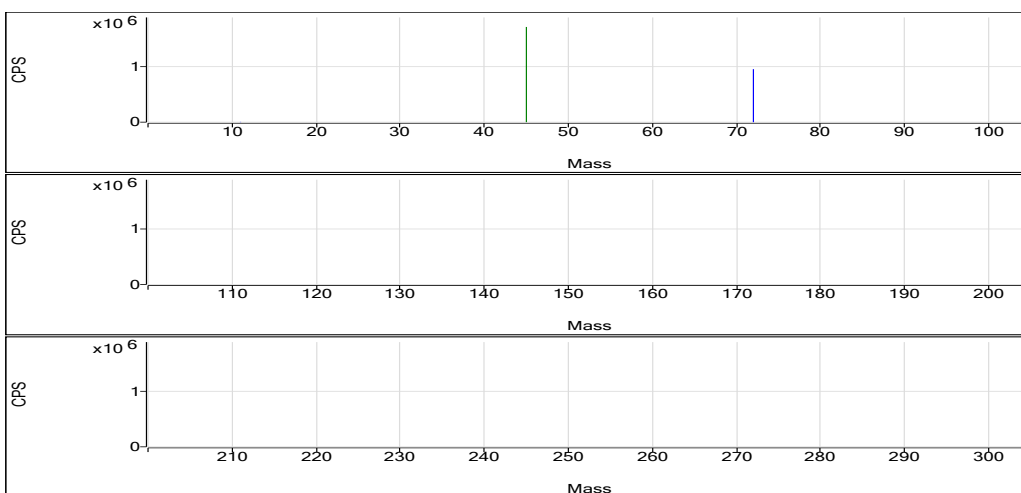
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.049	ppb	23.2	66.67	0.0000	Pulse	0.5000	3
B	11	45	No Gas	4.959	ppb	3.6	4884.15	0.0029	Pulse	0.5000	3
Se	78	115	H2	0.021	ppb	41.2	2.89	0.0000	Pulse	1.5000	3
Na	23	45	He	4.403	ppb	45.7	33752.06	0.3061	Pulse	0.1000	3
Mg	24	45	He	3.341	ppb	34.0	836.72	0.0076	Pulse	0.1000	3
Al	27	45	He	4.937	ppb	31.6	373.35	0.0034	Pulse	0.1000	3
K	39	45	He	11.552	ppb	144.5	56492.50	0.5125	Pulse	0.1000	3
Ca	44	45	He	20.033	ppb	47.6	453.36	0.0041	Pulse	0.1000	3
Ti	47	45	He	0.123	ppb	85.7	13.33	0.0001	Pulse	0.1000	3
V	51	45	He	0.127	ppb	40.9	810.05	0.0074	Pulse	0.1000	3
Cr	52	45	He	0.483	ppb	30.3	3573.90	0.0324	Pulse	0.1000	3
Mn	55	45	He	0.313	ppb	24.3	873.39	0.0079	Pulse	0.1000	3
Fe	57	45	He	6.796	ppb	8.0	523.36	0.0047	Pulse	0.1000	3
Co	59	115	He	0.057	ppb	51.3	226.68	0.0018	Pulse	0.1000	3
Ni	60	115	He	-0.494	ppb	N/A	5257.80	0.0423	Pulse	0.1000	3
Cu	63	115	He	-0.415	ppb	N/A	2203.59	0.0177	Pulse	0.1000	3
Zn	66	115	He	0.055	ppb	568.6	886.72	0.0071	Pulse	0.1000	3
As	75	115	He	0.028	ppb	155.1	68.00	0.0005	Pulse	0.5000	3
Sr	88	115	He	0.050	ppb	21.3	110.00	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.354	ppb	8.4	576.70	0.0046	Pulse	0.1000	3
Ag	107	115	He	0.008	ppb	93.7	46.67	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	74.6	10.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.002	ppb	1333.4	1633.49	0.0131	Pulse	0.1000	3
Sb	121	72	He	0.264	ppb	1.5	446.69	0.0019	Pulse	0.1000	3
Ba	137	115	He	0.039	ppb	182.4	46.67	0.0004	Pulse	0.1000	3
Tl	205	209	He	0.012	ppb	147.9	180.01	0.0011	Pulse	0.1000	3
Pb	208	209	He	-0.024	ppb	N/A	243.34	0.0015	Pulse	0.1000	3
U	238	209	He	0.021	ppb	18.0	110.00	0.0007	Pulse	0.1000	3

Quantitation Report

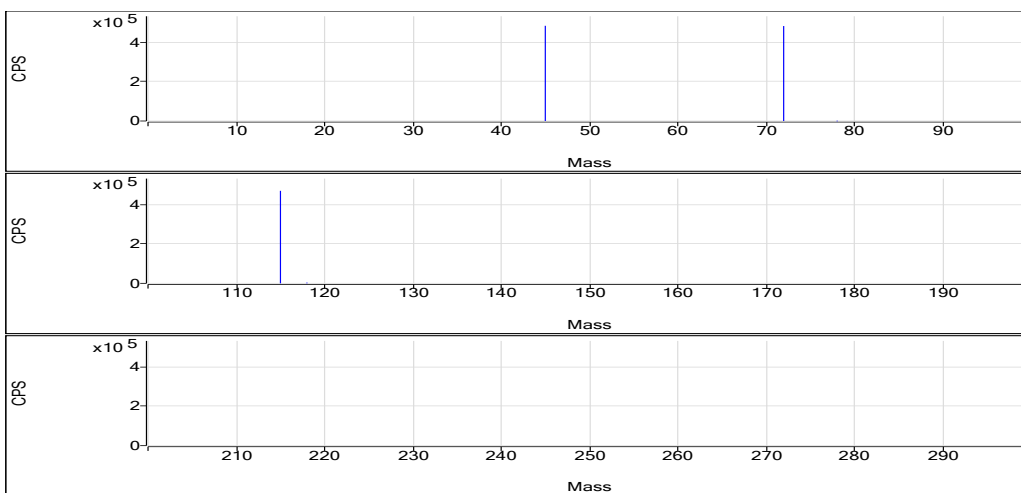
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1710996.90	0.7	102.3	Analog	0.1000	3
No Gas	Ge	72	952483.29	0.6	101.1	Pulse	0.1000	3
H2	Sc	45	482311.68	1.6	99.2	Pulse	0.1000	3
H2	Ge	72	481085.44	1.4	99.2	Pulse	0.1000	3
H2	In	115	468629.73	0.6	101.1	Pulse	0.1000	3
He	Sc	45	110260.08	1.0	100.8	Pulse	0.1000	3
He	Ge	72	237188.46	0.3	100.1	Pulse	0.1000	3
He	In	115	124469.75	1.6	101.7	Pulse	0.1000	3
He	Tb	159	278209.44	0.8	98.0	Pulse	0.1000	3
He	Bi	209	167486.55	0.8	98.7	Pulse	0.1000	3

No Gas

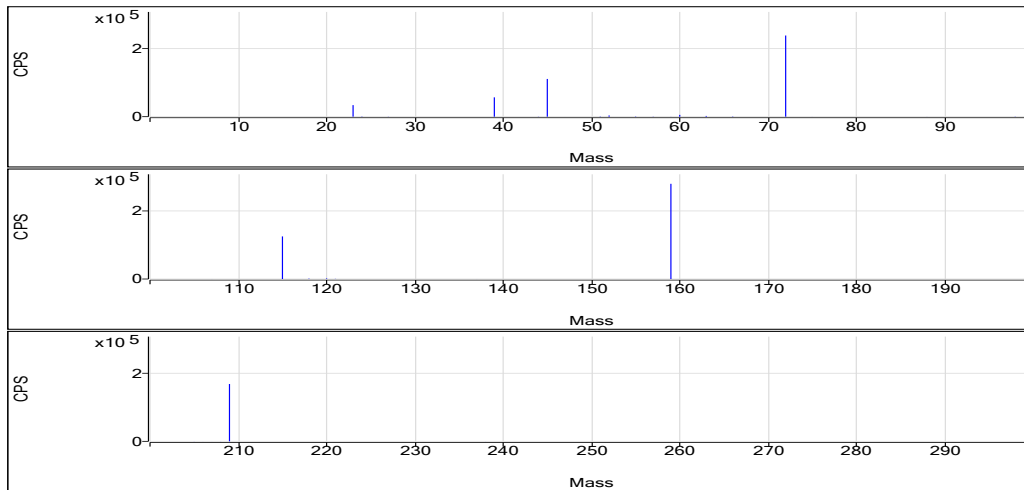


H2



Quantitation Report

He



Quantitation Report

Data File Name 022SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:04:56 PM
Sample Name LCS 410-10576/2-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

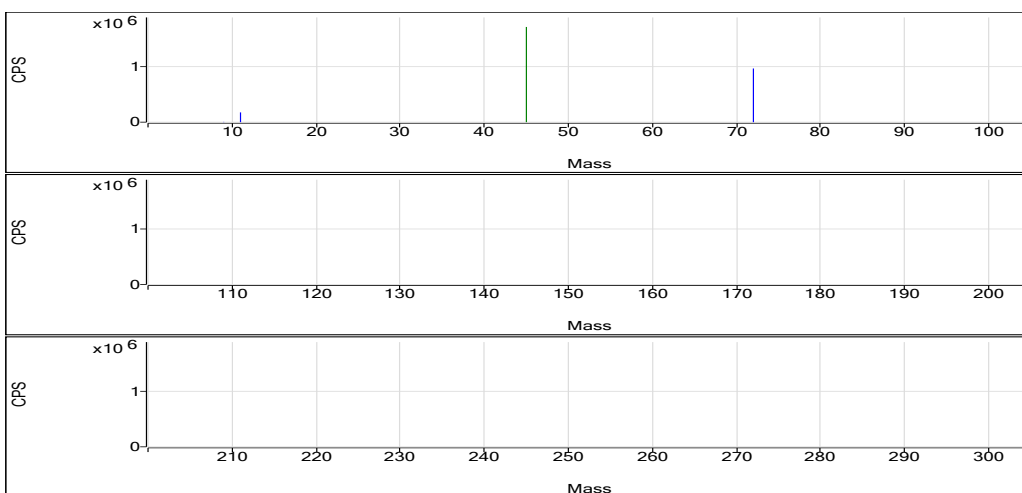
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	4.089	ppb	5.0	4838.80	0.0028	Pulse	0.5000	3
B	11	45	No Gas	243.408	ppb	3.1	176911.65	0.1026	Pulse	0.5000	3
Se	78	115	H2	10.236	ppb	2.3	1227.61	0.0026	Pulse	1.5000	3
Na	23	45	He	9922.486	ppb	0.5	2820310.27	25.4484	Analog	0.1000	3
Mg	24	45	He	1899.232	ppb	0.7	273368.74	2.4669	Pulse	0.1000	3
Al	27	45	He	199.228	ppb	1.6	11704.97	0.1056	Pulse	0.1000	3
K	39	45	He	10317.550	ppb	0.4	1980215.13	17.8693	Analog	0.1000	3
Ca	44	45	He	4118.615	ppb	1.6	34868.98	0.3147	Pulse	0.1000	3
Ti	47	45	He	251.258	ppb	1.8	13453.37	0.1214	Pulse	0.1000	3
V	51	45	He	47.146	ppb	1.8	82326.12	0.7430	Pulse	0.1000	3
Cr	52	45	He	48.367	ppb	0.3	99796.95	0.9005	Pulse	0.1000	3
Mn	55	45	He	50.741	ppb	0.3	58545.09	0.5283	Pulse	0.1000	3
Fe	57	45	He	301.690	ppb	2.5	12058.75	0.1088	Pulse	0.1000	3
Co	59	115	He	242.794	ppb	1.3	723845.67	5.7885	Pulse	0.1000	3
Ni	60	115	He	49.745	ppb	2.7	41827.90	0.3345	Pulse	0.1000	3
Cu	63	115	He	49.865	ppb	2.5	102182.24	0.8170	Pulse	0.1000	3
Zn	66	115	He	517.271	ppb	1.2	168349.92	1.3462	Pulse	0.1000	3
As	75	115	He	10.361	ppb	1.4	2926.32	0.0234	Pulse	0.5000	3
Sr	88	115	He	40.287	ppb	1.6	66525.94	0.5320	Pulse	0.1000	3
Mo	98	115	He	50.296	ppb	1.5	82332.74	0.6584	Pulse	0.1000	3
Ag	107	115	He	50.074	ppb	0.4	147258.86	1.1776	Pulse	0.1000	3
Cd	111	115	He	5.111	ppb	1.7	2294.21	0.0183	Pulse	0.5000	3
Sn	120	115	He	50.150	ppb	0.5	82115.11	0.6566	Pulse	0.1000	3
Sb	121	72	He	5.048	ppb	1.4	7795.75	0.0327	Pulse	0.1000	3
Ba	137	115	He	49.813	ppb	2.6	28820.89	0.2305	Pulse	0.1000	3
Tl	205	209	He	1.965	ppb	3.7	9280.27	0.0560	Pulse	0.1000	3
Pb	208	209	He	5.129	ppb	1.3	32623.52	0.1967	Pulse	0.1000	3
U	238	209	He	0.007	ppb	47.8	43.33	0.0003	Pulse	0.1000	3

Quantitation Report

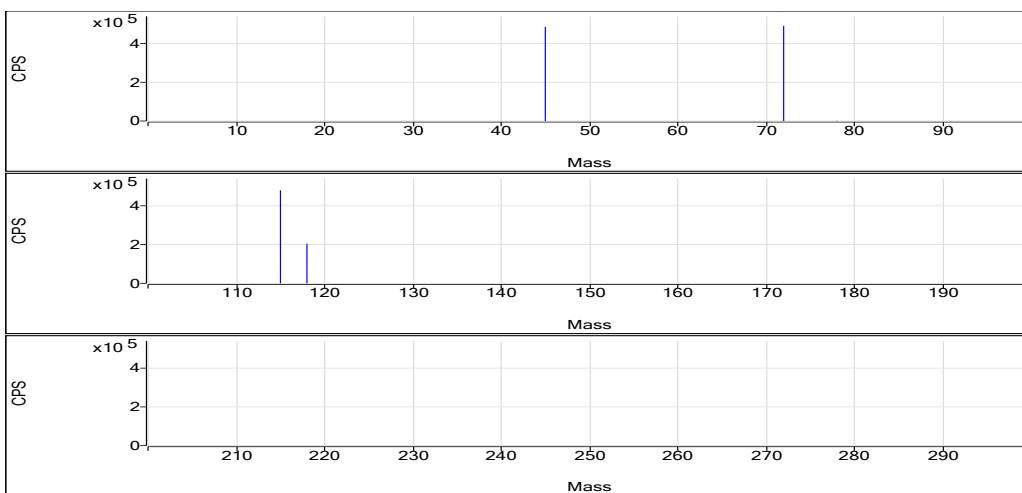
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1724878.20	1.5	103.1	Analog	0.1000	3
No Gas	Ge	72	972317.98	0.5	103.2	Pulse	0.1000	3
H2	Sc	45	484271.49	2.3	99.6	Pulse	0.1000	3
H2	Ge	72	490083.69	1.8	101.1	Pulse	0.1000	3
H2	In	115	478939.00	2.2	103.3	Pulse	0.1000	3
He	Sc	45	110820.51	1.6	101.3	Pulse	0.1000	3
He	Ge	72	238722.45	1.4	100.7	Pulse	0.1000	3
He	In	115	125051.86	0.6	102.1	Pulse	0.1000	3
He	Tb	159	279155.74	0.6	98.4	Pulse	0.1000	3
He	Bi	209	165854.94	2.1	97.7	Pulse	0.1000	3

No Gas

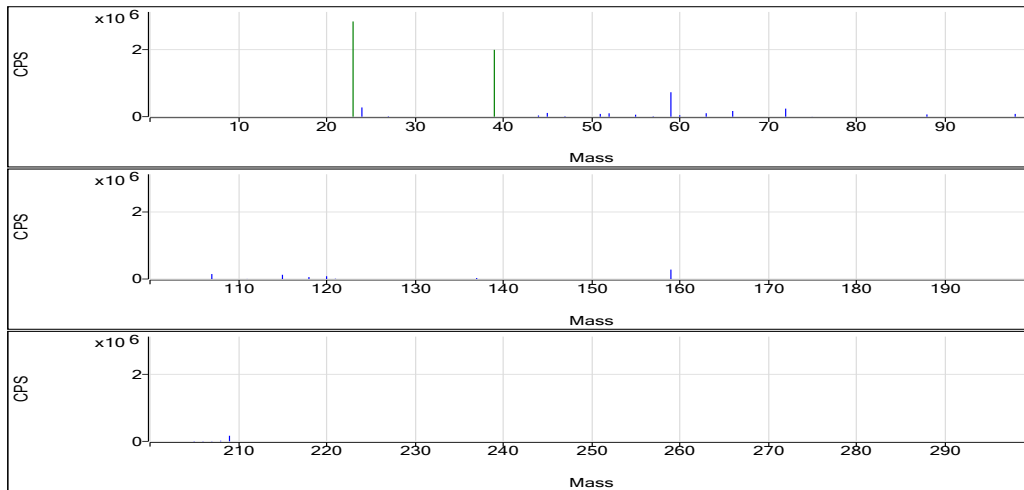


H2



Quantitation Report

He



Quantitation Report

Data File Name 023SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:06:47 PM
Sample Name 410-3210-W-1-B
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

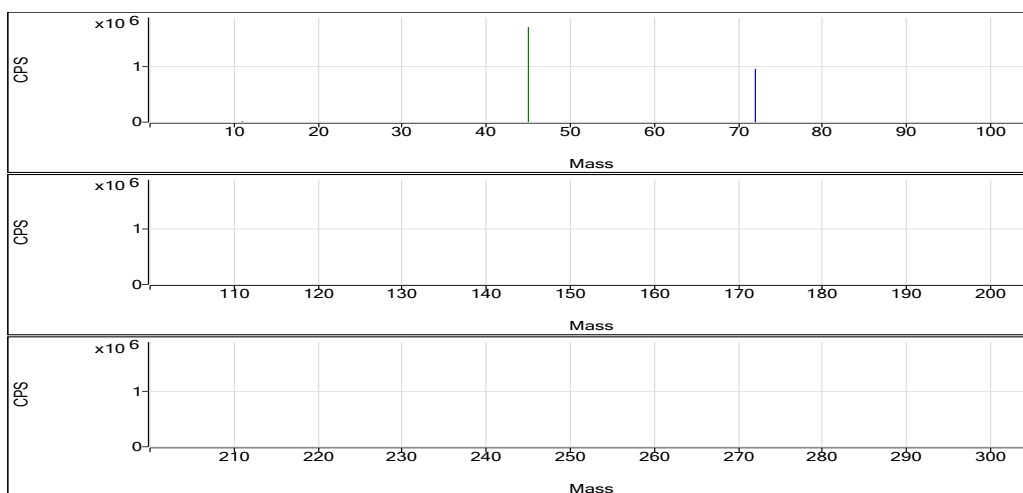
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.034	ppb	26.8	49.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	18.665	ppb	0.7	14823.32	0.0086	Pulse	0.5000	3
Se	78	115	H2	0.274	ppb	6.3	32.67	0.0001	Pulse	1.5000	3
Na	23	45	He	29973.371	ppb	1.7	8442807.79	76.2771	Analog	0.1000	3
Mg	24	45	He	14040.113	ppb	0.6	2016208.20	18.2160	Analog	0.1000	3
Al	27	45	He	8.673	ppb	29.0	593.38	0.0054	Pulse	0.1000	3
K	39	45	He	1733.429	ppb	0.7	377695.50	3.4124	Pulse	0.1000	3
Ca	44	45	He	32554.602	ppb	0.6	273326.88	2.4695	Pulse	0.1000	3
Ti	47	45	He	-0.003	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	0.225	ppb	29.6	983.40	0.0089	Pulse	0.1000	3
Cr	52	45	He	0.599	ppb	27.6	3820.64	0.0345	Pulse	0.1000	3
Mn	55	45	He	0.935	ppb	10.1	1586.81	0.0143	Pulse	0.1000	3
Fe	57	45	He	28.086	ppb	13.2	1356.78	0.0123	Pulse	0.1000	3
Co	59	115	He	0.154	ppb	18.2	513.36	0.0041	Pulse	0.1000	3
Ni	60	115	He	-0.461	ppb	N/A	5261.15	0.0424	Pulse	0.1000	3
Cu	63	115	He	-0.343	ppb	N/A	2336.94	0.0188	Pulse	0.1000	3
Zn	66	115	He	0.858	ppb	9.8	1140.08	0.0092	Pulse	0.1000	3
As	75	115	He	0.068	ppb	68.9	78.67	0.0006	Pulse	0.5000	3
Sr	88	115	He	50.755	ppb	1.2	83092.31	0.6702	Pulse	0.1000	3
Mo	98	115	He	0.421	ppb	10.0	683.37	0.0055	Pulse	0.1000	3
Ag	107	115	He	0.032	ppb	21.7	116.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.019	ppb	87.5	11.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.050	ppb	76.0	1703.49	0.0137	Pulse	0.1000	3
Sb	121	72	He	0.326	ppb	21.0	546.70	0.0023	Pulse	0.1000	3
Ba	137	115	He	43.637	ppb	1.3	25036.72	0.2019	Pulse	0.1000	3
Tl	205	209	He	-0.002	ppb	N/A	116.67	0.0007	Pulse	0.1000	3
Pb	208	209	He	-0.018	ppb	N/A	280.01	0.0017	Pulse	0.1000	3
U	238	209	He	0.055	ppb	22.5	266.68	0.0016	Pulse	0.1000	3

Quantitation Report

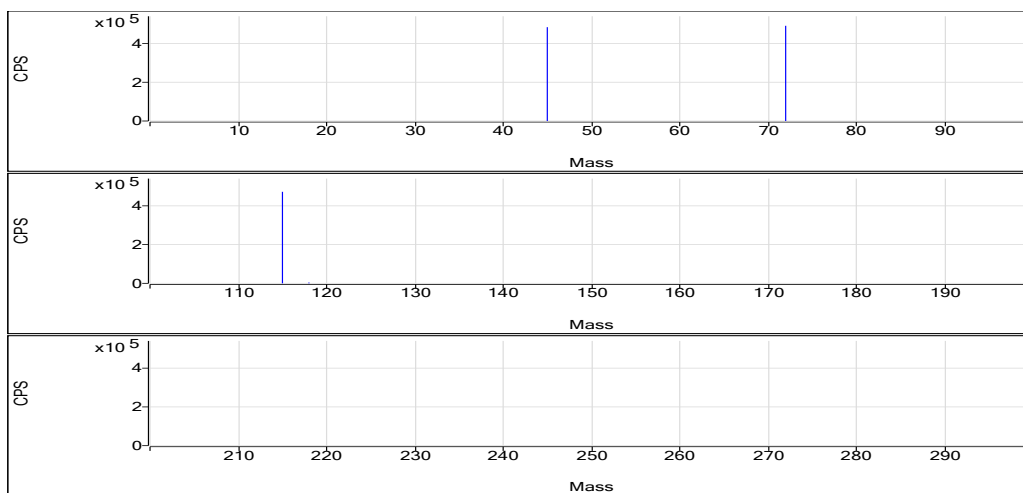
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1726235.86	1.9	103.2	Analog	0.1000	3
No Gas	Ge	72	966994.13	1.2	102.6	Pulse	0.1000	3
H2	Sc	45	481525.75	1.1	99.0	Pulse	0.1000	3
H2	Ge	72	488646.83	1.2	100.8	Pulse	0.1000	3
H2	In	115	469784.86	1.5	101.4	Pulse	0.1000	3
He	Sc	45	110686.58	0.8	101.2	Pulse	0.1000	3
He	Ge	72	239761.51	1.4	101.1	Pulse	0.1000	3
He	In	115	123989.30	0.9	101.3	Pulse	0.1000	3
He	Tb	159	278950.94	0.3	98.3	Pulse	0.1000	3
He	Bi	209	165494.79	1.2	97.5	Pulse	0.1000	3

No Gas

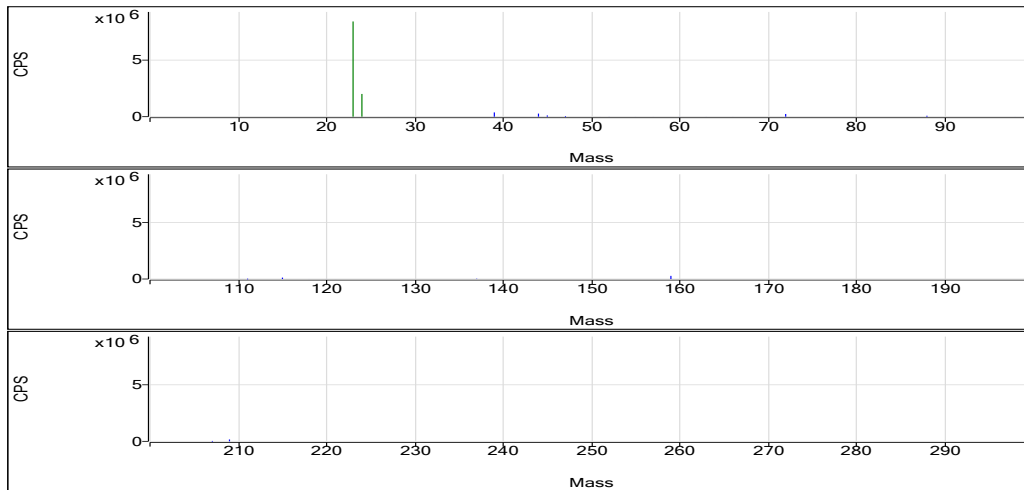


H2



Quantitation Report

He



Quantitation Report

Data File Name 024SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:08:39 PM
Sample Name 410-3210-W-1-B pds
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

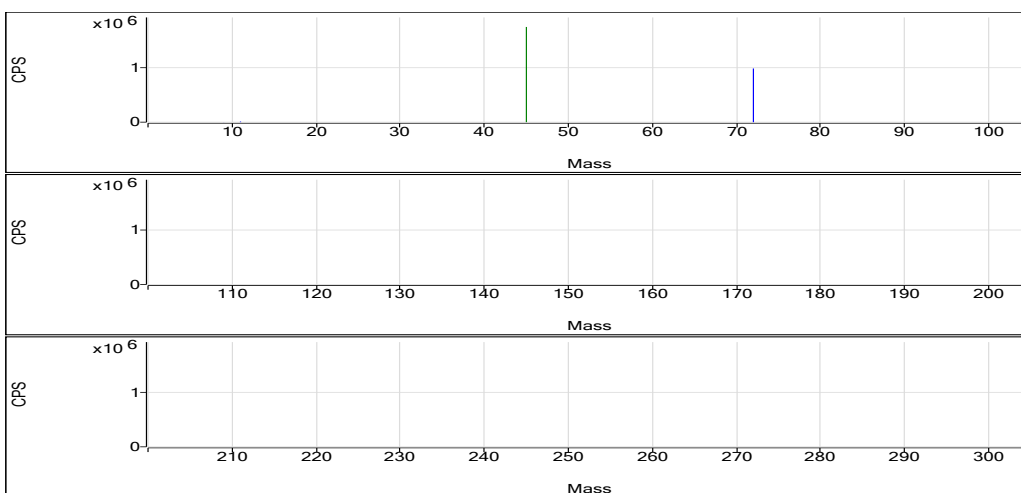
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	1.005	ppb	3.4	1207.39	0.0007	Pulse	0.5000	3
B	11	45	No Gas	13.454	ppb	0.6	11152.84	0.0064	Pulse	0.5000	3
Se	78	115	H2	2.207	ppb	2.0	259.56	0.0006	Pulse	1.5000	3
Na	23	45	He	29451.185	ppb	1.5	8312706.75	74.9533	Analog	0.1000	3
Mg	24	45	He	13831.682	ppb	1.8	1990185.96	17.9456	Analog	0.1000	3
Al	27	45	He	63.192	ppb	7.3	3773.96	0.0340	Pulse	0.1000	3
K	39	45	He	2043.290	ppb	1.8	436337.23	3.9342	Pulse	0.1000	3
Ca	44	45	He	31706.285	ppb	1.4	266746.54	2.4052	Pulse	0.1000	3
Ti	47	45	He	19.857	ppb	5.9	1070.08	0.0097	Pulse	0.1000	3
V	51	45	He	1.266	ppb	9.5	2790.37	0.0252	Pulse	0.1000	3
Cr	52	45	He	2.474	ppb	2.9	7598.88	0.0685	Pulse	0.1000	3
Mn	55	45	He	4.932	ppb	1.3	6164.86	0.0556	Pulse	0.1000	3
Fe	57	45	He	122.297	ppb	1.8	5047.72	0.0455	Pulse	0.1000	3
Co	59	115	He	1.000	ppb	9.9	3023.76	0.0243	Pulse	0.1000	3
Ni	60	115	He	1.351	ppb	14.7	6588.38	0.0530	Pulse	0.1000	3
Cu	63	115	He	1.445	ppb	9.8	5878.04	0.0473	Pulse	0.1000	3
Zn	66	115	He	22.233	ppb	3.5	8025.86	0.0645	Pulse	0.1000	3
As	75	115	He	3.779	ppb	3.8	1099.38	0.0088	Pulse	0.5000	3
Sr	88	115	He	51.624	ppb	1.5	84756.08	0.6816	Pulse	0.1000	3
Mo	98	115	He	1.323	ppb	3.6	2153.57	0.0173	Pulse	0.1000	3
Ag	107	115	He	0.942	ppb	9.4	2777.04	0.0223	Pulse	0.1000	3
Cd	111	115	He	1.026	ppb	6.0	460.01	0.0037	Pulse	0.5000	3
Sn	120	115	He	3.652	ppb	2.1	7455.58	0.0600	Pulse	0.1000	3
Sb	121	72	He	2.041	ppb	5.1	3193.82	0.0133	Pulse	0.1000	3
Ba	137	115	He	46.047	ppb	0.1	26496.09	0.2131	Pulse	0.1000	3
Tl	205	209	He	0.977	ppb	1.4	4677.68	0.0282	Pulse	0.1000	3
Pb	208	209	He	0.936	ppb	7.5	6274.17	0.0378	Pulse	0.1000	3
U	238	209	He	2.442	ppb	6.0	11398.76	0.0688	Pulse	0.1000	3

Quantitation Report

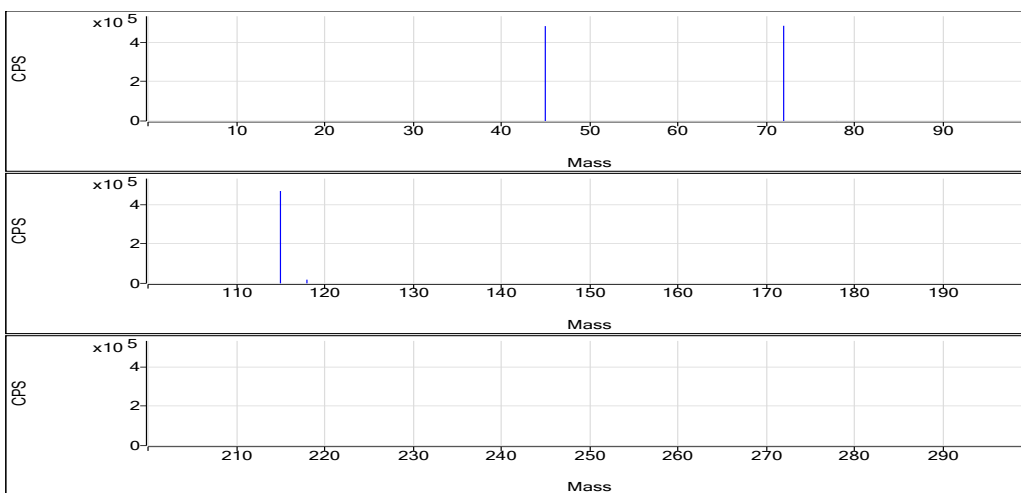
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1740632.27	0.9	104.0	Analog	0.1000	3
No Gas	Ge	72	981198.14	0.8	104.1	Pulse	0.1000	3
H2	Sc	45	482475.86	2.2	99.2	Pulse	0.1000	3
H2	Ge	72	483992.52	2.6	99.8	Pulse	0.1000	3
H2	In	115	469341.01	1.7	101.3	Pulse	0.1000	3
He	Sc	45	110918.03	1.2	101.4	Pulse	0.1000	3
He	Ge	72	239908.77	0.4	101.2	Pulse	0.1000	3
He	In	115	124346.18	0.8	101.6	Pulse	0.1000	3
He	Tb	159	282098.28	0.7	99.4	Pulse	0.1000	3
He	Bi	209	165814.91	0.8	97.7	Pulse	0.1000	3

No Gas

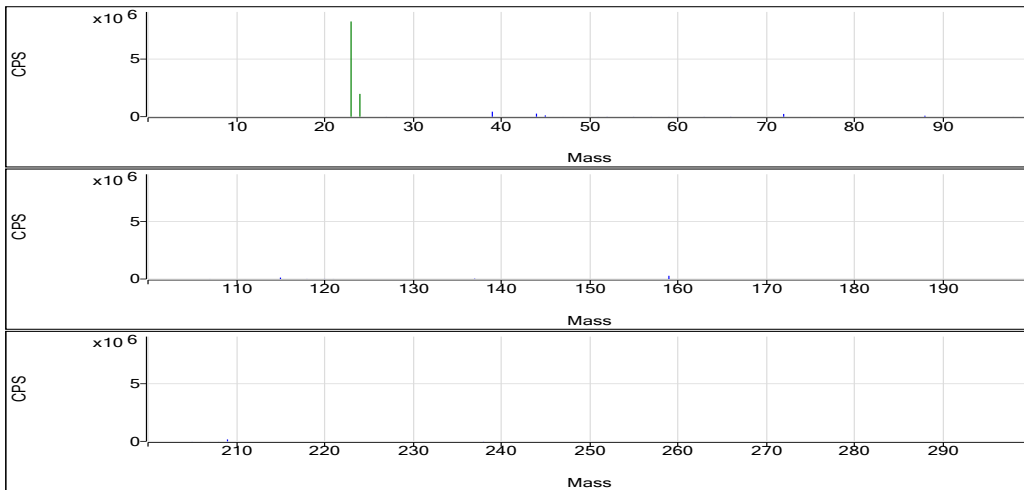


H2



Quantitation Report

He



Quantitation Report

Data File Name 025SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:10:30 PM
Sample Name 410-3210-I-1-B DU
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

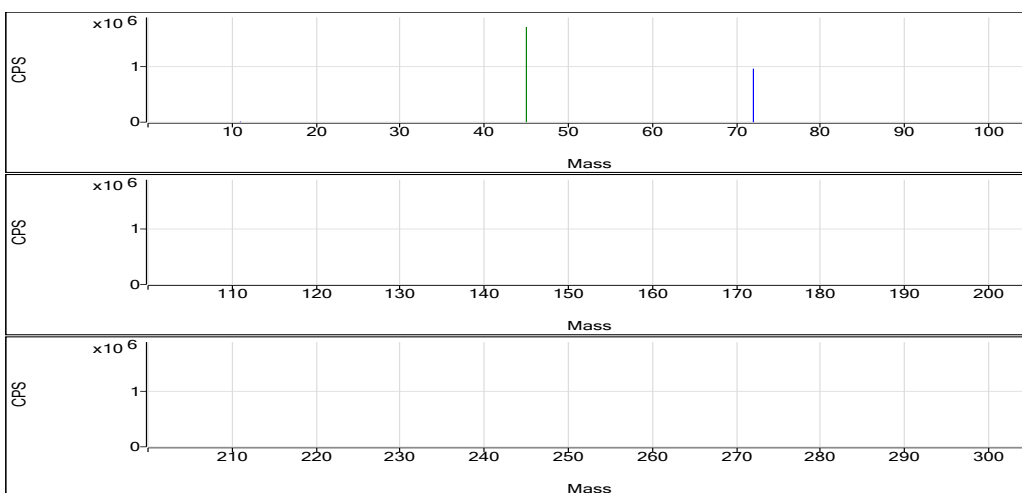
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.023	ppb	32.4	36.67	0.0000	Pulse	0.5000	3
B	11	45	No Gas	13.224	ppb	1.8	10914.66	0.0063	Pulse	0.5000	3
Se	78	115	H2	0.234	ppb	6.3	28.00	0.0001	Pulse	1.5000	3
Na	23	45	He	30723.510	ppb	1.3	8555418.83	78.1787	Analog	0.1000	3
Mg	24	45	He	14535.486	ppb	1.2	2063957.89	18.8586	Analog	0.1000	3
Al	27	45	He	10.082	ppb	13.5	666.71	0.0061	Pulse	0.1000	3
K	39	45	He	1772.409	ppb	1.1	380616.30	3.4780	Pulse	0.1000	3
Ca	44	45	He	33364.800	ppb	0.8	276966.96	2.5308	Pulse	0.1000	3
Ti	47	45	He	0.062	ppb	4.3	10.00	0.0001	Pulse	0.1000	3
V	51	45	He	0.237	ppb	13.5	993.40	0.0091	Pulse	0.1000	3
Cr	52	45	He	0.823	ppb	15.8	4224.10	0.0386	Pulse	0.1000	3
Mn	55	45	He	0.937	ppb	21.9	1573.47	0.0144	Pulse	0.1000	3
Fe	57	45	He	23.356	ppb	12.6	1160.09	0.0106	Pulse	0.1000	3
Co	59	115	He	0.084	ppb	45.6	306.68	0.0025	Pulse	0.1000	3
Ni	60	115	He	0.144	ppb	218.4	5737.98	0.0460	Pulse	0.1000	3
Cu	63	115	He	-0.438	ppb	N/A	2163.57	0.0173	Pulse	0.1000	3
Zn	66	115	He	1.087	ppb	63.9	1220.10	0.0098	Pulse	0.1000	3
As	75	115	He	0.095	ppb	15.2	86.67	0.0007	Pulse	0.5000	3
Sr	88	115	He	51.405	ppb	1.5	84752.29	0.6788	Pulse	0.1000	3
Mo	98	115	He	0.292	ppb	18.6	476.69	0.0038	Pulse	0.1000	3
Ag	107	115	He	0.027	ppb	35.6	103.34	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.016	ppb	25.8	10.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.082	ppb	N/A	1503.47	0.0120	Pulse	0.1000	3
Sb	121	72	He	0.126	ppb	35.5	240.01	0.0010	Pulse	0.1000	3
Ba	137	115	He	42.926	ppb	1.5	24809.59	0.1987	Pulse	0.1000	3
Tl	205	209	He	-0.008	ppb	N/A	86.67	0.0005	Pulse	0.1000	3
Pb	208	209	He	-0.016	ppb	N/A	290.01	0.0018	Pulse	0.1000	3
U	238	209	He	0.048	ppb	29.2	233.34	0.0014	Pulse	0.1000	3

Quantitation Report

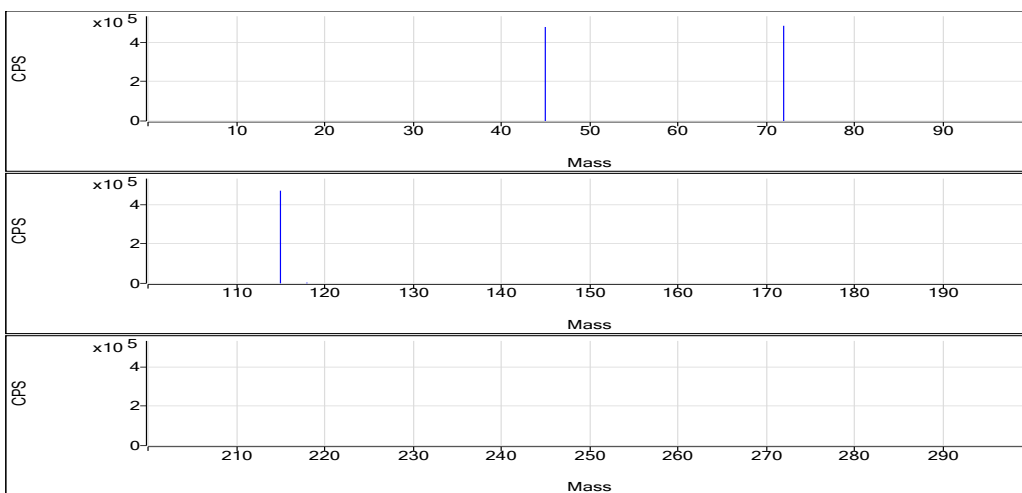
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1729347.16	0.7	103.3	Analog	0.1000	3
No Gas	Ge	72	971092.09	0.2	103.1	Pulse	0.1000	3
H2	Sc	45	477042.52	0.8	98.1	Pulse	0.1000	3
H2	Ge	72	483136.23	1.4	99.7	Pulse	0.1000	3
H2	In	115	470099.90	1.4	101.4	Pulse	0.1000	3
He	Sc	45	109443.11	1.4	100.1	Pulse	0.1000	3
He	Ge	72	241683.57	0.6	101.9	Pulse	0.1000	3
He	In	115	124880.76	1.5	102.0	Pulse	0.1000	3
He	Tb	159	278114.94	0.2	98.0	Pulse	0.1000	3
He	Bi	209	164901.21	0.7	97.2	Pulse	0.1000	3

No Gas

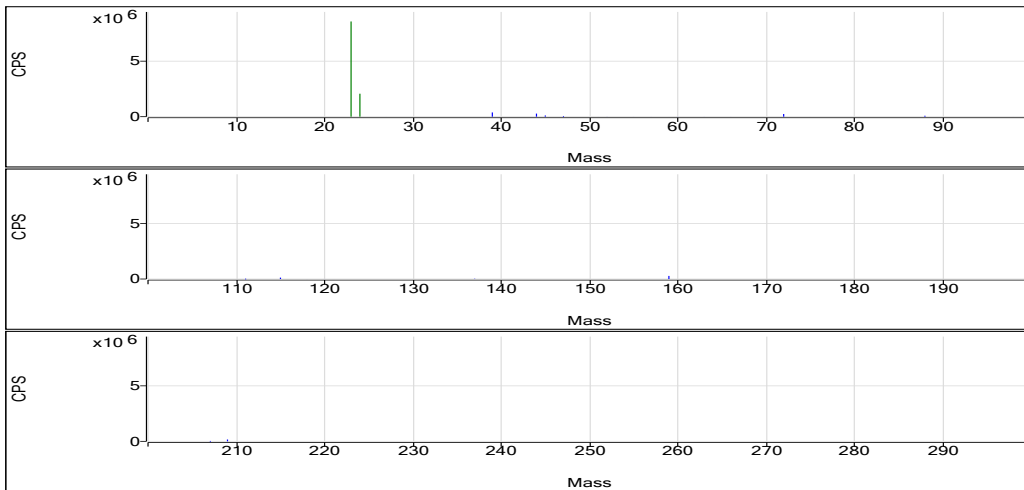


H2



Quantitation Report

He



Quantitation Report

Data File Name 026SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:12:21 PM
Sample Name 410-3210-Z-1-A MS
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

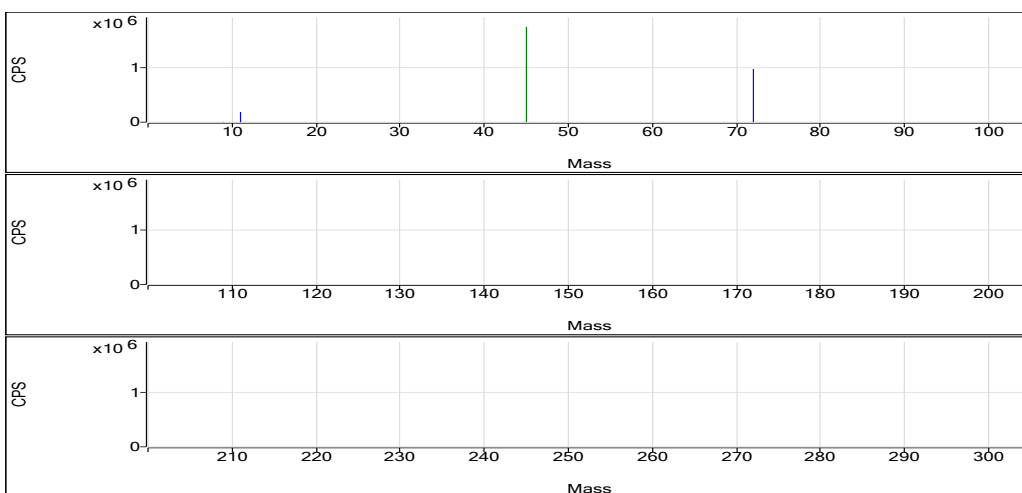
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	4.024	ppb	2.7	4842.80	0.0028	Pulse	0.5000	3
B	11	45	No Gas	253.688	ppb	3.0	187427.48	0.1069	Pulse	0.5000	3
Se	78	115	H2	10.391	ppb	0.5	1237.84	0.0026	Pulse	1.5000	3
Na	23	45	He	40286.861	ppb	1.3	11361980.66	102.4216	Analog	0.1000	3
Mg	24	45	He	15968.055	ppb	1.9	2298043.66	20.7169	Analog	0.1000	3
Al	27	45	He	211.724	ppb	3.2	12442.23	0.1122	Pulse	0.1000	3
K	39	45	He	11964.228	ppb	0.7	2290010.75	20.6425	Analog	0.1000	3
Ca	44	45	He	36848.413	ppb	2.0	310015.19	2.7948	Pulse	0.1000	3
Ti	47	45	He	245.740	ppb	1.2	13176.33	0.1188	Pulse	0.1000	3
V	51	45	He	47.553	ppb	3.2	83113.19	0.7494	Pulse	0.1000	3
Cr	52	45	He	47.964	ppb	1.5	99082.32	0.8932	Pulse	0.1000	3
Mn	55	45	He	51.130	ppb	1.0	59054.02	0.5323	Pulse	0.1000	3
Fe	57	45	He	336.955	ppb	4.4	13449.99	0.1213	Pulse	0.1000	3
Co	59	115	He	240.034	ppb	0.9	714035.95	5.7227	Pulse	0.1000	3
Ni	60	115	He	50.391	ppb	0.1	42208.96	0.3383	Pulse	0.1000	3
Cu	63	115	He	49.012	ppb	1.0	100252.69	0.8035	Pulse	0.1000	3
Zn	66	115	He	506.839	ppb	1.4	164592.94	1.3192	Pulse	0.1000	3
As	75	115	He	10.159	ppb	3.1	2863.64	0.0230	Pulse	0.5000	3
Sr	88	115	He	91.906	ppb	0.5	151413.60	1.2134	Pulse	0.1000	3
Mo	98	115	He	50.279	ppb	1.3	82121.91	0.6582	Pulse	0.1000	3
Ag	107	115	He	49.283	ppb	2.1	144593.97	1.1590	Pulse	0.1000	3
Cd	111	115	He	5.100	ppb	0.7	2284.87	0.0183	Pulse	0.5000	3
Sn	120	115	He	51.000	ppb	0.9	83292.20	0.6675	Pulse	0.1000	3
Sb	121	72	He	4.977	ppb	2.2	7775.77	0.0322	Pulse	0.1000	3
Ba	137	115	He	94.708	ppb	2.3	54652.18	0.4381	Pulse	0.1000	3
Tl	205	209	He	1.964	ppb	4.1	9270.27	0.0559	Pulse	0.1000	3
Pb	208	209	He	5.123	ppb	1.9	32573.71	0.1965	Pulse	0.1000	3
U	238	209	He	0.039	ppb	42.6	190.01	0.0011	Pulse	0.1000	3

Quantitation Report

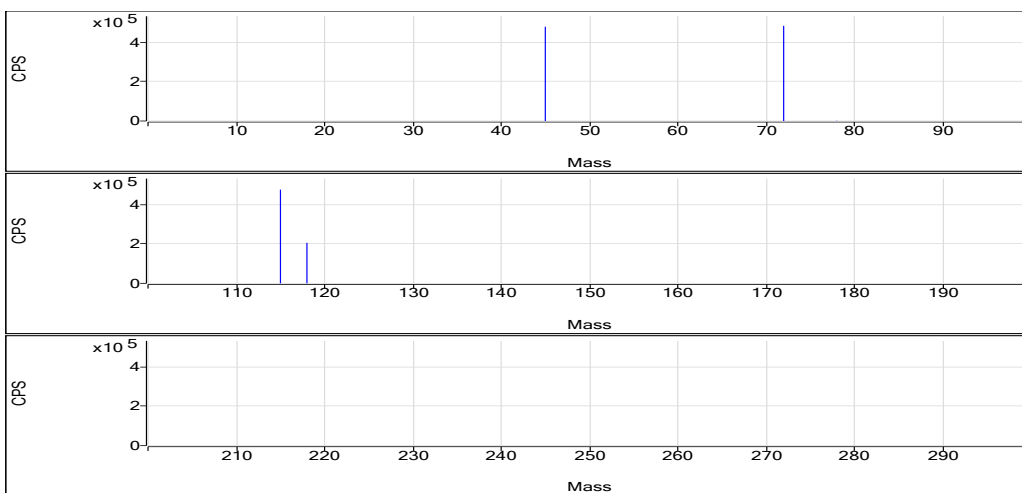
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1753596.85	0.8	104.8	Analog	0.1000	3
No Gas	Ge	72	979685.69	0.2	104.0	Pulse	0.1000	3
H2	Sc	45	478859.99	0.7	98.5	Pulse	0.1000	3
H2	Ge	72	483529.46	0.6	99.8	Pulse	0.1000	3
H2	In	115	475878.25	0.4	102.7	Pulse	0.1000	3
He	Sc	45	110944.48	1.6	101.5	Pulse	0.1000	3
He	Ge	72	241434.78	0.9	101.8	Pulse	0.1000	3
He	In	115	124782.33	1.4	101.9	Pulse	0.1000	3
He	Tb	159	281196.44	1.2	99.1	Pulse	0.1000	3
He	Bi	209	165767.85	0.7	97.7	Pulse	0.1000	3

No Gas

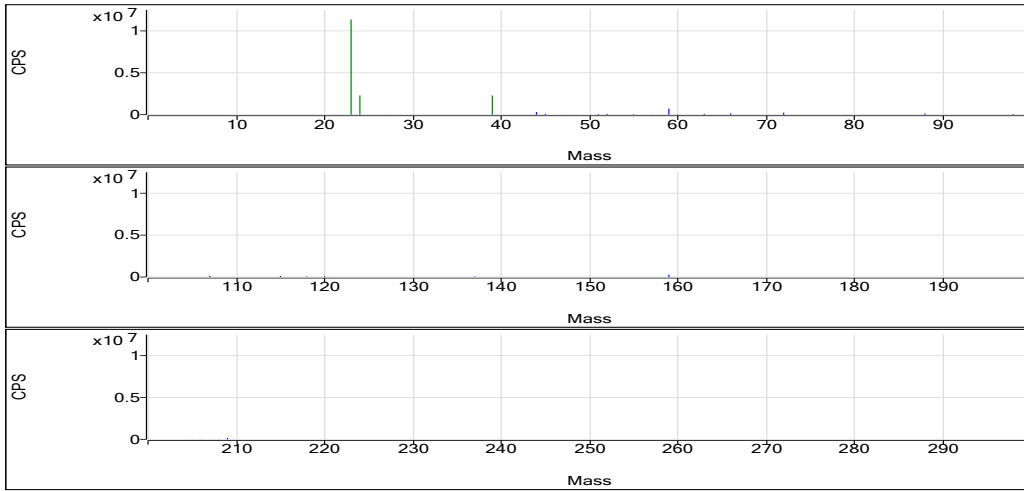


H2



Quantitation Report

He



Quantitation Report

Data File Name 027SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:14:12 PM
Sample Name 410-3210-X-1-A MSD
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

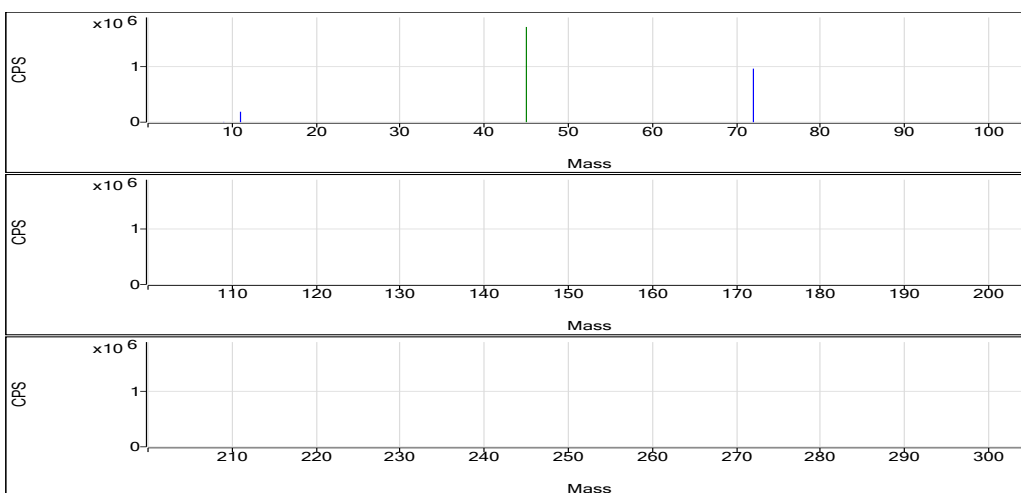
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	3.978	ppb	3.7	4706.77	0.0027	Pulse	0.5000	3
B	11	45	No Gas	259.948	ppb	3.2	188834.05	0.1095	Pulse	0.5000	3
Se	78	115	H2	10.358	ppb	4.3	1222.94	0.0026	Pulse	1.5000	3
Na	23	45	He	40271.148	ppb	1.3	11226645.66	102.3818	Analog	0.1000	3
Mg	24	45	He	16311.303	ppb	1.0	2320648.45	21.1621	Analog	0.1000	3
Al	27	45	He	203.871	ppb	3.0	11848.47	0.1081	Pulse	0.1000	3
K	39	45	He	12173.149	ppb	0.6	2302190.23	20.9944	Analog	0.1000	3
Ca	44	45	He	36995.168	ppb	0.5	307690.34	2.8059	Pulse	0.1000	3
Ti	47	45	He	250.978	ppb	1.6	13299.83	0.1213	Pulse	0.1000	3
V	51	45	He	47.899	ppb	0.9	82767.92	0.7548	Pulse	0.1000	3
Cr	52	45	He	48.668	ppb	2.1	99340.77	0.9060	Pulse	0.1000	3
Mn	55	45	He	51.788	ppb	1.8	59113.94	0.5391	Pulse	0.1000	3
Fe	57	45	He	325.018	ppb	3.3	12836.05	0.1171	Pulse	0.1000	3
Co	59	115	He	240.846	ppb	1.4	713568.71	5.7421	Pulse	0.1000	3
Ni	60	115	He	50.405	ppb	2.4	42045.22	0.3383	Pulse	0.1000	3
Cu	63	115	He	48.342	ppb	0.4	98531.11	0.7928	Pulse	0.1000	3
Zn	66	115	He	503.335	ppb	1.6	162808.91	1.3101	Pulse	0.1000	3
As	75	115	He	10.542	ppb	3.4	2957.65	0.0238	Pulse	0.5000	3
Sr	88	115	He	93.713	ppb	2.2	153743.55	1.2372	Pulse	0.1000	3
Mo	98	115	He	51.474	ppb	1.4	83737.76	0.6738	Pulse	0.1000	3
Ag	107	115	He	49.387	ppb	1.2	144335.01	1.1614	Pulse	0.1000	3
Cd	111	115	He	4.916	ppb	2.4	2193.52	0.0176	Pulse	0.5000	3
Sn	120	115	He	50.745	ppb	0.7	82560.98	0.6643	Pulse	0.1000	3
Sb	121	72	He	5.463	ppb	3.4	8449.47	0.0353	Pulse	0.1000	3
Ba	137	115	He	93.649	ppb	1.5	53829.08	0.4332	Pulse	0.1000	3
Tl	205	209	He	2.002	ppb	2.1	9400.28	0.0570	Pulse	0.1000	3
Pb	208	209	He	5.036	ppb	1.3	31859.47	0.1932	Pulse	0.1000	3
U	238	209	He	0.044	ppb	14.5	213.34	0.0013	Pulse	0.1000	3

Quantitation Report

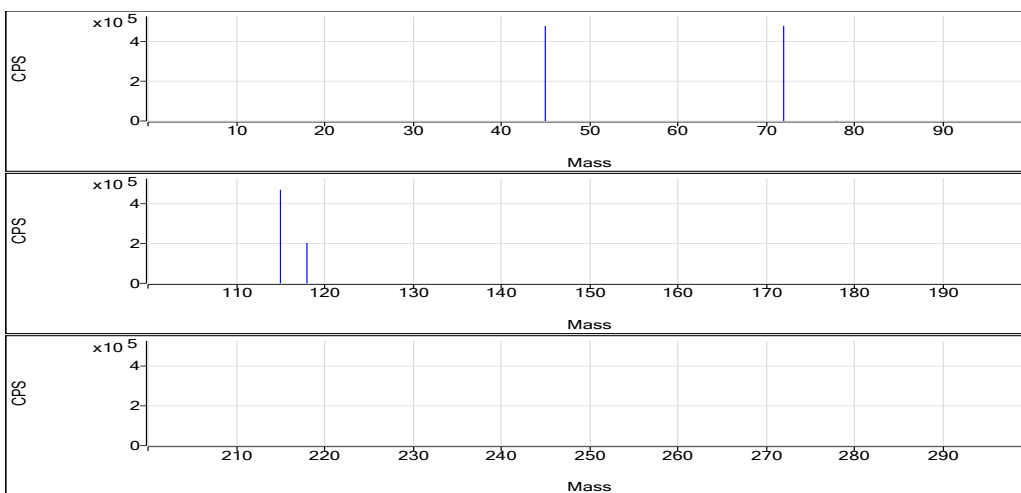
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1724619.40	1.9	103.1	Analog	0.1000	3
No Gas	Ge	72	969411.81	1.3	102.9	Pulse	0.1000	3
H2	Sc	45	479038.91	0.3	98.5	Pulse	0.1000	3
H2	Ge	72	480047.79	1.4	99.0	Pulse	0.1000	3
H2	In	115	471688.29	1.1	101.8	Pulse	0.1000	3
He	Sc	45	109658.91	0.6	100.3	Pulse	0.1000	3
He	Ge	72	239184.81	0.3	100.9	Pulse	0.1000	3
He	In	115	124281.53	1.0	101.5	Pulse	0.1000	3
He	Tb	159	280331.63	0.8	98.8	Pulse	0.1000	3
He	Bi	209	164893.39	0.5	97.1	Pulse	0.1000	3

No Gas

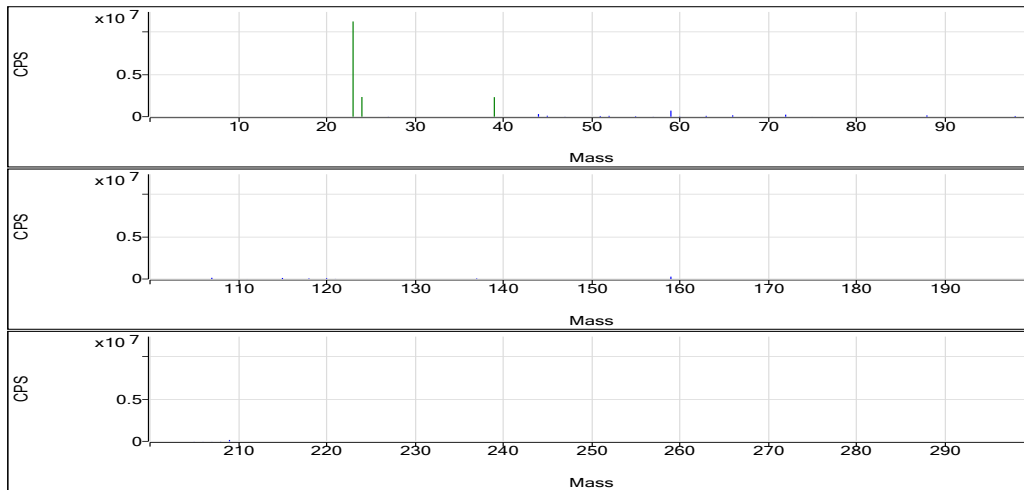


H2



Quantitation Report

He



Quantitation Report

Data File Name 028SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:16:03 PM
Sample Name 410-3210-W-1-B sd@5
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

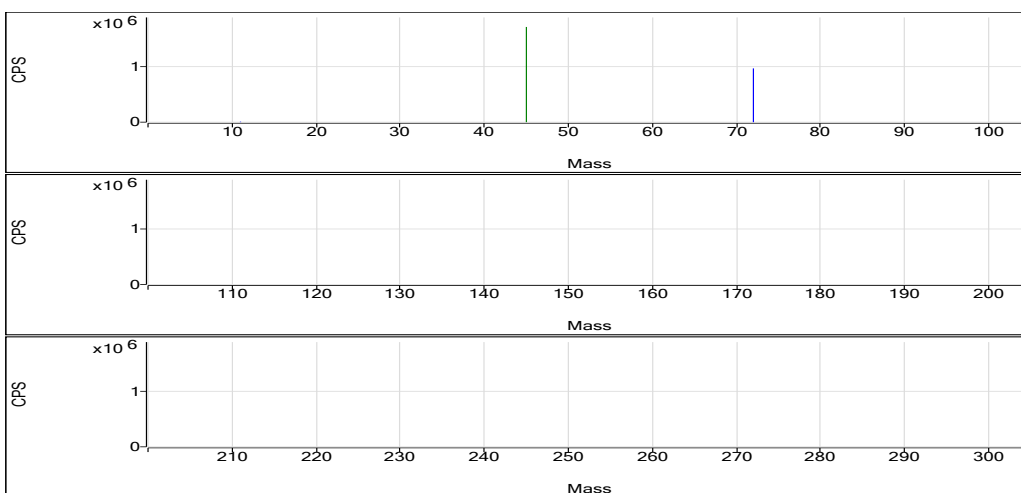
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.019	ppb	26.6	32.67	0.0000	Pulse	0.5000	3
B	11	45	No Gas	10.526	ppb	1.9	8959.38	0.0052	Pulse	0.5000	3
Se	78	115	H2	0.071	ppb	26.2	8.89	0.0000	Pulse	1.5000	3
Na	23	45	He	6210.789	ppb	2.1	1774019.56	16.0393	Analog	0.1000	3
Mg	24	45	He	2673.775	ppb	1.7	383946.00	3.4717	Pulse	0.1000	3
Al	27	45	He	7.606	ppb	19.0	530.02	0.0048	Pulse	0.1000	3
K	39	45	He	353.249	ppb	5.3	120308.47	1.0880	Pulse	0.1000	3
Ca	44	45	He	6485.752	ppb	0.2	54649.44	0.4941	Pulse	0.1000	3
Ti	47	45	He	0.436	ppb	44.4	30.00	0.0003	Pulse	0.1000	3
V	51	45	He	0.071	ppb	65.3	716.71	0.0065	Pulse	0.1000	3
Cr	52	45	He	0.436	ppb	30.2	3490.53	0.0316	Pulse	0.1000	3
Mn	55	45	He	0.339	ppb	6.2	906.72	0.0082	Pulse	0.1000	3
Fe	57	45	He	8.897	ppb	34.1	606.70	0.0055	Pulse	0.1000	3
Co	59	115	He	0.128	ppb	23.4	443.36	0.0035	Pulse	0.1000	3
Ni	60	115	He	-0.071	ppb	N/A	5627.96	0.0447	Pulse	0.1000	3
Cu	63	115	He	-0.426	ppb	N/A	2210.25	0.0175	Pulse	0.1000	3
Zn	66	115	He	4.080	ppb	26.0	2203.58	0.0175	Pulse	0.1000	3
As	75	115	He	0.065	ppb	40.8	79.33	0.0006	Pulse	0.5000	3
Sr	88	115	He	9.841	ppb	4.0	16379.92	0.1301	Pulse	0.1000	3
Mo	98	115	He	0.336	ppb	9.3	553.37	0.0044	Pulse	0.1000	3
Ag	107	115	He	0.024	ppb	42.6	96.67	0.0008	Pulse	0.1000	3
Cd	111	115	He	0.009	ppb	119.5	6.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.202	ppb	7.0	1976.89	0.0157	Pulse	0.1000	3
Sb	121	72	He	0.278	ppb	21.1	476.69	0.0020	Pulse	0.1000	3
Ba	137	115	He	8.841	ppb	5.2	5167.84	0.0411	Pulse	0.1000	3
Tl	205	209	He	-0.010	ppb	N/A	80.00	0.0005	Pulse	0.1000	3
Pb	208	209	He	-0.021	ppb	N/A	263.34	0.0016	Pulse	0.1000	3
U	238	209	He	0.015	ppb	50.4	80.00	0.0005	Pulse	0.1000	3

Quantitation Report

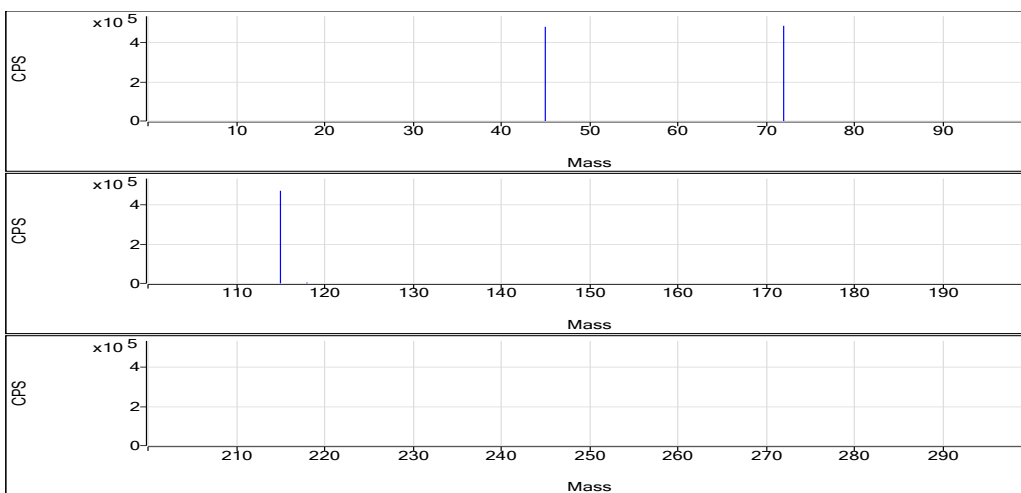
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1728557.16	0.9	103.3	Analog	0.1000	3
No Gas	Ge	72	976119.80	0.4	103.6	Pulse	0.1000	3
H2	Sc	45	481545.72	1.1	99.0	Pulse	0.1000	3
H2	Ge	72	486595.76	2.0	100.4	Pulse	0.1000	3
H2	In	115	473047.83	1.2	102.1	Pulse	0.1000	3
He	Sc	45	110611.90	1.6	101.2	Pulse	0.1000	3
He	Ge	72	241684.75	1.1	101.9	Pulse	0.1000	3
He	In	115	125954.24	2.5	102.9	Pulse	0.1000	3
He	Tb	159	283590.68	0.5	99.9	Pulse	0.1000	3
He	Bi	209	167176.93	0.8	98.5	Pulse	0.1000	3

No Gas

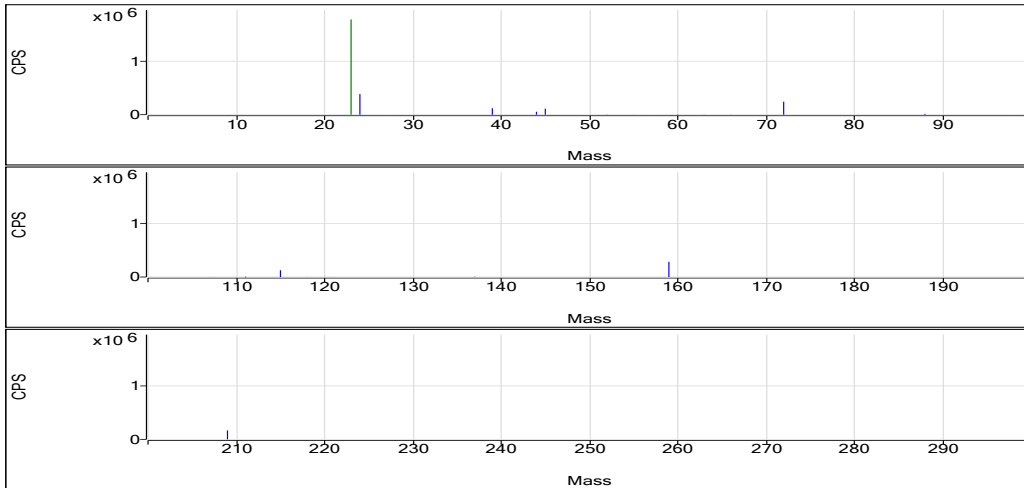


H2



Quantitation Report

He



Quantitation Report

Data File Name 029SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:17:54 PM
Sample Name 410-2734-M-4-B
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

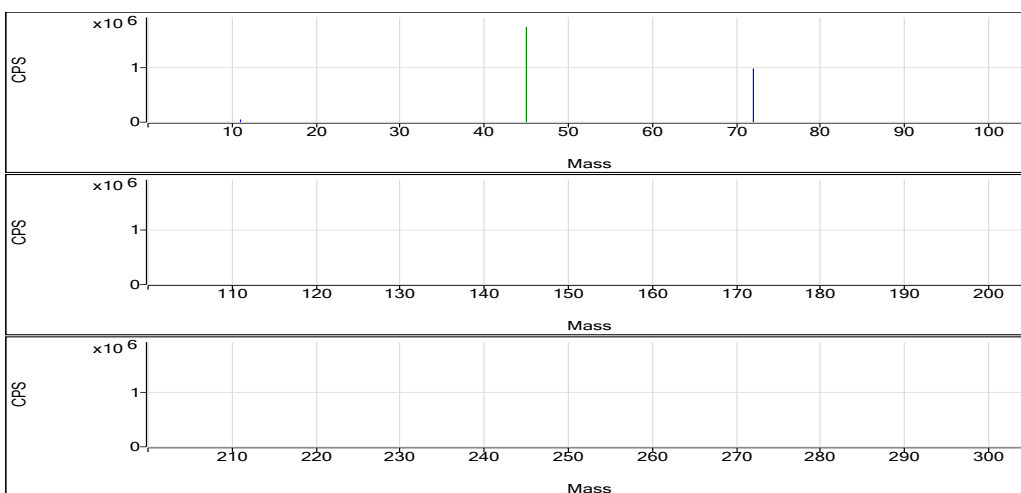
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.035	ppb	36.2	51.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	65.529	ppb	2.2	48850.93	0.0282	Pulse	0.5000	3
Se	78	115	H2	0.293	ppb	11.8	34.89	0.0001	Pulse	1.5000	3
Na	23	45	He	9511.152	ppb	1.2	2689020.27	24.4056	Analog	0.1000	3
Mg	24	45	He	24788.513	ppb	1.0	3543158.39	32.1587	Analog	0.1000	3
Al	27	45	He	371.775	ppb	15.0	21645.70	0.1964	Pulse	0.1000	3
K	39	45	He	1831.351	ppb	1.1	394131.23	3.5773	Pulse	0.1000	3
Ca	44	45	He	102890.297	ppb	0.4	859299.96	7.7992	Pulse	0.1000	3
Ti	47	45	He	10.017	ppb	45.9	540.11	0.0049	Pulse	0.1000	3
V	51	45	He	1.028	ppb	4.1	2363.60	0.0215	Pulse	0.1000	3
Cr	52	45	He	3.198	ppb	8.2	8993.13	0.0816	Pulse	0.1000	3
Mn	55	45	He	8.667	ppb	2.0	10370.71	0.0941	Pulse	0.1000	3
Fe	57	45	He	346.580	ppb	2.6	13737.13	0.1247	Pulse	0.1000	3
Co	59	115	He	0.213	ppb	20.0	690.04	0.0055	Pulse	0.1000	3
Ni	60	115	He	0.609	ppb	8.2	6048.11	0.0487	Pulse	0.1000	3
Cu	63	115	He	-0.207	ppb	N/A	2610.32	0.0210	Pulse	0.1000	3
Zn	66	115	He	1.295	ppb	18.6	1283.44	0.0103	Pulse	0.1000	3
As	75	115	He	0.274	ppb	23.4	135.33	0.0011	Pulse	0.5000	3
Sr	88	115	He	89.189	ppb	1.7	146316.40	1.1775	Pulse	0.1000	3
Mo	98	115	He	0.412	ppb	13.4	670.04	0.0054	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	65.6	50.00	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.022	ppb	41.1	12.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.000	ppb	2597813.8	1626.87	0.0131	Pulse	0.1000	3
Sb	121	72	He	0.190	ppb	5.2	336.68	0.0014	Pulse	0.1000	3
Ba	137	115	He	55.727	ppb	0.6	32041.51	0.2578	Pulse	0.1000	3
Tl	205	209	He	-0.003	ppb	N/A	110.00	0.0007	Pulse	0.1000	3
Pb	208	209	He	0.140	ppb	6.4	1283.41	0.0077	Pulse	0.1000	3
U	238	209	He	0.246	ppb	8.4	1166.77	0.0070	Pulse	0.1000	3

Quantitation Report

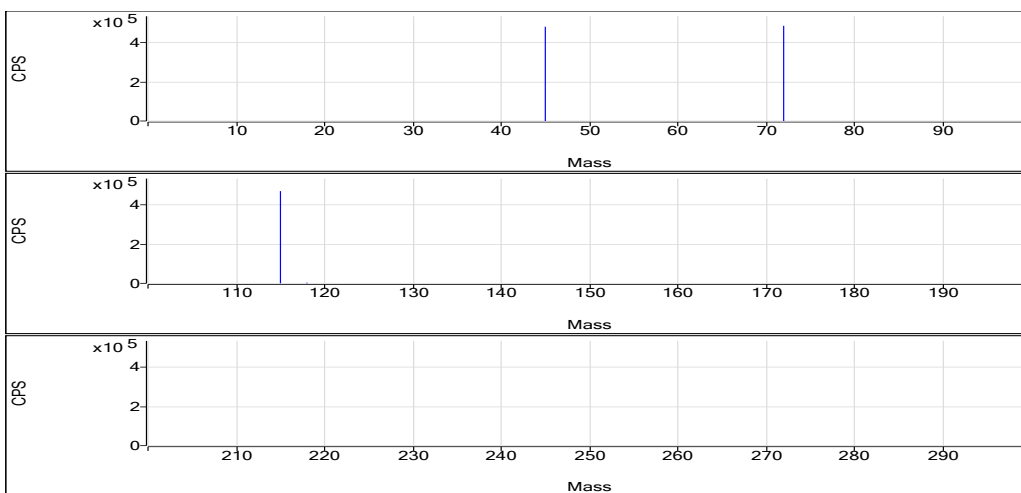
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1732941.85	0.6	103.6	Analog	0.1000	3
No Gas	Ge	72	975737.88	1.0	103.5	Pulse	0.1000	3
H2	Sc	45	480633.78	1.0	98.8	Pulse	0.1000	3
H2	Ge	72	485433.48	1.5	100.1	Pulse	0.1000	3
H2	In	115	470164.67	1.2	101.4	Pulse	0.1000	3
He	Sc	45	110178.14	0.4	100.8	Pulse	0.1000	3
He	Ge	72	239645.87	0.3	101.1	Pulse	0.1000	3
He	In	115	124268.79	0.7	101.5	Pulse	0.1000	3
He	Tb	159	282358.59	0.4	99.5	Pulse	0.1000	3
He	Bi	209	167288.23	0.8	98.6	Pulse	0.1000	3

No Gas

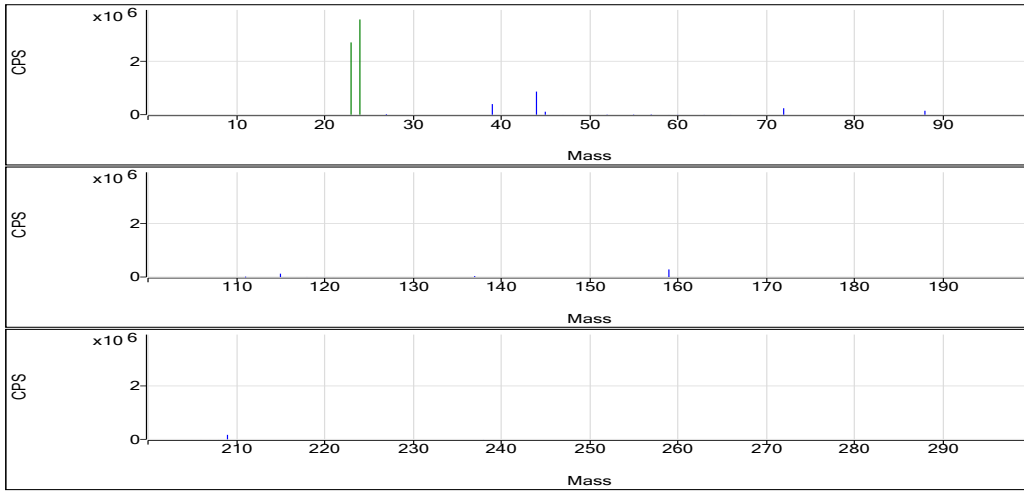


H2



Quantitation Report

He



Quantitation Report

Data File Name 030SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:19:45 PM
Sample Name 410-2734-M-5-B
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

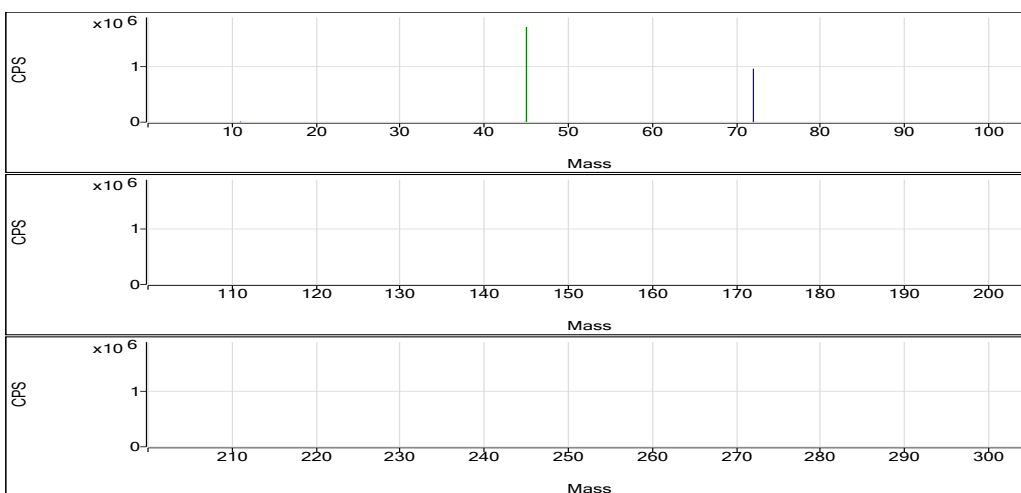
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.035	ppb	37.7	51.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	13.638	ppb	3.6	11146.17	0.0065	Pulse	0.5000	3
Se	78	115	H2	0.054	ppb	53.8	6.89	0.0000	Pulse	1.5000	3
Na	23	45	He	4809.508	ppb	1.8	1387047.37	12.4870	Analog	0.1000	3
Mg	24	45	He	9935.185	ppb	0.2	1432062.43	12.8911	Analog	0.1000	3
Al	27	45	He	21.461	ppb	15.6	1343.73	0.0121	Pulse	0.1000	3
K	39	45	He	1873.482	ppb	1.3	405282.10	3.6482	Pulse	0.1000	3
Ca	44	45	He	70099.238	ppb	1.4	590331.80	5.3144	Pulse	0.1000	3
Ti	47	45	He	0.247	ppb	76.9	20.00	0.0002	Pulse	0.1000	3
V	51	45	He	0.417	ppb	6.3	1320.10	0.0119	Pulse	0.1000	3
Cr	52	45	He	1.324	ppb	4.5	5294.50	0.0477	Pulse	0.1000	3
Mn	55	45	He	2.314	ppb	1.3	3173.79	0.0286	Pulse	0.1000	3
Fe	57	45	He	45.716	ppb	10.1	2053.68	0.0185	Pulse	0.1000	3
Co	59	115	He	0.075	ppb	16.0	280.01	0.0022	Pulse	0.1000	3
Ni	60	115	He	0.933	ppb	20.0	6304.91	0.0506	Pulse	0.1000	3
Cu	63	115	He	-0.050	ppb	N/A	2930.40	0.0235	Pulse	0.1000	3
Zn	66	115	He	1.933	ppb	13.1	1493.45	0.0120	Pulse	0.1000	3
As	75	115	He	0.124	ppb	26.7	94.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	59.237	ppb	1.1	97540.47	0.7821	Pulse	0.1000	3
Mo	98	115	He	0.318	ppb	13.1	520.03	0.0042	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	42.8	70.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.025	ppb	31.2	14.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.158	ppb	N/A	1380.12	0.0111	Pulse	0.1000	3
Sb	121	72	He	0.108	ppb	35.8	210.01	0.0009	Pulse	0.1000	3
Ba	137	115	He	35.593	ppb	0.7	20545.89	0.1647	Pulse	0.1000	3
Tl	205	209	He	-0.011	ppb	N/A	73.33	0.0004	Pulse	0.1000	3
Pb	208	209	He	-0.018	ppb	N/A	280.01	0.0017	Pulse	0.1000	3
U	238	209	He	0.192	ppb	18.3	916.73	0.0054	Pulse	0.1000	3

Quantitation Report

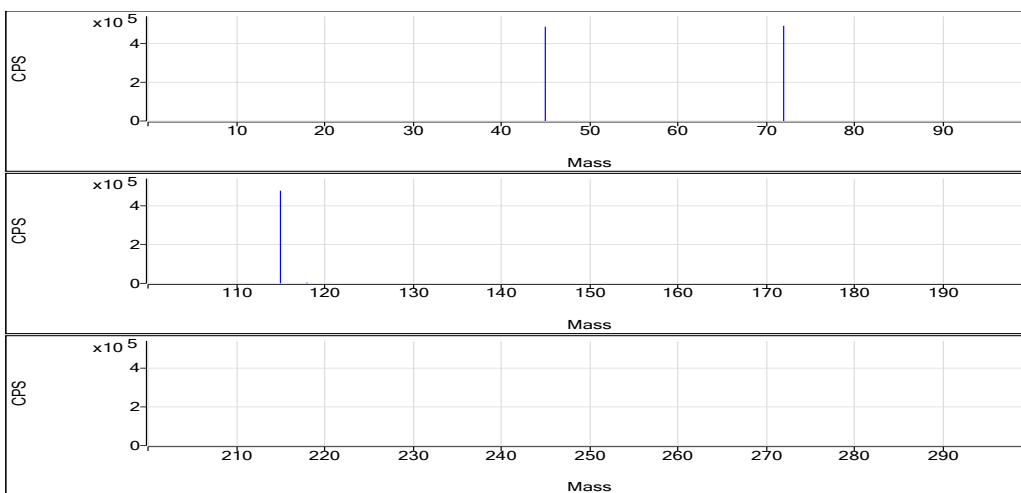
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1719139.71	1.2	102.7	Analog	0.1000	3
No Gas	Ge	72	966010.97	1.0	102.5	Pulse	0.1000	3
H2	Sc	45	483892.30	2.0	99.5	Pulse	0.1000	3
H2	Ge	72	488942.97	1.5	100.9	Pulse	0.1000	3
H2	In	115	475853.93	1.2	102.7	Pulse	0.1000	3
He	Sc	45	111089.96	1.0	101.6	Pulse	0.1000	3
He	Ge	72	239340.36	0.8	101.0	Pulse	0.1000	3
He	In	115	124711.70	0.4	101.9	Pulse	0.1000	3
He	Tb	159	281461.49	1.2	99.2	Pulse	0.1000	3
He	Bi	209	168305.97	0.2	99.2	Pulse	0.1000	3

No Gas

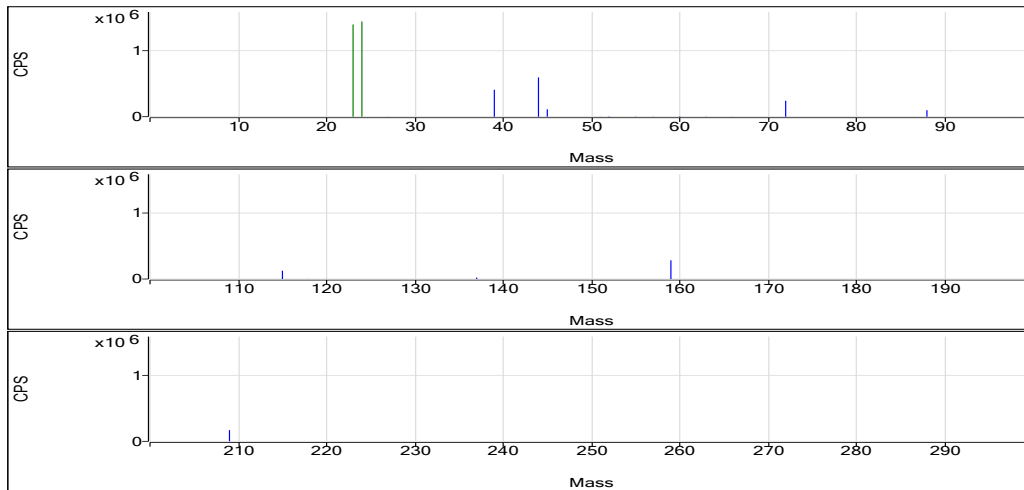


H2



Quantitation Report

He



Quantitation Report

Data File Name 031_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:21:37 PM
Sample Name ccv 64982
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

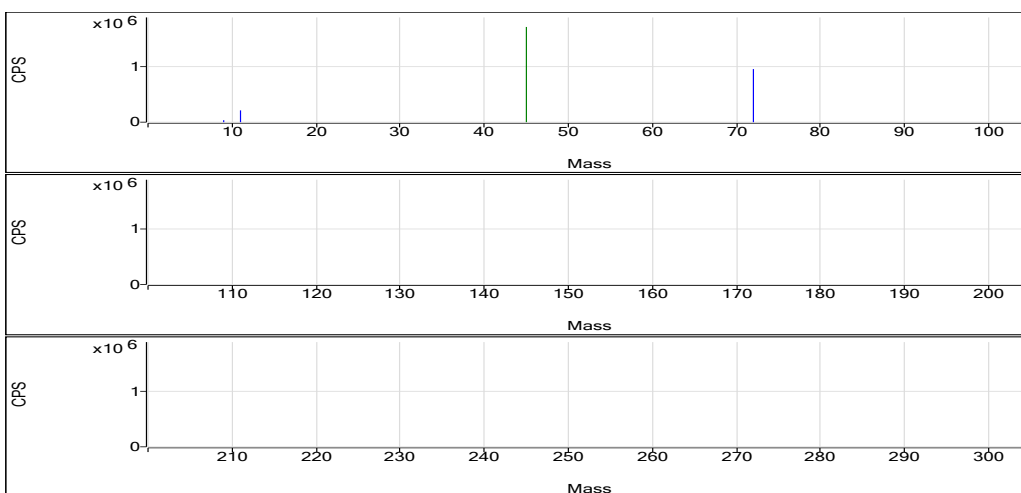
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	29.944	ppb	0.9	35310.61	0.0205	Pulse	0.5000	3
B	11	45	No Gas	294.209	ppb	2.2	213140.24	0.1238	Pulse	0.5000	3
Se	78	115	H2	29.866	ppb	1.2	3575.78	0.0075	Pulse	1.5000	3
Na	23	45	He	5067.811	ppb	3.0	1459819.46	13.1418	Analog	0.1000	3
Mg	24	45	He	4737.370	ppb	1.4	683083.43	6.1485	Pulse	0.1000	3
Al	27	45	He	4912.101	ppb	0.6	287217.88	2.5851	Pulse	0.1000	3
K	39	45	He	4698.303	ppb	1.3	933851.97	8.4056	Pulse	0.1000	3
Ca	44	45	He	4984.731	ppb	2.1	42248.47	0.3803	Pulse	0.1000	3
Ti	47	45	He	300.470	ppb	4.3	16126.05	0.1452	Pulse	0.1000	3
V	51	45	He	280.780	ppb	1.2	488656.62	4.3985	Pulse	0.1000	3
Cr	52	45	He	283.345	ppb	2.2	573263.68	5.1605	Pulse	0.1000	3
Mn	55	45	He	299.856	ppb	2.0	344264.34	3.0990	Pulse	0.1000	3
Fe	57	45	He	4983.057	ppb	2.2	195634.94	1.7611	Pulse	0.1000	3
Co	59	115	He	289.829	ppb	1.0	865842.75	6.9098	Pulse	0.1000	3
Ni	60	115	He	304.696	ppb	1.1	227766.04	1.8176	Pulse	0.1000	3
Cu	63	115	He	293.546	ppb	0.6	587832.64	4.6910	Pulse	0.1000	3
Zn	66	115	He	303.994	ppb	0.6	99500.76	0.7940	Pulse	0.1000	3
As	75	115	He	303.236	ppb	0.3	84108.77	0.6712	Pulse	0.5000	3
Sr	88	115	He	30.041	ppb	1.3	49713.98	0.3968	Pulse	0.1000	3
Mo	98	115	He	30.396	ppb	0.4	49861.90	0.3979	Pulse	0.1000	3
Ag	107	115	He	29.603	ppb	1.2	87244.07	0.6962	Pulse	0.1000	3
Cd	111	115	He	30.312	ppb	1.7	13622.65	0.1087	Pulse	0.5000	3
Sn	120	115	He	29.652	ppb	1.0	49321.36	0.3936	Pulse	0.1000	3
Sb	121	72	He	29.364	ppb	2.0	44930.17	0.1891	Pulse	0.1000	3
Ba	137	115	He	301.110	ppb	0.6	174471.87	1.3923	Pulse	0.1000	3
Tl	205	209	He	29.974	ppb	0.2	141073.72	0.8432	Pulse	0.1000	3
Pb	208	209	He	29.978	ppb	1.1	190464.23	1.1384	Pulse	0.1000	3
U	238	209	He	49.995	ppb	1.7	235357.96	1.4068	Pulse	0.1000	3

Quantitation Report

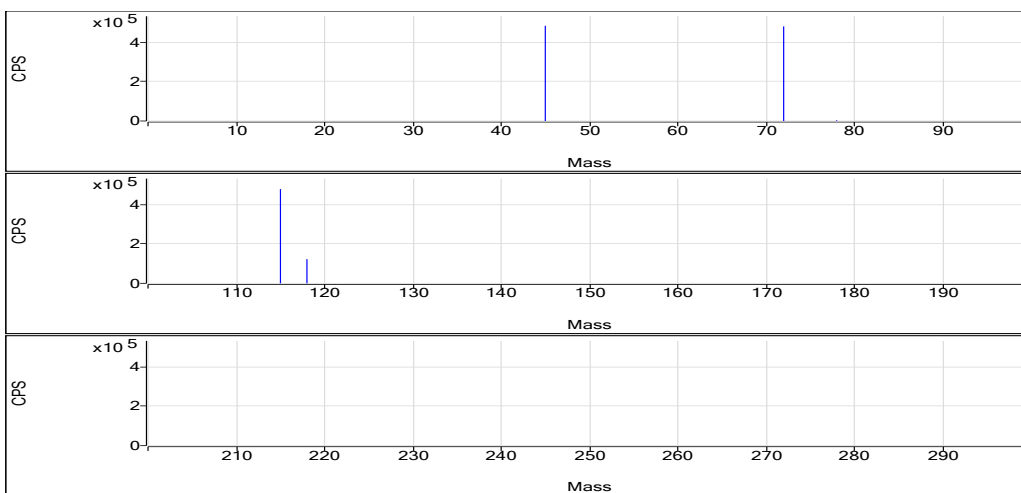
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1721467.37	1.6	102.9	Analog	0.1000	3
No Gas	Ge	72	959844.05	0.9	101.9	Pulse	0.1000	3
H2	Sc	45	483461.61	1.8	99.4	Pulse	0.1000	3
H2	Ge	72	480652.04	2.5	99.2	Pulse	0.1000	3
H2	In	115	478390.45	1.5	103.2	Pulse	0.1000	3
He	Sc	45	111109.54	1.4	101.6	Pulse	0.1000	3
He	Ge	72	237601.04	0.3	100.2	Pulse	0.1000	3
He	In	115	125314.20	1.0	102.4	Pulse	0.1000	3
He	Tb	159	283381.23	0.6	99.9	Pulse	0.1000	3
He	Bi	209	167312.49	0.5	98.6	Pulse	0.1000	3

No Gas

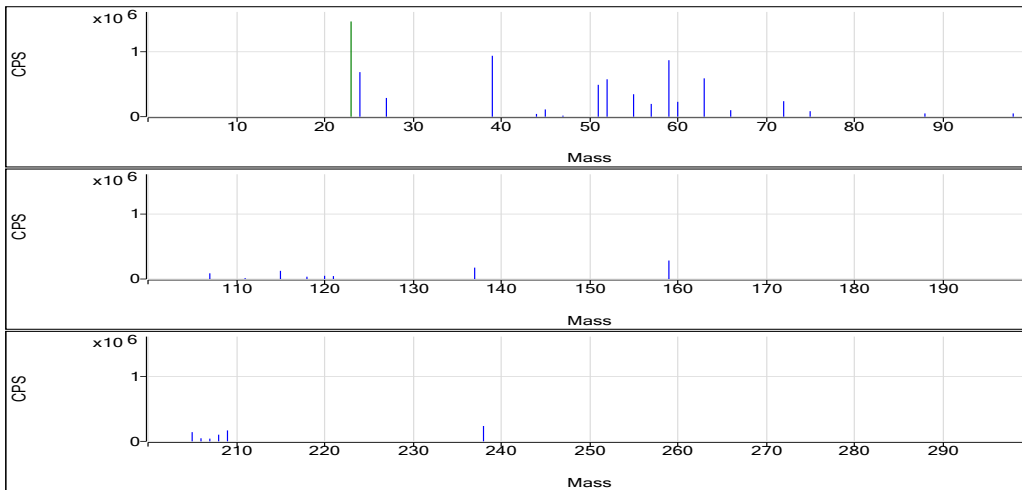


H2



Quantitation Report

He



Quantitation Report

Data File Name 032_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:23:30 PM
Sample Name ccb 58667
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

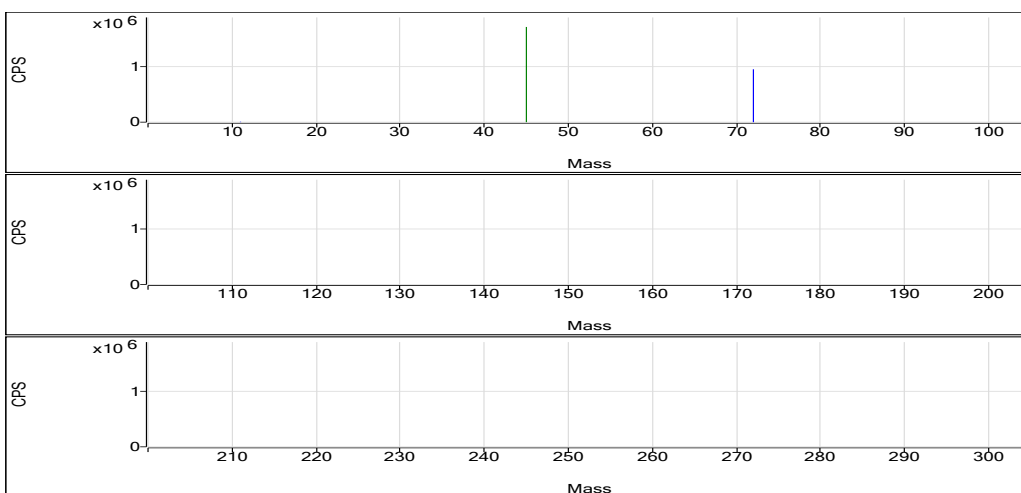
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.040	ppb	23.4	57.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	8.719	ppb	2.4	7656.64	0.0044	Pulse	0.5000	3
Se	78	115	H2	0.036	ppb	2.9	4.67	0.0000	Pulse	1.5000	3
Na	23	45	He	4.042	ppb	55.7	33481.47	0.3052	Pulse	0.1000	3
Mg	24	45	He	2.829	ppb	12.8	760.04	0.0069	Pulse	0.1000	3
Al	27	45	He	4.561	ppb	14.7	350.02	0.0032	Pulse	0.1000	3
K	39	45	He	13.153	ppb	154.3	56475.76	0.5152	Pulse	0.1000	3
Ca	44	45	He	29.405	ppb	66.7	526.70	0.0048	Pulse	0.1000	3
Ti	47	45	He	0.189	ppb	59.4	16.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.159	ppb	44.9	860.06	0.0078	Pulse	0.1000	3
Cr	52	45	He	0.487	ppb	41.0	3563.88	0.0325	Pulse	0.1000	3
Mn	55	45	He	0.176	ppb	21.9	713.37	0.0065	Pulse	0.1000	3
Fe	57	45	He	2.048	ppb	46.2	336.68	0.0031	Pulse	0.1000	3
Co	59	115	He	0.122	ppb	30.3	410.02	0.0034	Pulse	0.1000	3
Ni	60	115	He	1.141	ppb	42.2	6304.88	0.0518	Pulse	0.1000	3
Cu	63	115	He	-0.475	ppb	N/A	2036.88	0.0167	Pulse	0.1000	3
Zn	66	115	He	1.824	ppb	18.2	1423.46	0.0117	Pulse	0.1000	3
As	75	115	He	0.146	ppb	60.4	98.67	0.0008	Pulse	0.5000	3
Sr	88	115	He	0.050	ppb	63.6	106.67	0.0009	Pulse	0.1000	3
Mo	98	115	He	0.265	ppb	8.6	423.36	0.0035	Pulse	0.1000	3
Ag	107	115	He	0.015	ppb	88.6	66.67	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.008	ppb	117.1	6.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.038	ppb	N/A	1536.81	0.0126	Pulse	0.1000	3
Sb	121	72	He	0.602	ppb	14.9	960.07	0.0041	Pulse	0.1000	3
Ba	137	115	He	0.136	ppb	36.4	100.00	0.0008	Pulse	0.1000	3
Tl	205	209	He	0.011	ppb	13.7	173.34	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.014	ppb	48.7	480.01	0.0029	Pulse	0.1000	3
U	238	209	He	0.036	ppb	47.3	180.01	0.0011	Pulse	0.1000	3

Quantitation Report

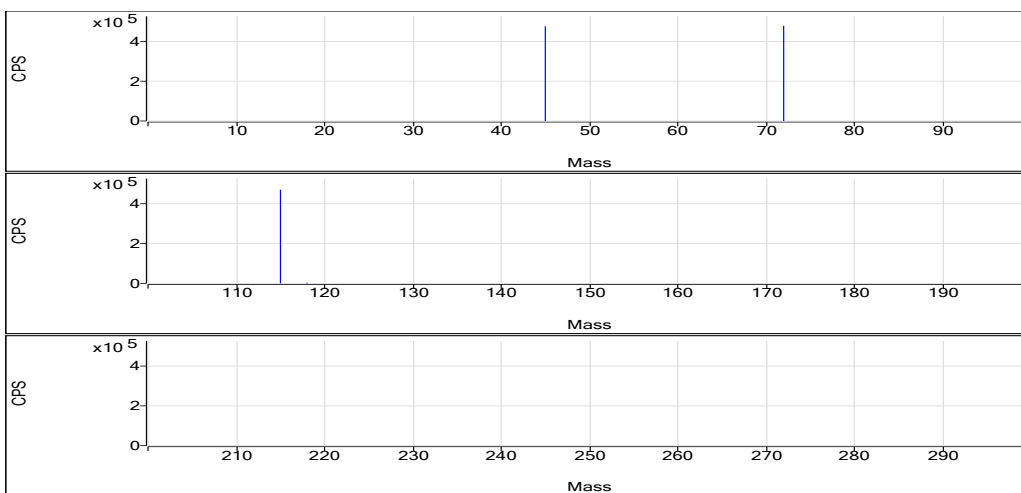
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1729502.63	1.7	103.4	Analog	0.1000	3
No Gas	Ge	72	960503.74	1.2	101.9	Pulse	0.1000	3
H2	Sc	45	473038.54	1.8	97.3	Pulse	0.1000	3
H2	Ge	72	475469.85	2.6	98.1	Pulse	0.1000	3
H2	In	115	467586.88	2.6	100.9	Pulse	0.1000	3
He	Sc	45	109720.24	2.0	100.3	Pulse	0.1000	3
He	Ge	72	236770.63	0.6	99.9	Pulse	0.1000	3
He	In	115	121820.96	2.2	99.5	Pulse	0.1000	3
He	Tb	159	279261.94	0.4	98.4	Pulse	0.1000	3
He	Bi	209	166124.05	0.9	97.9	Pulse	0.1000	3

No Gas

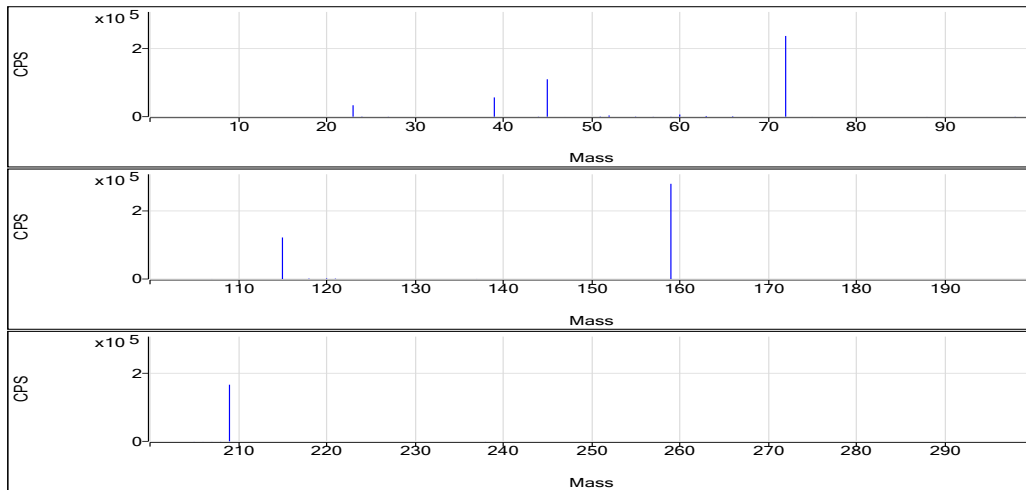


H2



Quantitation Report

He



Quantitation Report

Data File Name 033SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:25:22 PM
Sample Name 410-2734-M-9-B
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

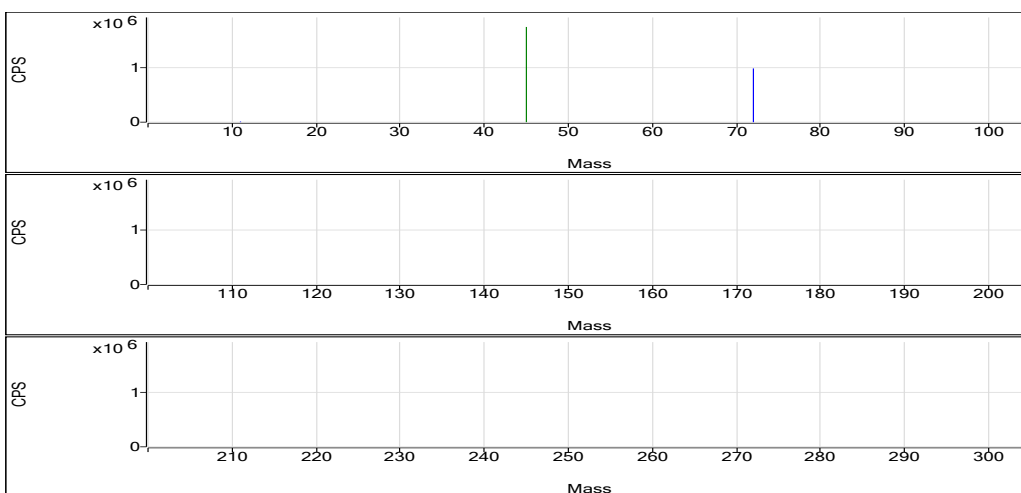
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.022	ppb	20.1	36.00	0.0000	Pulse	0.5000	3
B	11	45	No Gas	13.679	ppb	2.3	11322.97	0.0065	Pulse	0.5000	3
Se	78	115	H2	0.120	ppb	15.8	14.89	0.0000	Pulse	1.5000	3
Na	23	45	He	6876.893	ppb	1.9	1961331.12	17.7278	Analog	0.1000	3
Mg	24	45	He	8953.959	ppb	1.2	1285447.37	11.6183	Analog	0.1000	3
Al	27	45	He	7.663	ppb	22.0	533.36	0.0048	Pulse	0.1000	3
K	39	45	He	591.372	ppb	1.2	164759.71	1.4890	Pulse	0.1000	3
Ca	44	45	He	60295.577	ppb	1.7	505775.35	4.5716	Pulse	0.1000	3
Ti	47	45	He	0.372	ppb	76.9	26.67	0.0002	Pulse	0.1000	3
V	51	45	He	4.754	ppb	1.7	8822.93	0.0797	Pulse	0.1000	3
Cr	52	45	He	1.532	ppb	1.6	5691.26	0.0514	Pulse	0.1000	3
Mn	55	45	He	0.736	ppb	17.0	1360.12	0.0123	Pulse	0.1000	3
Fe	57	45	He	27.072	ppb	15.8	1316.77	0.0119	Pulse	0.1000	3
Co	59	115	He	0.236	ppb	14.0	760.05	0.0061	Pulse	0.1000	3
Ni	60	115	He	0.812	ppb	22.4	6231.55	0.0499	Pulse	0.1000	3
Cu	63	115	He	0.146	ppb	48.4	3327.16	0.0266	Pulse	0.1000	3
Zn	66	115	He	0.894	ppb	44.2	1160.09	0.0093	Pulse	0.1000	3
As	75	115	He	1.324	ppb	4.5	426.68	0.0034	Pulse	0.5000	3
Sr	88	115	He	78.332	ppb	1.5	129280.10	1.0342	Pulse	0.1000	3
Mo	98	115	He	0.428	ppb	11.8	700.05	0.0056	Pulse	0.1000	3
Ag	107	115	He	0.028	ppb	42.2	106.67	0.0009	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	135.7	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.106	ppb	N/A	1466.80	0.0117	Pulse	0.1000	3
Sb	121	72	He	0.185	ppb	22.0	333.35	0.0014	Pulse	0.1000	3
Ba	137	115	He	76.789	ppb	1.0	44405.75	0.3552	Pulse	0.1000	3
Tl	205	209	He	-0.006	ppb	N/A	96.67	0.0006	Pulse	0.1000	3
Pb	208	209	He	-0.005	ppb	N/A	363.35	0.0022	Pulse	0.1000	3
U	238	209	He	0.843	ppb	7.9	4010.77	0.0238	Pulse	0.1000	3

Quantitation Report

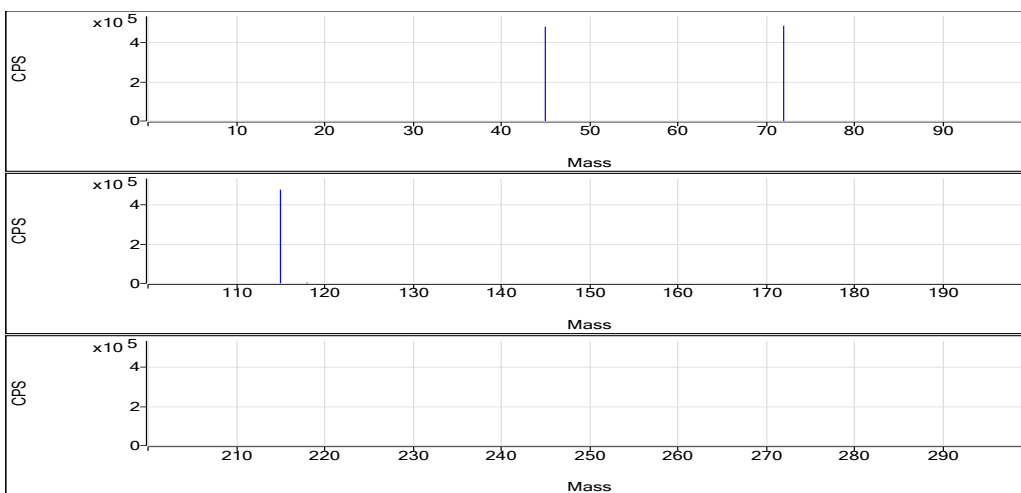
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1741627.27	0.6	104.1	Analog	0.1000	3
No Gas	Ge	72	982740.40	0.8	104.3	Pulse	0.1000	3
H2	Sc	45	482823.55	1.6	99.3	Pulse	0.1000	3
H2	Ge	72	487197.87	2.4	100.5	Pulse	0.1000	3
H2	In	115	479407.50	2.6	103.4	Pulse	0.1000	3
He	Sc	45	110646.62	0.9	101.2	Pulse	0.1000	3
He	Ge	72	242471.81	0.2	102.3	Pulse	0.1000	3
He	In	115	125022.12	1.2	102.1	Pulse	0.1000	3
He	Tb	159	281911.48	0.5	99.3	Pulse	0.1000	3
He	Bi	209	168749.58	0.7	99.4	Pulse	0.1000	3

No Gas

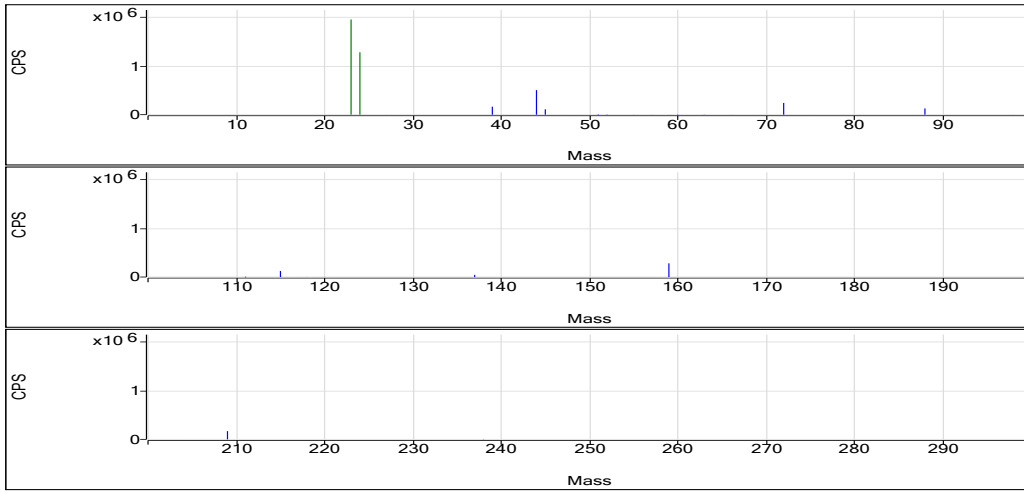


H2



Quantitation Report

He



Quantitation Report

Data File Name 034SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:27:13 PM
Sample Name 410-3144-1-2-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

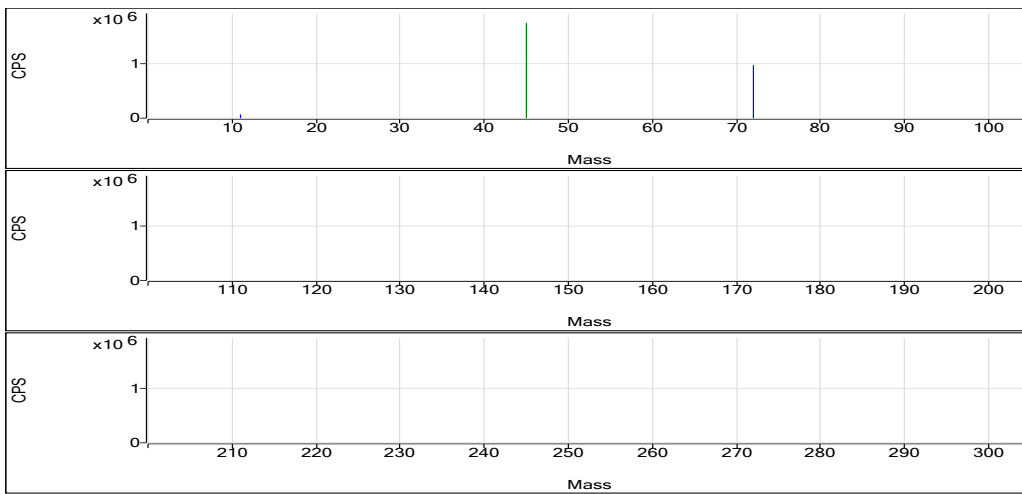
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.009	ppb	39.4	20.67	0.0000	Pulse	0.5000	3
B	11	45	No Gas	89.691	ppb	2.8	67130.13	0.0383	Pulse	0.5000	3
Se	78	115	H2	0.769	ppb	8.7	91.33	0.0002	Pulse	1.5000	3
Na	23	45	He	20840.082	ppb	1.2	5845547.21	53.1243	Analog	0.1000	3
Mg	24	45	He	7063.958	ppb	0.9	1008672.67	9.1666	Pulse	0.1000	3
Al	27	45	He	2.008	ppb	20.2	203.34	0.0018	Pulse	0.1000	3
K	39	45	He	3503.473	ppb	2.1	703448.35	6.3934	Pulse	0.1000	3
Ca	44	45	He	38148.926	ppb	1.9	318353.83	2.8934	Pulse	0.1000	3
Ti	47	45	He	0.187	ppb	152.7	16.67	0.0002	Pulse	0.1000	3
V	51	45	He	9.436	ppb	4.6	16830.21	0.1530	Pulse	0.1000	3
Cr	52	45	He	1.213	ppb	0.6	5024.37	0.0457	Pulse	0.1000	3
Mn	55	45	He	0.235	ppb	16.4	783.38	0.0071	Pulse	0.1000	3
Fe	57	45	He	13.619	ppb	11.1	786.72	0.0072	Pulse	0.1000	3
Co	59	115	He	0.024	ppb	59.3	130.01	0.0010	Pulse	0.1000	3
Ni	60	115	He	-0.164	ppb	N/A	5504.54	0.0442	Pulse	0.1000	3
Cu	63	115	He	12.577	ppb	1.6	27947.51	0.2242	Pulse	0.1000	3
Zn	66	115	He	15.868	ppb	3.8	5988.12	0.0481	Pulse	0.1000	3
As	75	115	He	2.838	ppb	5.2	842.70	0.0068	Pulse	0.5000	3
Sr	88	115	He	459.950	ppb	1.0	756642.80	6.0715	Pulse	0.1000	3
Mo	98	115	He	2.073	ppb	9.0	3380.51	0.0271	Pulse	0.1000	3
Ag	107	115	He	0.003	ppb	122.0	33.33	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	51.3	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.234	ppb	263.0	2009.33	0.0161	Pulse	0.1000	3
Sb	121	72	He	0.195	ppb	21.5	343.35	0.0014	Pulse	0.1000	3
Ba	137	115	He	141.736	ppb	1.0	81688.35	0.6555	Pulse	0.1000	3
Tl	205	209	He	-0.019	ppb	N/A	36.67	0.0002	Pulse	0.1000	3
Pb	208	209	He	0.226	ppb	10.3	1856.79	0.0109	Pulse	0.1000	3
U	238	209	He	2.656	ppb	3.9	12689.96	0.0748	Pulse	0.1000	3

Quantitation Report

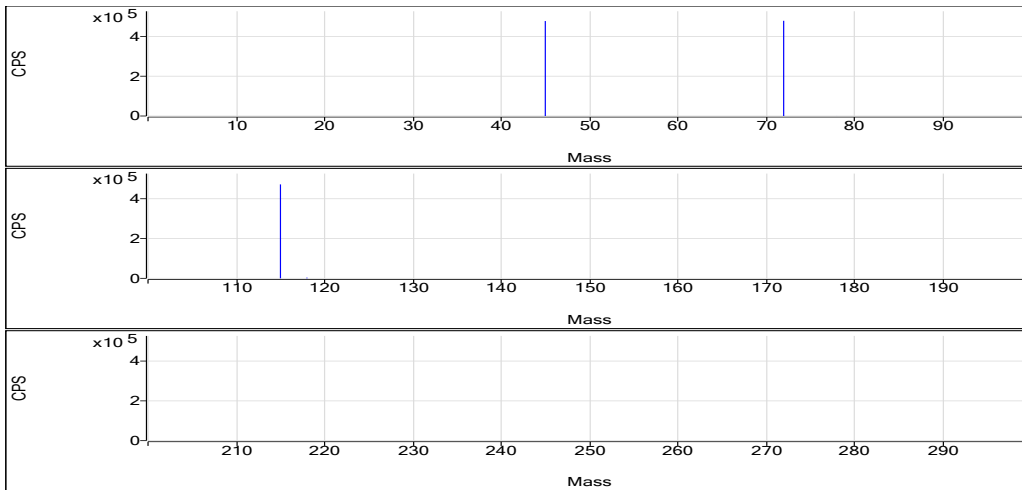
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1753447.79	1.3	104.8	Analog	0.1000	3
No Gas	Ge	72	976274.78	1.2	103.6	Pulse	0.1000	3
H2	Sc	45	477165.99	1.9	98.1	Pulse	0.1000	3
H2	Ge	72	478432.13	2.6	98.7	Pulse	0.1000	3
H2	In	115	472066.62	1.7	101.8	Pulse	0.1000	3
He	Sc	45	110048.72	1.5	100.6	Pulse	0.1000	3
He	Ge	72	238819.89	0.2	100.7	Pulse	0.1000	3
He	In	115	124627.89	0.7	101.8	Pulse	0.1000	3
He	Tb	159	281676.27	1.0	99.3	Pulse	0.1000	3
He	Bi	209	169728.18	0.6	100.0	Pulse	0.1000	3

No Gas

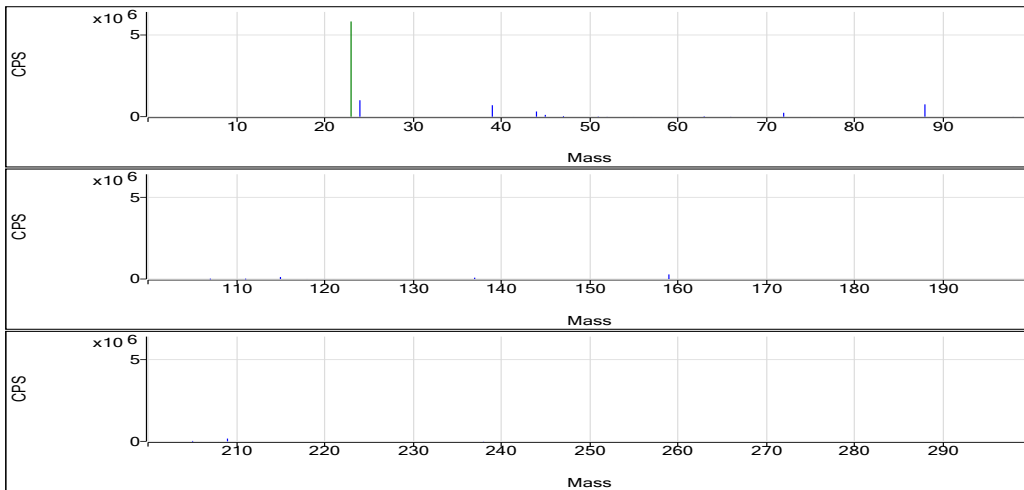


H2



Quantitation Report

He



Quantitation Report

Data File Name 035SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:29:05 PM
Sample Name 410-3144-I-5-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Callb 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

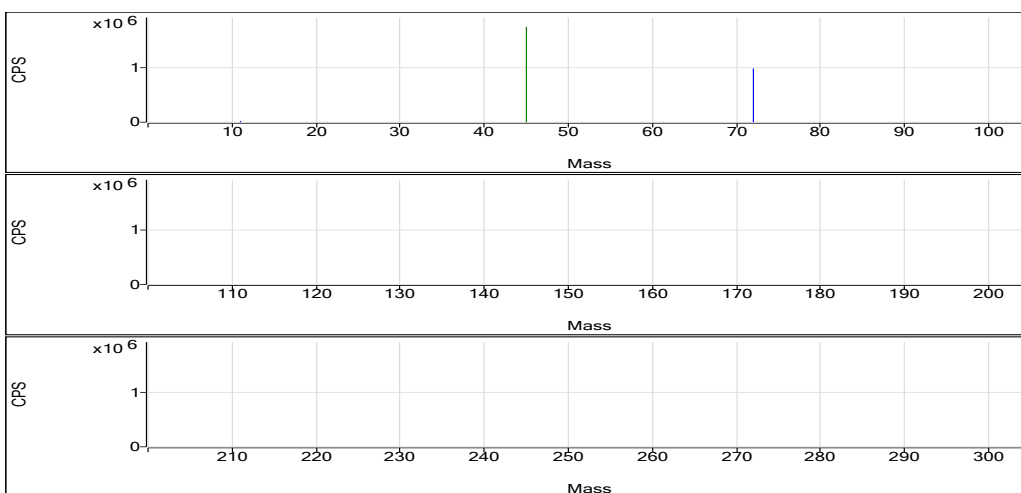
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.015	ppb	57.7	27.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	28.428	ppb	2.3	21974.71	0.0127	Pulse	0.5000	3
Se	78	115	H2	1.380	ppb	1.8	163.78	0.0003	Pulse	1.5000	3
Na	23	45	He	20928.274	ppb	1.9	5829304.29	53.3479	Analog	0.1000	3
Mg	24	45	He	5156.033	ppb	1.2	731203.61	6.6916	Pulse	0.1000	3
Al	27	45	He	8.583	ppb	8.5	580.03	0.0053	Pulse	0.1000	3
K	39	45	He	2119.819	ppb	0.6	443991.47	4.0631	Pulse	0.1000	3
Ca	44	45	He	40575.168	ppb	0.9	336255.96	3.0772	Pulse	0.1000	3
Ti	47	45	He	-0.002	ppb	N/A	6.67	0.0001	Pulse	0.1000	3
V	51	45	He	5.660	ppb	0.9	10263.95	0.0939	Pulse	0.1000	3
Cr	52	45	He	2.635	ppb	3.4	7805.68	0.0714	Pulse	0.1000	3
Mn	55	45	He	0.110	ppb	32.4	636.70	0.0058	Pulse	0.1000	3
Fe	57	45	He	13.072	ppb	27.1	760.04	0.0070	Pulse	0.1000	3
Co	59	115	He	0.020	ppb	42.3	116.67	0.0009	Pulse	0.1000	3
Ni	60	115	He	0.778	ppb	26.0	6184.88	0.0496	Pulse	0.1000	3
Cu	63	115	He	-0.380	ppb	N/A	2276.92	0.0183	Pulse	0.1000	3
Zn	66	115	He	1.533	ppb	18.6	1363.45	0.0109	Pulse	0.1000	3
As	75	115	He	0.949	ppb	12.2	322.01	0.0026	Pulse	0.5000	3
Sr	88	115	He	234.965	ppb	1.0	386429.56	3.1017	Pulse	0.1000	3
Mo	98	115	He	1.010	ppb	9.0	1646.82	0.0132	Pulse	0.1000	3
Ag	107	115	He	0.001	ppb	548.4	26.67	0.0002	Pulse	0.1000	3
Cd	111	115	He	-0.002	ppb	N/A	2.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	-0.091	ppb	N/A	1486.81	0.0119	Pulse	0.1000	3
Sb	121	72	He	0.094	ppb	18.1	190.01	0.0008	Pulse	0.1000	3
Ba	137	115	He	140.624	ppb	1.2	81024.83	0.6503	Pulse	0.1000	3
Tl	205	209	He	-0.020	ppb	N/A	30.00	0.0002	Pulse	0.1000	3
Pb	208	209	He	0.051	ppb	19.4	726.70	0.0043	Pulse	0.1000	3
U	238	209	He	1.692	ppb	5.0	8079.55	0.0477	Pulse	0.1000	3

Quantitation Report

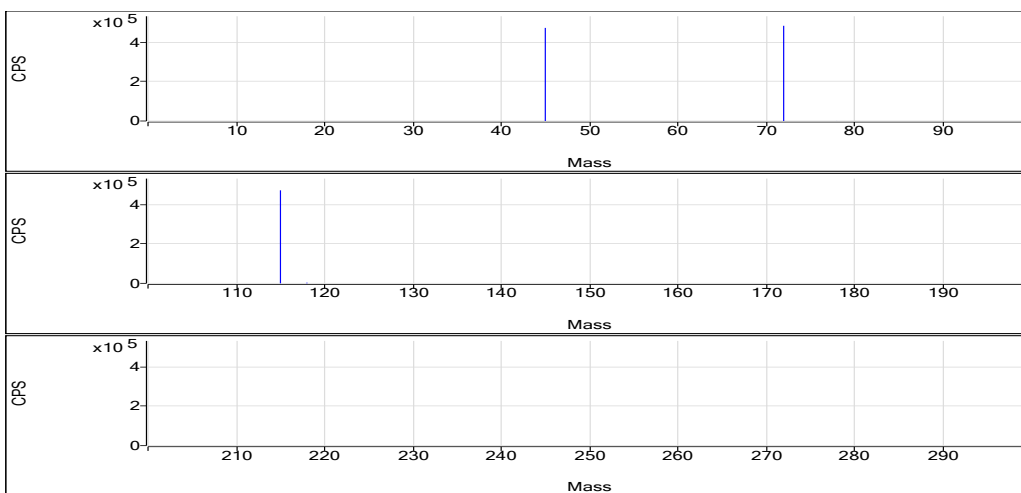
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1734532.84	1.2	103.7	Analog	0.1000	3
No Gas	Ge	72	977821.99	1.5	103.8	Pulse	0.1000	3
H2	Sc	45	473517.43	1.2	97.4	Pulse	0.1000	3
H2	Ge	72	484230.07	1.5	99.9	Pulse	0.1000	3
H2	In	115	473059.61	1.0	102.1	Pulse	0.1000	3
He	Sc	45	109275.95	0.9	99.9	Pulse	0.1000	3
He	Ge	72	241246.50	0.2	101.8	Pulse	0.1000	3
He	In	115	124597.60	1.6	101.8	Pulse	0.1000	3
He	Tb	159	280508.52	0.1	98.8	Pulse	0.1000	3
He	Bi	209	169518.24	1.4	99.9	Pulse	0.1000	3

No Gas

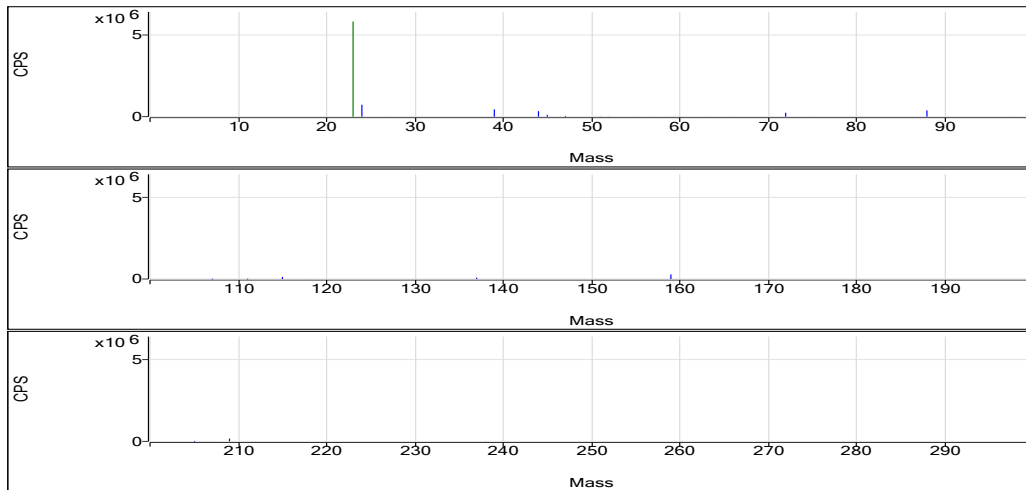


H2



Quantitation Report

He



Quantitation Report

Data File Name 036SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:30:57 PM
Sample Name 410-3144-I-4-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

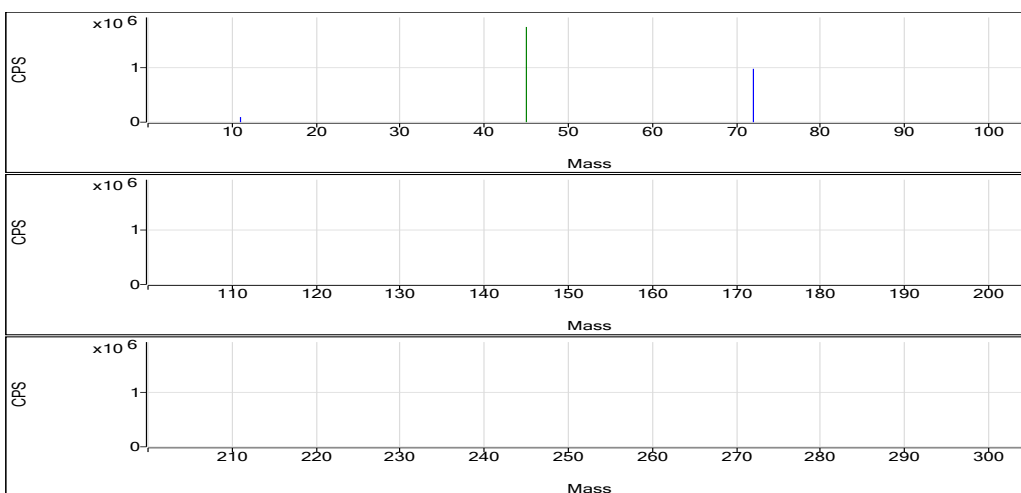
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.013	ppb	50.8	25.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	126.420	ppb	2.1	93460.64	0.0537	Pulse	0.5000	3
Se	78	115	H2	0.026	ppb	111.7	3.56	0.0000	Pulse	1.5000	3
Na	23	45	He	26723.367	ppb	0.9	7432005.52	68.0384	Analog	0.1000	3
Mg	24	45	He	5006.343	ppb	1.4	709746.00	6.4974	Pulse	0.1000	3
Al	27	45	He	2.092	ppb	56.0	206.68	0.0019	Pulse	0.1000	3
K	39	45	He	3276.233	ppb	0.3	656548.70	6.0107	Pulse	0.1000	3
Ca	44	45	He	45907.197	ppb	1.1	380268.91	3.4813	Pulse	0.1000	3
Ti	47	45	He	0.190	ppb	152.8	16.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.123	ppb	14.3	796.72	0.0073	Pulse	0.1000	3
Cr	52	45	He	0.461	ppb	15.0	3497.21	0.0320	Pulse	0.1000	3
Mn	55	45	He	6.638	ppb	2.7	7995.76	0.0732	Pulse	0.1000	3
Fe	57	45	He	27.408	ppb	17.2	1313.44	0.0120	Pulse	0.1000	3
Co	59	115	He	0.012	ppb	60.3	93.33	0.0007	Pulse	0.1000	3
Ni	60	115	He	0.607	ppb	48.2	6104.81	0.0487	Pulse	0.1000	3
Cu	63	115	He	1.205	ppb	13.9	5451.23	0.0434	Pulse	0.1000	3
Zn	66	115	He	7.917	ppb	10.6	3447.21	0.0275	Pulse	0.1000	3
As	75	115	He	23.817	ppb	1.8	6670.91	0.0532	Pulse	0.5000	3
Sr	88	115	He	485.017	ppb	1.1	803378.81	6.4024	Pulse	0.1000	3
Mo	98	115	He	6.384	ppb	2.3	10487.56	0.0836	Pulse	0.1000	3
Ag	107	115	He	0.012	ppb	127.2	60.00	0.0005	Pulse	0.1000	3
Cd	111	115	He	0.010	ppb	24.6	7.33	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.058	ppb	N/A	1550.13	0.0124	Pulse	0.1000	3
Sb	121	72	He	0.116	ppb	22.2	223.34	0.0009	Pulse	0.1000	3
Ba	137	115	He	154.802	ppb	0.3	89836.08	0.7159	Pulse	0.1000	3
Tl	205	209	He	-0.010	ppb	N/A	76.67	0.0005	Pulse	0.1000	3
Pb	208	209	He	3.687	ppb	0.7	23879.31	0.1421	Pulse	0.1000	3
U	238	209	He	8.109	ppb	2.5	38361.09	0.2282	Pulse	0.1000	3

Quantitation Report

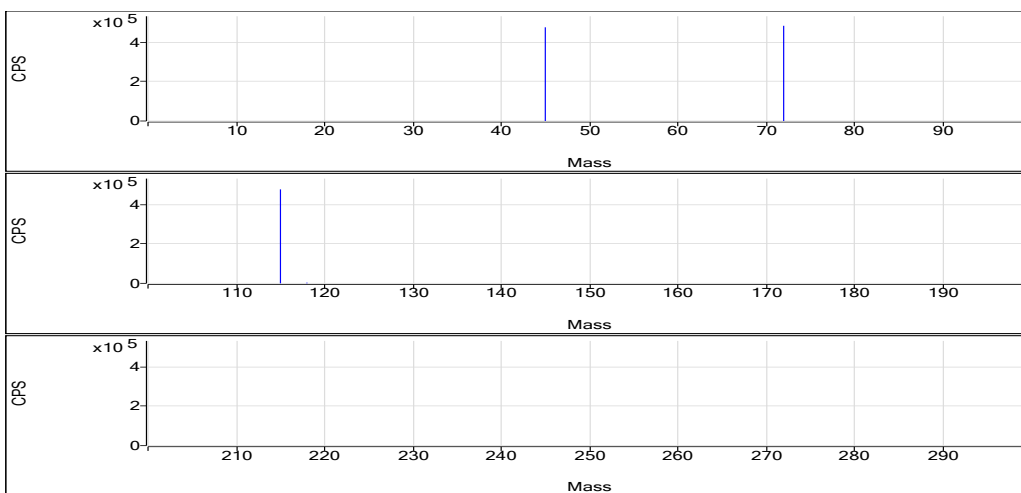
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1742252.53	2.1	104.1	Analog	0.1000	3
No Gas	Ge	72	976174.49	1.5	103.6	Pulse	0.1000	3
H2	Sc	45	475227.49	1.4	97.7	Pulse	0.1000	3
H2	Ge	72	482878.16	1.3	99.6	Pulse	0.1000	3
H2	In	115	476511.70	1.9	102.8	Pulse	0.1000	3
He	Sc	45	109229.26	0.5	99.9	Pulse	0.1000	3
He	Ge	72	239789.96	0.7	101.1	Pulse	0.1000	3
He	In	115	125486.07	0.5	102.5	Pulse	0.1000	3
He	Tb	159	279800.97	1.2	98.6	Pulse	0.1000	3
He	Bi	209	168070.10	0.7	99.0	Pulse	0.1000	3

No Gas

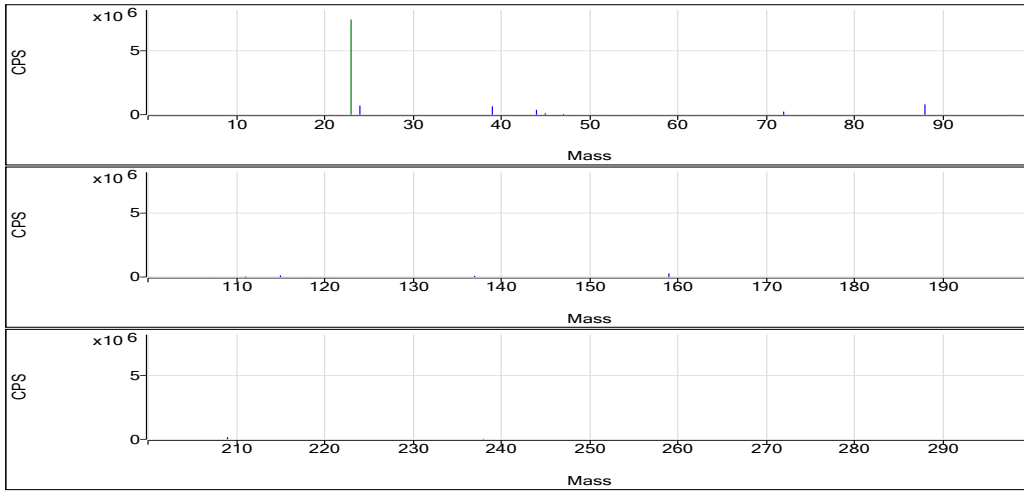


H2



Quantitation Report

He



Quantitation Report

Data File Name 037SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:32:48 PM
Sample Name 410-3144-I-3-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

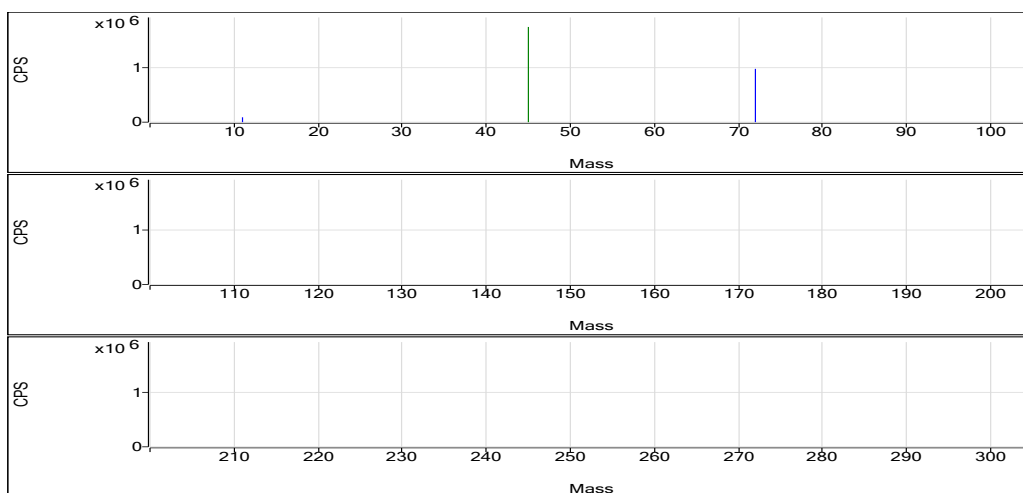
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.008	ppb	61.2	19.33	0.0000	Pulse	0.5000	3
B	11	45	No Gas	120.270	ppb	2.1	88989.55	0.0511	Pulse	0.5000	3
Se	78	115	H2	0.194	ppb	13.3	23.56	0.0000	Pulse	1.5000	3
Na	23	45	He	35131.168	ppb	0.9	9787552.98	89.3520	Analog	0.1000	3
Mg	24	45	He	7266.555	ppb	0.7	1032913.79	9.4294	Pulse	0.1000	3
Al	27	45	He	3.645	ppb	28.8	296.68	0.0027	Pulse	0.1000	3
K	39	45	He	6013.146	ppb	0.5	1163344.65	10.6200	Pulse	0.1000	3
Ca	44	45	He	30212.444	ppb	1.0	251064.39	2.2920	Pulse	0.1000	3
Ti	47	45	He	-0.063	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
V	51	45	He	4.565	ppb	4.6	8409.35	0.0768	Pulse	0.1000	3
Cr	52	45	He	0.458	ppb	19.3	3500.54	0.0320	Pulse	0.1000	3
Mn	55	45	He	28.065	ppb	2.0	32239.86	0.2943	Pulse	0.1000	3
Fe	57	45	He	17.928	ppb	17.9	950.07	0.0087	Pulse	0.1000	3
Co	59	115	He	0.022	ppb	88.4	123.34	0.0010	Pulse	0.1000	3
Ni	60	115	He	0.379	ppb	51.9	5901.36	0.0473	Pulse	0.1000	3
Cu	63	115	He	-0.471	ppb	N/A	2096.90	0.0168	Pulse	0.1000	3
Zn	66	115	He	8.275	ppb	8.0	3540.56	0.0284	Pulse	0.1000	3
As	75	115	He	16.702	ppb	2.7	4666.79	0.0374	Pulse	0.5000	3
Sr	88	115	He	360.674	ppb	1.2	593635.46	4.7611	Pulse	0.1000	3
Mo	98	115	He	5.996	ppb	2.4	9786.99	0.0785	Pulse	0.1000	3
Ag	107	115	He	0.004	ppb	87.7	36.67	0.0003	Pulse	0.1000	3
Cd	111	115	He	0.007	ppb	61.5	6.00	0.0000	Pulse	0.5000	3
Sn	120	115	He	0.026	ppb	878.5	1673.73	0.0134	Pulse	0.1000	3
Sb	121	72	He	0.171	ppb	16.1	306.68	0.0013	Pulse	0.1000	3
Ba	137	115	He	142.482	ppb	1.7	82158.12	0.6589	Pulse	0.1000	3
Tl	205	209	He	0.007	ppb	108.5	160.01	0.0009	Pulse	0.1000	3
Pb	208	209	He	0.105	ppb	19.3	1083.39	0.0063	Pulse	0.1000	3
U	238	209	He	2.292	ppb	2.5	11035.01	0.0646	Pulse	0.1000	3

Quantitation Report

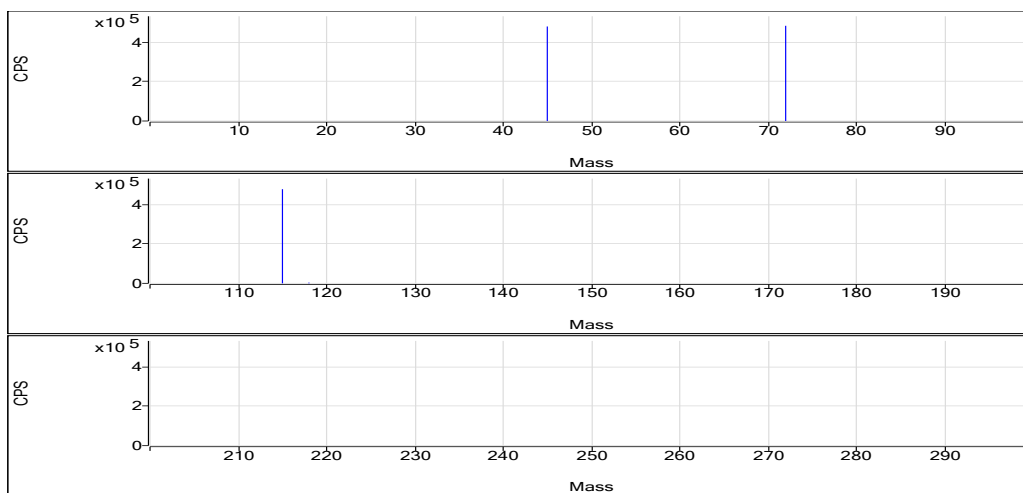
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1742454.14	1.7	104.1	Analog	0.1000	3
No Gas	Ge	72	975481.76	2.1	103.5	Pulse	0.1000	3
H2	Sc	45	478406.45	1.9	98.4	Pulse	0.1000	3
H2	Ge	72	481915.86	3.0	99.4	Pulse	0.1000	3
H2	In	115	476530.76	2.1	102.8	Pulse	0.1000	3
He	Sc	45	109544.47	0.8	100.2	Pulse	0.1000	3
He	Ge	72	239766.59	1.2	101.1	Pulse	0.1000	3
He	In	115	124692.93	0.7	101.9	Pulse	0.1000	3
He	Tb	159	280642.24	0.6	98.9	Pulse	0.1000	3
He	Bi	209	170913.55	1.0	100.7	Pulse	0.1000	3

No Gas

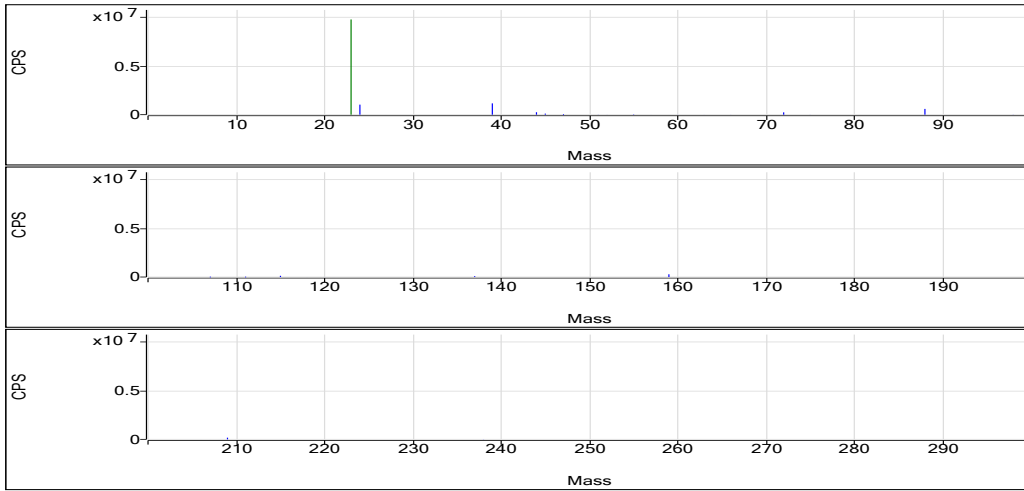


H2



Quantitation Report

He



Quantitation Report

Data File Name 038SMPL.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:34:39 PM
Sample Name 410-3144-I-1-A
Sample Type Sample
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

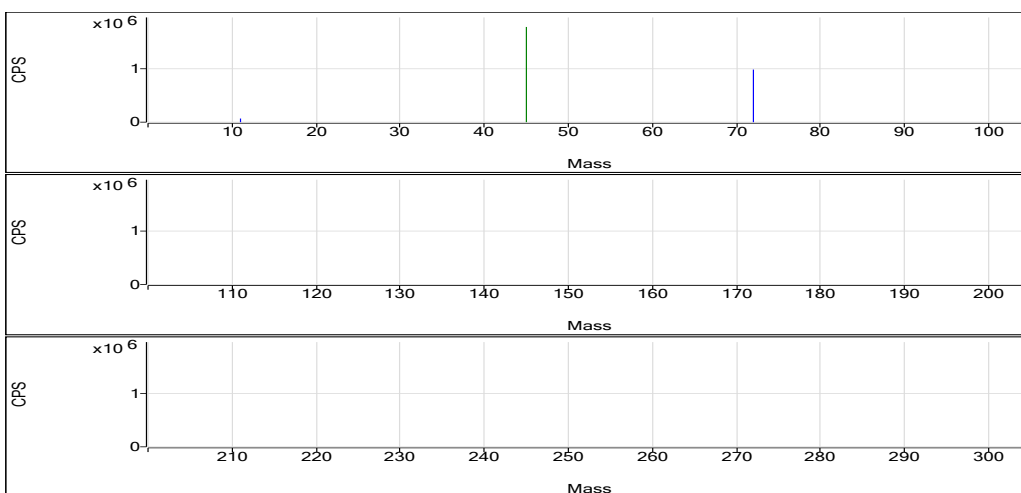
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.012	ppb	74.7	24.00	0.0000	Pulse	0.5000	3
B	11	45	No Gas	89.123	ppb	2.2	67369.93	0.0381	Pulse	0.5000	3
Se	78	115	H2	0.876	ppb	5.0	104.89	0.0002	Pulse	1.5000	3
Na	23	45	He	20796.454	ppb	1.3	5784640.74	53.0137	Analog	0.1000	3
Mg	24	45	He	7003.648	ppb	0.6	991716.03	9.0883	Pulse	0.1000	3
Al	27	45	He	1.857	ppb	59.6	193.34	0.0018	Pulse	0.1000	3
K	39	45	He	3503.495	ppb	0.2	697662.23	6.3934	Pulse	0.1000	3
Ca	44	45	He	38332.029	ppb	0.5	317237.80	2.9072	Pulse	0.1000	3
Ti	47	45	He	-0.063	ppb	N/A	3.33	0.0000	Pulse	0.1000	3
V	51	45	He	9.346	ppb	2.1	16543.21	0.1516	Pulse	0.1000	3
Cr	52	45	He	1.127	ppb	5.0	4810.94	0.0441	Pulse	0.1000	3
Mn	55	45	He	0.436	ppb	31.8	1003.41	0.0092	Pulse	0.1000	3
Fe	57	45	He	13.436	ppb	11.8	773.38	0.0071	Pulse	0.1000	3
Co	59	115	He	0.019	ppb	83.7	113.34	0.0009	Pulse	0.1000	3
Ni	60	115	He	0.704	ppb	21.3	6081.50	0.0492	Pulse	0.1000	3
Cu	63	115	He	17.253	ppb	0.3	36884.40	0.2986	Pulse	0.1000	3
Zn	66	115	He	19.488	ppb	9.8	7088.64	0.0574	Pulse	0.1000	3
As	75	115	He	2.861	ppb	6.2	842.03	0.0068	Pulse	0.5000	3
Sr	88	115	He	462.969	ppb	1.8	754830.72	6.1113	Pulse	0.1000	3
Mo	98	115	He	2.079	ppb	6.8	3360.53	0.0272	Pulse	0.1000	3
Ag	107	115	He	0.009	ppb	36.6	50.00	0.0004	Pulse	0.1000	3
Cd	111	115	He	0.012	ppb	99.5	8.00	0.0001	Pulse	0.5000	3
Sn	120	115	He	-0.056	ppb	N/A	1526.81	0.0124	Pulse	0.1000	3
Sb	121	72	He	0.101	ppb	45.6	200.01	0.0008	Pulse	0.1000	3
Ba	137	115	He	141.572	ppb	1.4	80870.30	0.6547	Pulse	0.1000	3
Tl	205	209	He	-0.015	ppb	N/A	53.33	0.0003	Pulse	0.1000	3
Pb	208	209	He	0.269	ppb	2.8	2130.16	0.0126	Pulse	0.1000	3
U	238	209	He	2.640	ppb	3.6	12603.25	0.0743	Pulse	0.1000	3

Quantitation Report

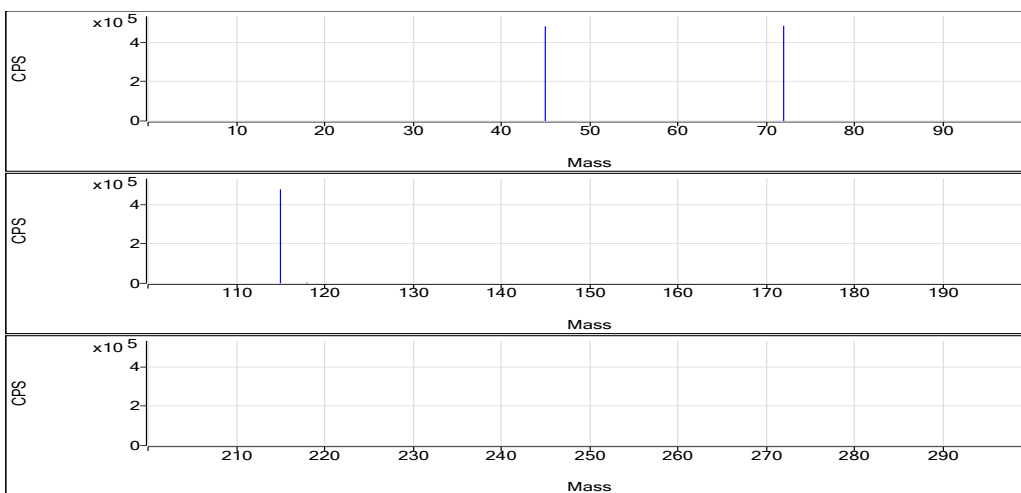
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1770357.84	0.8	105.8	Analog	0.1000	3
No Gas	Ge	72	977713.76	0.7	103.8	Pulse	0.1000	3
H2	Sc	45	478882.19	1.9	98.5	Pulse	0.1000	3
H2	Ge	72	481803.21	1.2	99.4	Pulse	0.1000	3
H2	In	115	476212.10	1.0	102.7	Pulse	0.1000	3
He	Sc	45	109121.45	0.6	99.8	Pulse	0.1000	3
He	Ge	72	240318.08	0.5	101.4	Pulse	0.1000	3
He	In	115	123532.11	1.4	100.9	Pulse	0.1000	3
He	Tb	159	278166.90	0.2	98.0	Pulse	0.1000	3
He	Bi	209	169517.73	0.2	99.9	Pulse	0.1000	3

No Gas

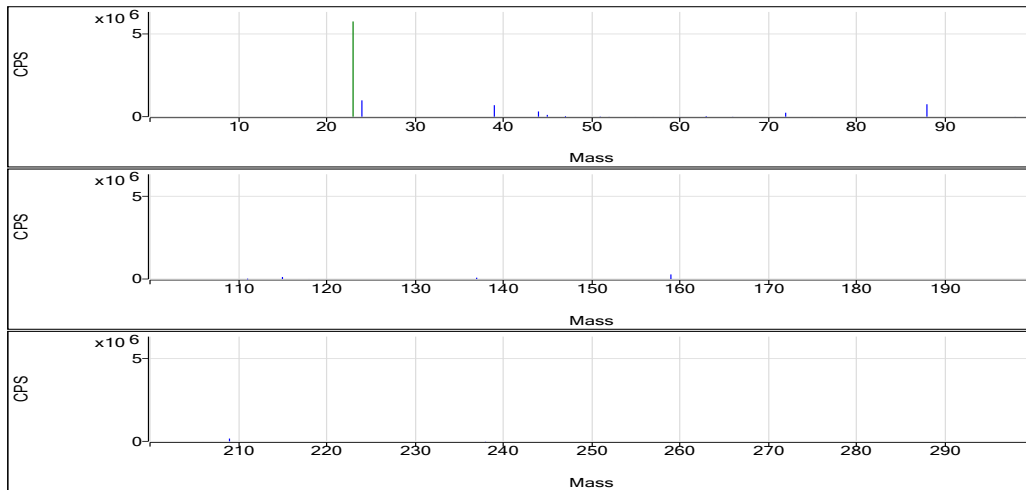


H2



Quantitation Report

He



Quantitation Report

Data File Name 039_CCV.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:36:32 PM
Sample Name ccv 64982
Sample Type CCV
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

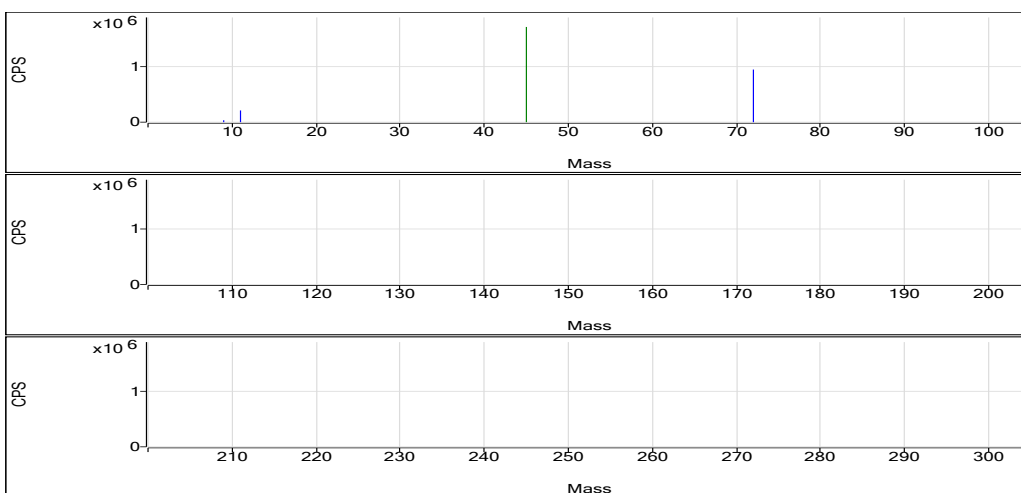
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	29.239	ppb	2.5	34530.12	0.0200	Pulse	0.5000	3
B	11	45	No Gas	292.442	ppb	3.2	212209.31	0.1231	Pulse	0.5000	3
Se	78	115	H2	29.736	ppb	1.0	3560.67	0.0074	Pulse	1.5000	3
Na	23	45	He	5021.431	ppb	1.6	1443350.55	13.0242	Analog	0.1000	3
Mg	24	45	He	4685.135	ppb	1.1	673864.65	6.0808	Pulse	0.1000	3
Al	27	45	He	4852.627	ppb	2.0	282998.73	2.5538	Pulse	0.1000	3
K	39	45	He	4686.453	ppb	1.6	929268.48	8.3857	Pulse	0.1000	3
Ca	44	45	He	4994.493	ppb	1.0	42231.85	0.3811	Pulse	0.1000	3
Ti	47	45	He	300.690	ppb	4.1	16099.34	0.1453	Pulse	0.1000	3
V	51	45	He	279.981	ppb	1.5	486043.39	4.3860	Pulse	0.1000	3
Cr	52	45	He	282.716	ppb	0.8	570614.42	5.1491	Pulse	0.1000	3
Mn	55	45	He	297.457	ppb	1.6	340681.64	3.0742	Pulse	0.1000	3
Fe	57	45	He	4961.465	ppb	1.4	194314.77	1.7535	Pulse	0.1000	3
Co	59	115	He	284.580	ppb	0.9	853195.38	6.7847	Pulse	0.1000	3
Ni	60	115	He	298.362	ppb	0.8	223943.26	1.7808	Pulse	0.1000	3
Cu	63	115	He	289.861	ppb	1.5	582524.65	4.6324	Pulse	0.1000	3
Zn	66	115	He	306.196	ppb	1.3	100569.23	0.7997	Pulse	0.1000	3
As	75	115	He	300.256	ppb	0.7	83581.29	0.6646	Pulse	0.5000	3
Sr	88	115	He	30.499	ppb	0.9	50661.06	0.4028	Pulse	0.1000	3
Mo	98	115	He	29.483	ppb	0.3	48537.73	0.3860	Pulse	0.1000	3
Ag	107	115	He	29.815	ppb	2.1	88175.88	0.7012	Pulse	0.1000	3
Cd	111	115	He	29.876	ppb	0.6	13474.50	0.1071	Pulse	0.5000	3
Sn	120	115	He	29.643	ppb	1.9	49478.78	0.3935	Pulse	0.1000	3
Sb	121	72	He	29.045	ppb	1.3	44405.09	0.1870	Pulse	0.1000	3
Ba	137	115	He	296.743	ppb	2.1	172537.24	1.3721	Pulse	0.1000	3
Tl	205	209	He	29.864	ppb	1.0	139682.04	0.8401	Pulse	0.1000	3
Pb	208	209	He	29.989	ppb	1.3	189333.65	1.1388	Pulse	0.1000	3
U	238	209	He	49.707	ppb	0.9	232561.86	1.3987	Pulse	0.1000	3

Quantitation Report

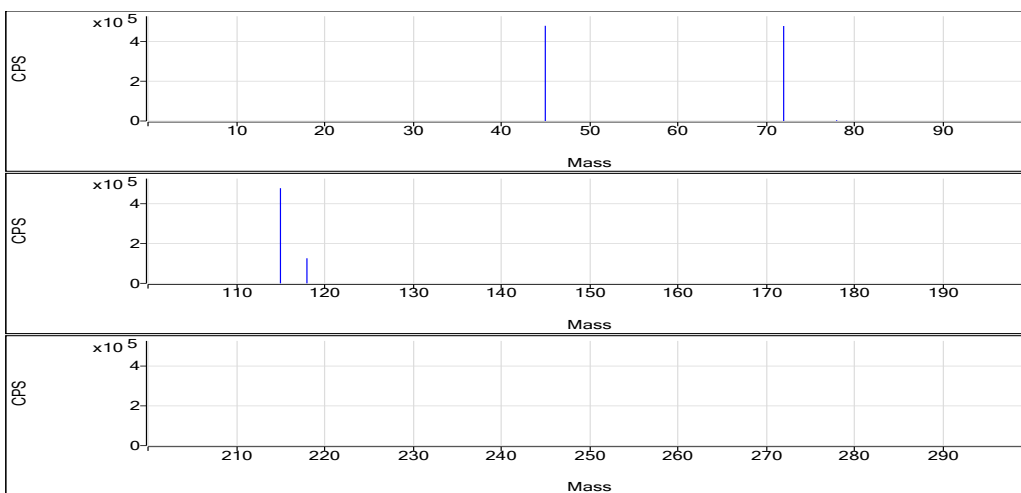
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1723972.11	1.2	103.0	Analog	0.1000	3
No Gas	Ge	72	952474.57	0.7	101.1	Pulse	0.1000	3
H2	Sc	45	478754.60	1.2	98.4	Pulse	0.1000	3
H2	Ge	72	477632.78	1.7	98.5	Pulse	0.1000	3
H2	In	115	478460.94	1.8	103.2	Pulse	0.1000	3
He	Sc	45	110823.55	0.7	101.4	Pulse	0.1000	3
He	Ge	72	237432.65	1.1	100.2	Pulse	0.1000	3
He	In	115	125762.65	1.1	102.7	Pulse	0.1000	3
He	Tb	159	281267.20	0.2	99.1	Pulse	0.1000	3
He	Bi	209	166267.13	0.9	98.0	Pulse	0.1000	3

No Gas

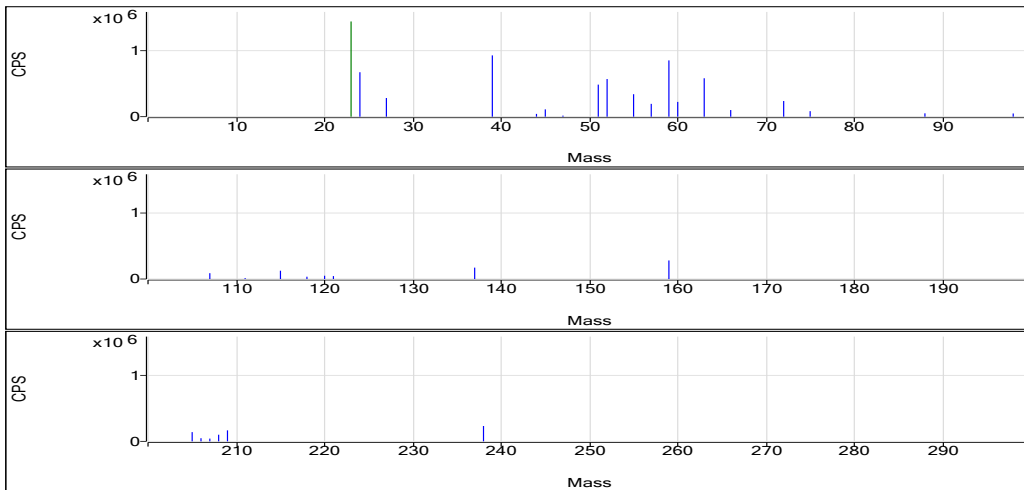


H2



Quantitation Report

He



Quantitation Report

Data File Name 040_CCB.d
Acq/Data Batch C:\Agilent\ICPMH\1\DATA\20F08A00.b
Acq Time 6/8/2020 12:38:24 PM
Sample Name ccb 58667
Sample Type CCB
Comment ---
Prep Dilution 1.0000
Auto Dilution 1.0000
Total Dilution 1.0000
Operator Name us19_usr_ins03786
Acq Mode Spectrum
Cal Title ---
Cal Type External Calibration
Last Calib 6/8/2020 11:43:27 AM
Bkg File ---
Bkg Mode Count Subtraction except for ISTD
FQ BlankFile ---
VIS Fit Point to Point

FullQuant Table

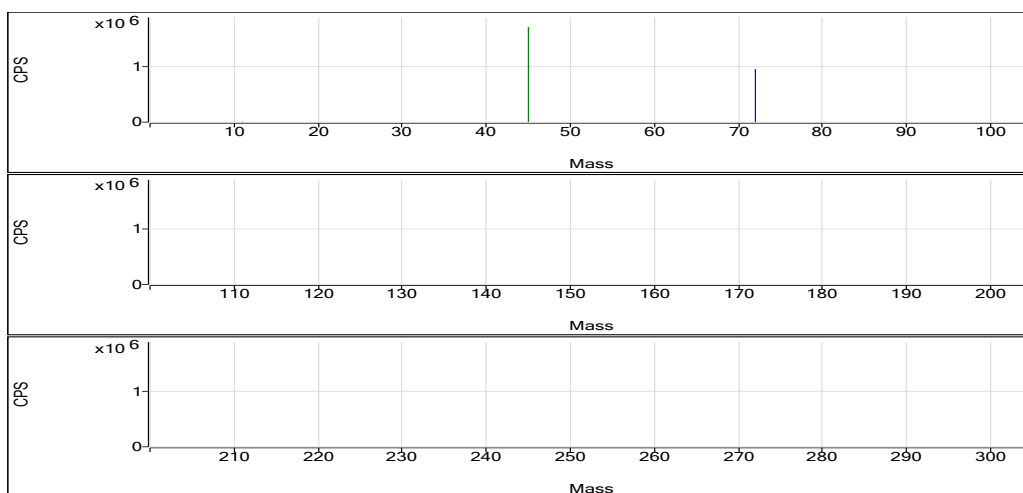
Element	Mass	ISTD	Tune Mode	Conc.	Units	RSD(%)	CPS	Ratio	Det.	Time(sec)	Rep
Be	9	45	No Gas	0.029	ppb	20.0	44.00	0.0000	Pulse	0.5000	3
B	11	45	No Gas	8.689	ppb	2.9	7638.64	0.0044	Pulse	0.5000	3
Se	78	115	H2	0.022	ppb	38.9	3.11	0.0000	Pulse	1.5000	3
Na	23	45	He	0.973	ppb	63.5	32810.17	0.2975	Pulse	0.1000	3
Mg	24	45	He	1.259	ppb	53.3	540.03	0.0049	Pulse	0.1000	3
Al	27	45	He	3.147	ppb	11.8	270.01	0.0024	Pulse	0.1000	3
K	39	45	He	17.889	ppb	68.7	57720.41	0.5232	Pulse	0.1000	3
Ca	44	45	He	28.376	ppb	24.2	523.36	0.0047	Pulse	0.1000	3
Ti	47	45	He	0.187	ppb	154.6	16.67	0.0002	Pulse	0.1000	3
V	51	45	He	0.107	ppb	41.0	776.71	0.0070	Pulse	0.1000	3
Cr	52	45	He	0.412	ppb	25.6	3433.85	0.0311	Pulse	0.1000	3
Mn	55	45	He	0.224	ppb	32.0	773.38	0.0070	Pulse	0.1000	3
Fe	57	45	He	1.477	ppb	72.9	316.68	0.0029	Pulse	0.1000	3
Co	59	115	He	0.056	ppb	67.4	223.34	0.0018	Pulse	0.1000	3
Ni	60	115	He	1.315	ppb	26.3	6545.00	0.0528	Pulse	0.1000	3
Cu	63	115	He	-0.639	ppb	N/A	1753.51	0.0141	Pulse	0.1000	3
Zn	66	115	He	1.751	ppb	7.2	1426.78	0.0115	Pulse	0.1000	3
As	75	115	He	0.102	ppb	63.7	88.00	0.0007	Pulse	0.5000	3
Sr	88	115	He	0.106	ppb	16.2	200.01	0.0016	Pulse	0.1000	3
Mo	98	115	He	0.209	ppb	8.2	340.02	0.0027	Pulse	0.1000	3
Ag	107	115	He	0.016	ppb	58.3	70.00	0.0006	Pulse	0.1000	3
Cd	111	115	He	0.013	ppb	69.3	8.67	0.0001	Pulse	0.5000	3
Sn	120	115	He	0.002	ppb	2207.0	1626.82	0.0131	Pulse	0.1000	3
Sb	121	72	He	0.537	ppb	24.9	866.72	0.0036	Pulse	0.1000	3
Ba	137	115	He	0.098	ppb	76.0	80.00	0.0006	Pulse	0.1000	3
Tl	205	209	He	0.008	ppb	169.6	163.34	0.0010	Pulse	0.1000	3
Pb	208	209	He	0.011	ppb	48.1	463.35	0.0028	Pulse	0.1000	3
U	238	209	He	0.041	ppb	38.3	203.34	0.0012	Pulse	0.1000	3

Quantitation Report

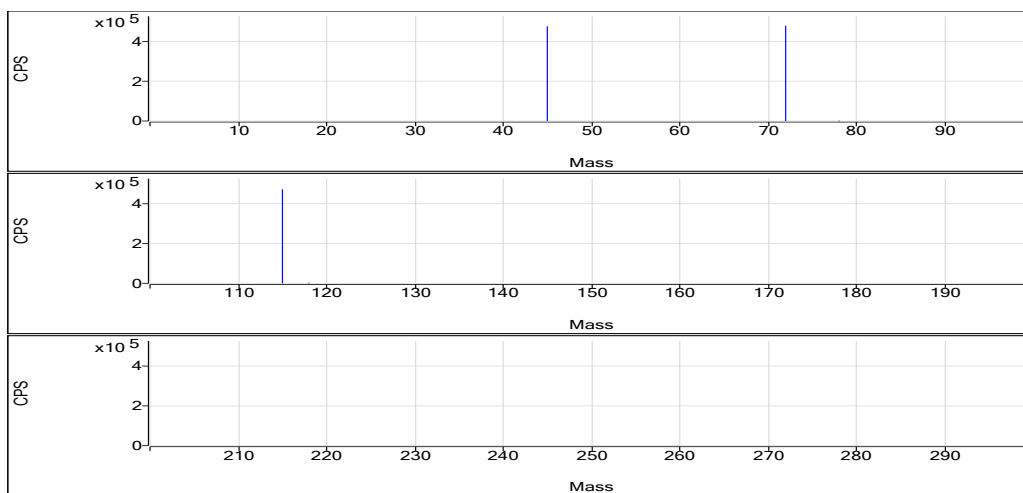
ISTD Table:

Tune Mode	Element	Mass	CPS	RSD(%)	ISTD Recovery %	Det.	Time(seq)	Rep
No Gas	Sc	45	1729935.13	1.8	103.4	Analog	0.1000	3
No Gas	Ge	72	962859.54	1.4	102.2	Pulse	0.1000	3
H2	Sc	45	478479.41	1.4	98.4	Pulse	0.1000	3
H2	Ge	72	481150.94	1.2	99.3	Pulse	0.1000	3
H2	In	115	475770.98	0.9	102.6	Pulse	0.1000	3
He	Sc	45	110302.57	1.0	100.9	Pulse	0.1000	3
He	Ge	72	238206.64	0.5	100.5	Pulse	0.1000	3
He	In	115	123999.06	0.9	101.3	Pulse	0.1000	3
He	Tb	159	278833.63	0.4	98.3	Pulse	0.1000	3
He	Bi	209	166926.94	0.7	98.3	Pulse	0.1000	3

No Gas

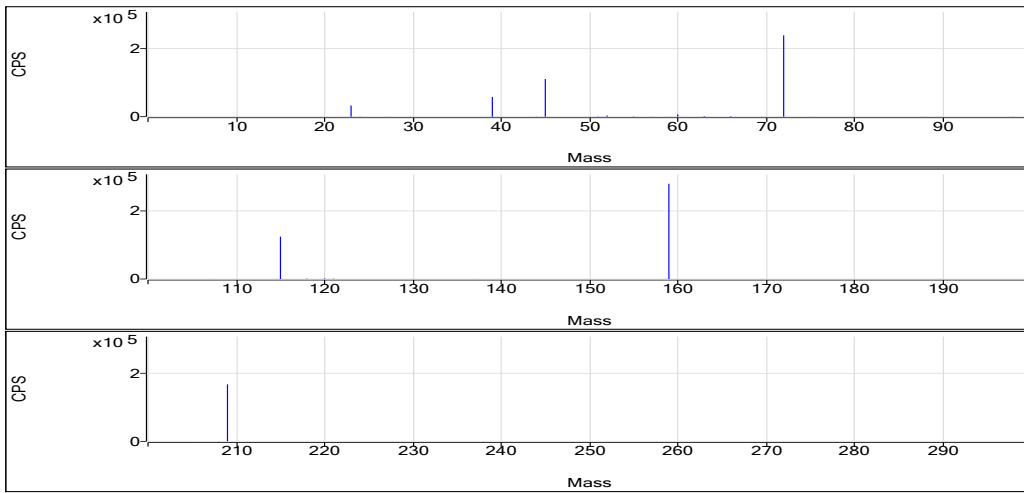


H2



Quantitation Report

He



US EPA Tune Check Report

Operator Name us19_usr_ins03786
 Acq/Data Batch C:\Agilent\ICPMH\1\DATA\~EPATune.b
 Acq. Date-Time 6/8/2020 10:37:20 AM
 Report Comment ---
 Instrument Name G8403A SG18254097

[No Gas]

Sensitivity

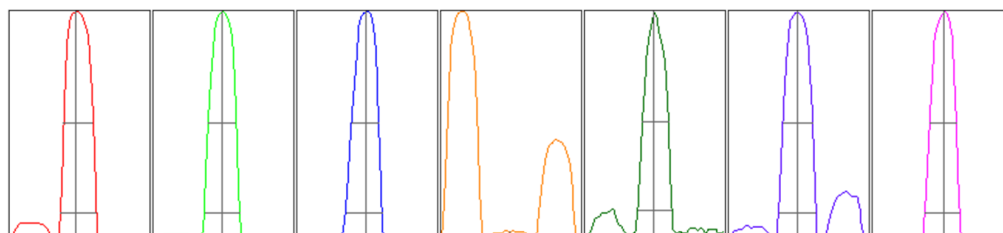
Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
7	10.00	2564	25637.82			0.368	5.000
89	10.00	5512	55121.05			0.323	5.000
205	10.00	1421	14209.12			0.747	5.000
69		5	50.90			8.082	
138		30	298.82			4.802	
70		130	1297.13			3.180	
140		3473	34728.26			0.300	

Mass	RSD% (Flag)
7	
89	
205	
69	
138	
70	
140	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	2566	2559	2561	2579	2554
89	5494	5496	5529	5510	5532
205	1434	1407	1413	1423	1427
69	6	5	5	4	5
138	29	29	32	29	31
70	130	126	125	136	131
140	3467	3462	3470	3477	3489

Integration Time [sec] 0.1

Resolution/Axis



US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
7	4165.99	6.95	6.90 - 7.10	
89	9449.77	89.00	88.90 - 89.10	
205	2483.46	205.00	204.90 - 205.10	
69	6.00	69.00	-	
138	56.95	138.00	-	
70	211.22	70.00	-	
140	6258.43	140.05	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.766	0.800	
89	0.61	0.759	0.800	
205	0.59	0.775	0.800	
69	0.71	0.808		
138	0.57	0.734		
70	0.64	0.798		
140	0.58	0.746		

Integration Time [sec] 0.1
Acquisition Time [sec] 223
Y Axis Linear

Tune Parameters**Plasma Parameters**

Plasma Mode	General Purpose	Nebulizer Gas	1.05 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.10 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	10.0 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-115 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9988	QP Bias	-3.0 V
Mass Offset	124	Axis Offset	0.07		

Hardware Settings**Torch**

Torch H	-0.2 mm	Torch V	0.0 mm
---------	---------	---------	--------

EM

Discriminator	4.3 mV	Analog HV	2202 V	Pulse HV	1455 V
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GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1

SDG No.: _____

Project: Kirtland AFB

Client Sample ID	Lab Sample ID
<u>GWVA2-2023</u>	<u>410-3144-1</u>
<u>GWVA2-6023</u>	<u>410-3144-2</u>
<u>GWK015-2023</u>	<u>410-3144-3</u>
<u>GWK016-2023</u>	<u>410-3144-4</u>
<u>GWK003-2023</u>	<u>410-3144-5</u>

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GWVA2-2023 Lab Sample ID: 410-3144-1
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.090	0.10	0.090	0.040	mg/L	U		1	353.2
Sulfide	1.5	2.0	1.5	0.70	mg/L	U		1	SM 4500 S2_F
Ammonia-N	0.60	0.75	0.60	0.25	mg/L	U		1	SM4500 NH3
Bicarbonate Alkalinity as CaCO3	100	8.0	6.0	8.0	mg/L			1	SM2320 B
Carbonate Alkalinity as CaCO3	6.0	8.0	6.0	8.0	mg/L	U		1	SM2320 B
Total Alkalinity as CaCO3 to pH 4.5	100	8.0	6.0	8.0	mg/L			1	SM2320 B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GWVA2-6023 Lab Sample ID: 410-3144-2
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 11:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.090	0.10	0.090	0.040	mg/L	U		1	353.2
Sulfide	1.5	2.0	1.5	0.70	mg/L	U		1	SM 4500 S2 F
Ammonia-N	0.60	0.75	0.60	0.25	mg/L	U		1	SM4500 NH3
Bicarbonate Alkalinity as CaCO3	100	8.0	6.0	8.0	mg/L			1	SM2320 B
Carbonate Alkalinity as CaCO3	6.0	8.0	6.0	8.0	mg/L	U		1	SM2320 B
Total Alkalinity as CaCO3 to pH 4.5	100	8.0	6.0	8.0	mg/L			1	SM2320 B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GWK015-2023 Lab Sample ID: 410-3144-3
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:00
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.090	0.10	0.090	0.040	mg/L	U	J1	1	353.2
Sulfide	1.5	2.0	1.5	0.70	mg/L	U		1	SM 4500 S2_F
Ammonia-N	0.60	0.75	0.60	0.25	mg/L	U		1	SM4500 NH3
Bicarbonate Alkalinity as CaCO3	93	8.0	6.0	8.0	mg/L			1	SM2320 B
Carbonate Alkalinity as CaCO3	6.0	8.0	6.0	8.0	mg/L	U		1	SM2320 B
Total Alkalinity as CaCO3 to pH 4.5	93	8.0	6.0	8.0	mg/L			1	SM2320 B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GWK016-2023 Lab Sample ID: 410-3144-4
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 09:30
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.090	0.10	0.090	0.040	mg/L	U		1	353.2
Sulfide	1.5	2.0	1.5	0.70	mg/L	U		1	SM 4500 S2_F
Ammonia-N	0.86	1.1	0.86	0.36	mg/L	U		1	SM4500 NH3
Bicarbonate Alkalinity as CaCO3	94	8.0	6.0	8.0	mg/L			1	SM2320 B
Carbonate Alkalinity as CaCO3	6.0	8.0	6.0	8.0	mg/L	U		1	SM2320 B
Total Alkalinity as CaCO3 to pH 4.5	94	8.0	6.0	8.0	mg/L			1	SM2320 B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: GWK003-2023 Lab Sample ID: 410-3144-5
 Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG ID.: _____
 Matrix: Water Date Sampled: 06/02/2020 10:40
 Reporting Basis: WET Date Received: 06/03/2020 10:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.48	0.10	0.090	0.040	mg/L			1	353.2
Sulfide	1.5	2.0	1.5	0.70	mg/L	U		1	SM 4500 S2_F
Ammonia-N	0.60	0.75	0.60	0.25	mg/L	U		1	SM4500 NH3
Bicarbonate Alkalinity as CaCO3	110	8.0	6.0	8.0	mg/L			1	SM2320 B
Carbonate Alkalinity as CaCO3	6.0	8.0	6.0	8.0	mg/L	U		1	SM2320 B
Total Alkalinity as CaCO3 to pH 4.5	110	8.0	6.0	8.0	mg/L			1	SM2320 B

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 Analyst: P684 Batch Start Date: 06/08/2020
 Reporting Units: mg/L Analytical Batch No.: 11207

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
18	ICV	09:34	Nitrate Nitrite as N	2.63	2.50	105	90-110		WC_FL_CCV_NO3_0001 3
19	ICB	09:35	Nitrate Nitrite as N	0.090				U	
65	CCV	11:28	Nitrate Nitrite as N	2.39	2.50	95	90-110		WC_FL_CCV_NO3_0001 3
66	CCB	11:29	Nitrate Nitrite as N	0.090				U	
77	CCV	11:43	Nitrate Nitrite as N	2.68	2.50	107	90-110		WC_FL_CCV_NO3_0001 3
78	CCB	11:44	Nitrate Nitrite as N	0.090				U	
89	CCV	11:58	Nitrate Nitrite as N	2.70	2.50	108	90-110		WC_FL_CCV_NO3_0001 3
90	CCB	11:59	Nitrate Nitrite as N	0.090				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 Analyst: DI9Q Batch Start Date: 06/06/2020
 Reporting Units: mg/L Analytical Batch No.: 11240

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
95	CCV	04:40	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
96	CCB	04:47	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
106	CCV	05:53	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
107	CCB	05:59	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
118	CCV	07:12	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
119	CCB	07:19	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
130	CCV	08:34	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
131	CCB	08:41	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
142	CCV	09:58	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	
			Total Alkalinity as CaCO3 to pH 4.5	6.0				U	
143	CCB	10:05	Bicarbonate Alkalinity as CaCO3	6.0				U	
			Carbonate Alkalinity as CaCO3	6.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1
 SDG No.: _____
 Analyst: DI9Q Batch Start Date: 06/06/2020
 Reporting Units: mg/L Analytical Batch No.: 11240

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
143	CCB	10:05	Total Alkalinity as CaCO ₃ to pH 4.5	6.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 11207 Date: 06/08/2020 11:31							
353.2	MB 410-11207/67	Nitrate Nitrite as N	0.090	U	mg/L	0.10	1
Batch ID: 11194 Date: 06/08/2020 12:35							
SM 4500 S2 F	MB 410-11194/1	Sulfide	1.5	U	mg/L	2.0	1
Batch ID: 11240 Date: 06/06/2020 04:53							
SM2320 B	MB 410-11240/97	Bicarbonate Alkalinity as CaCO3	6.0	U	mg/L	8.0	1
SM2320 B	MB 410-11240/97	Carbonate Alkalinity as CaCO3	6.0	U	mg/L	8.0	1
SM2320 B	MB 410-11240/97	Total Alkalinity as CaCO3 to pH 4.5	6.0	U	mg/L	8.0	1
Batch ID: 11240 Date: 06/06/2020 06:40							
SM2320 B	MB 410-11240/113	Bicarbonate Alkalinity as CaCO3	6.0	U	mg/L	8.0	1
SM2320 B	MB 410-11240/113	Carbonate Alkalinity as CaCO3	6.0	U	mg/L	8.0	1
SM2320 B	MB 410-11240/113	Total Alkalinity as CaCO3 to pH 4.5	6.0	U	mg/L	8.0	1
Batch ID: 12212 Date: 06/11/2020 09:33 Prep Batch: 12163 Date: 06/11/2020 08:39							
SM4500 NH3	MB 410-12163/1-A	Ammonia-N	0.60	U	mg/L	0.75	1

FORM III-IN

5-IN
 MATRIX SPIKE SAMPLE RECOVERY
 GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 11207 Date: 06/08/2020 11:54											
353.2	410-3144-3	Nitrate Nitrite as N	0.090	U	mg/L						J1
353.2	410-3144-3 MS	Nitrate Nitrite as N	1.28		mg/L	1.00	128	90-110			J1

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result Unit	RPD	RPD Limit	Qual
Batch ID: 11207 Date: 06/08/2020 11:53							
353.2	GWK015-2023	410-3144-3	Nitrate Nitrite as N	0.090 mg/L			U
353.2	GWK015-2023	410-3144-3 DU	Nitrate Nitrite as N	0.090 mg/L	NC	10	U
Batch ID: 12212 Date: 06/11/2020 09:33 Prep Batch: 12163 Date: 06/11/2020 08:39							
SM4500 NH3	GWK016-2023	410-3144-4	Ammonia-N	0.86 mg/L			U
SM4500 NH3	GWK016-2023	410-3144-4 DU	Ammonia-N	0.86 mg/L	NC	6	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 11207 Date: 06/08/2020 11:32											
						LCS Source: WC_FL_LCS_NO3_00013					
353.2	LCS 410-11207/68	Nitrate Nitrite as N	2.53		mg/L	2.50	101	90-110			
Batch ID: 11194 Date: 06/08/2020 12:35											
						LCS Source: WC_S-2_20_00021					
SM 4500 S2 F	LCS 410-11194/2	Sulfide	19.0		mg/L	20.1	95	80-120			
Batch ID: 11240 Date: 06/06/2020 05:00											
						LCS Source: WC_Alk_LCS_00002					
SM2320 B	LCS 410-11240/98	Total Alkalinity as CaCO3 to pH 4.5	169		mg/L	189	89	82-106			
Batch ID: 11240 Date: 06/06/2020 06:48											
						LCS Source: WC_Alk_LCS_00002					
SM2320 B	LCS 410-11240/114	Total Alkalinity as CaCO3 to pH 4.5	172		mg/L	189	91	82-106	4	10	
Batch ID: 12212 Date: 06/11/2020 09:33 Prep Batch: 12163 Date: 06/11/2020 08:39											
						LCS Source: WC_500mg/LNH3_00001					
SM4500 NH3	LCS 410-12163/2-A	Ammonia-N	497		mg/L	500	99	93-100	1	5	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-3144-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 11240 Date: 06/06/2020 06:55			LCSO Source: WC_Alk_LCS_00002								
SM2320 B	LCSD 410-11240/115	Total Alkalinity as CaCO3 to pH 4.5	177		mg/L	189	94	82-106	4	10	
Batch ID: 12212 Date: 06/11/2020 09:33			Prep Batch: 12163 Date: 06/11/2020 08:39								
			LCSO Source: WC_500mg/LNH3_00001								
SM4500 NH3	LCSD 410-12163/3-A	Ammonia-N	494		mg/L	500	99	93-100	1	5	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: 19369
 Method: 353.2 DL Date: 11/26/2018 23:20

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate Nitrite as N		0.1	0.04

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: 19369
 Method: 353.2 XMDL Date: 11/26/2018 08:25

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.1	0.04

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: NOEQUIP
 Method: SM 4500 S2 F DL Date: 05/25/2018 19:58

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		2	0.7

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: NOEQUIP
 Method: SM 4500 S2 F XMDL Date: 05/25/2018 08:49

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		2	0.7

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: NOEQUIP
 Method: SM4500 NH3 DL Date: 05/25/2018 09:49
 Prep Method: SM 4500 NH3 B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia-N		0.75	0.25

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM4500 NH3 XMDL Date: 12/28/2018 15:39

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia-N		0.75	0.25

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: 19074
 Method: SM2320 B DL Date: 06/03/2019 10:35

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Bicarbonate Alkalinity as CaCO ₃		8	2.6
Carbonate Alkalinity as CaCO ₃		8	2.6
Total Alkalinity as CaCO ₃ to pH 4.5		8	2.6

9-IN
 CALIBRATION BLANK DETECTION LIMITS
 GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-3144-1
 SDG Number: _____
 Matrix: Water Instrument ID: 19074
 Method: SM2320 B XMDL Date: 06/03/2019 08:47

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Bicarbonate Alkalinity as CaCO ₃		8	2.6
Carbonate Alkalinity as CaCO ₃		8	2.6
Total Alkalinity as CaCO ₃ to pH 4.5		8	2.6

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-3144-1

SDG No.: _____

Prep Method: SM 4500 NH3 B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 410-12163/1-A	06/11/2020 08:39	12163		500	500
LCS 410-12163/2-A	06/11/2020 08:39	12163		10	500
LCSD 410-12163/3-A	06/11/2020 08:39	12163		10	500
410-3144-4	06/11/2020 08:39	12163		350	500
410-3144-4 DU	06/11/2020 08:39	12163		350	500
410-3144-3	06/11/2020 08:39	12163		500	500
410-3144-2	06/11/2020 08:39	12163		500	500
410-3144-1	06/11/2020 08:39	12163		500	500
410-3144-5	06/11/2020 08:39	12163		500	500

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19369Analysis Method: 353.2Start Date: 06/08/2020 09:13End Date: 06/08/2020 12:37

Lab Sample Id	D/F	Type	Time	Analytes																											
				N	N	O	3	2																							
ZZZZZZ			09:13																												
ZZZZZZ			09:14																												
ZZZZZZ			09:15																												
IC 410-11207/4			09:16	X																											
IC 410-11207/5			09:18	X																											
IC 410-11207/6			09:19	X																											
IC 410-11207/7			09:20	X																											
IC 410-11207/8			09:21	X																											
IC 410-11207/9			09:23	X																											
IC 410-11207/10			09:24	X																											
ZZZZZZ			09:25																												
ZZZZZZ			09:26																												
RINSE 410-11207/13			09:28																												
ZZZZZZ			09:29																												
RINSE 410-11207/15			09:30																												
ZZZZZZ			09:31																												
RINSE 410-11207/17			09:33																												
ICV 410-11207/18	1		09:34	X																											
ICB 410-11207/19	1		09:35	X																											
ZZZZZZ			09:36																												
ZZZZZZ			09:38																												
ZZZZZZ			09:39																												
ZZZZZZ			09:40																												
ZZZZZZ			09:41																												
ZZZZZZ			09:43																												
ZZZZZZ			09:44																												
ZZZZZZ			09:45																												
ZZZZZZ			09:46																												
ZZZZZZ			09:48																												
CCV2 410-11207/30			09:49																												
CCB 410-11207/31			09:50																												
ZZZZZZ			09:51																												
ZZZZZZ			09:53																												
ZZZZZZ			09:54																												
ZZZZZZ			09:55																												
ZZZZZZ			09:56																												
ZZZZZZ			09:58																												
ZZZZZZ			09:59																												
ZZZZZZ			10:00																												

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: 19369 Analysis Method: 353.2
 Start Date: 06/08/2020 09:13 End Date: 06/08/2020 12:37

Lab Sample Id	D/F	Type	Time	Analytes																	
				N	N	O	3	2													
ZZZZZZ			10:01																		
ZZZZZZ			10:03																		
CCV2 410-11207/42			10:04																		
CCB 410-11207/43			10:05																		
ZZZZZZ			10:06																		
ZZZZZZ			10:08																		
ZZZZZZ			10:09																		
ZZZZZZ			10:10																		
ZZZZZZ			10:11																		
ZZZZZZ			10:13																		
CCV2 410-11207/50			10:14																		
CCB 410-11207/51			10:15																		
ZZZZZZ			10:16																		
RINSE 410-11207/53			10:18																		
ZZZZZZ			10:19																		
RINSE 410-11207/55			10:20																		
ZZZZZZ			10:54																		
ZZZZZZ			10:55																		
CCV2 410-11207/58			10:57																		
CCB 410-11207/59			10:58																		
ZZZZZZ			10:59																		
RINSE 410-11207/61			11:00																		
ZZZZZZ			11:02																		
RINSE 410-11207/63			11:03																		
ZZZZZZ			11:27																		
CCV2 410-11207/65	1		11:28	X																	
CCB 410-11207/66	1		11:29	X																	
MB 410-11207/67	1	T	11:31	X																	
LCS 410-11207/68	1	T	11:32	X																	
ZZZZZZ			11:33																		
ZZZZZZ			11:34																		
ZZZZZZ			11:36																		
ZZZZZZ			11:37																		
ZZZZZZ			11:38																		
ZZZZZZ			11:39																		
ZZZZZZ			11:41																		
ZZZZZZ			11:42																		
CCV2 410-11207/77	1		11:43	X																	
CCB 410-11207/78	1		11:44	X																	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19369 Analysis Method: 353.2

Start Date: 06/08/2020 09:13 End Date: 06/08/2020 12:37

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				N	N	O	3	2																							
ZZZZZZ			11:46																												
ZZZZZZ			11:47																												
ZZZZZZ			11:48																												
410-3144-1		1	T 11:49	X																											
410-3144-2		1	T 11:51	X																											
410-3144-3		1	T 11:52	X																											
410-3144-3 DU		1	T 11:53	X																											
410-3144-3 MS		1	T 11:54	X																											
410-3144-4		1	T 11:56	X																											
410-3144-5		1	T 11:57	X																											
CCV2 410-11207/89		1	11:58	X																											
CCB 410-11207/90		1	11:59	X																											
ZZZZZZ			12:01																												
ZZZZZZ			12:02																												
ZZZZZZ			12:03																												
ZZZZZZ			12:04																												
ZZZZZZ			12:06																												
ZZZZZZ			12:07																												
ZZZZZZ			12:08																												
CCV2 410-11207/98			12:09																												
CCB 410-11207/99			12:11																												
ZZZZZZ			12:12																												
RINSE 410-11207/101			12:13																												
ZZZZZZ			12:14																												
RINSE 410-11207/103			12:16																												
ZZZZZZ			12:28																												
ZZZZZZ			12:29																												
CCV2 410-11207/106			12:30																												
CCB 410-11207/107			12:32																												
ZZZZZZ			12:33																												
RINSE 410-11207/109			12:34																												
ZZZZZZ			12:35																												
RINSE 410-11207/111			12:37																												

Prep Types: _____
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: NOEQUIP Analysis Method: SM 4500 S2 F
 Start Date: 06/08/2020 12:35 End Date: 06/08/2020 12:35

Lab Sample Id	D/F	T Y P e	Time	Analytes																			
				S 2																			
MB 410-11194/1	1	T	12:35	X																			
LCS 410-11194/2	1	T	12:35	X																			
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
410-3144-1	1	T	12:35	X																			
410-3144-2	1	T	12:35	X																			
410-3144-3	1	T	12:35	X																			
410-3144-4	1	T	12:35	X																			
410-3144-5	1	T	12:35	X																			
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				
ZZZZZZ			12:35																				

Prep Types: _____
 T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: NOEQUIP Analysis Method: SM4500 NH3
 Start Date: 06/11/2020 09:33 End Date: 06/11/2020 09:33

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				NH3																											
MB 410-12163/1-A	1	T	09:33	X																											
LCS 410-12163/2-A	1	T	09:33	X																											
LCSD 410-12163/3-A	1	T	09:33	X																											
410-3144-4	1	T	09:33	X																											
410-3144-4 DU	1	T	09:33	X																											
410-3144-3	1	T	09:33	X																											
410-3144-2	1	T	09:33	X																											
410-3144-1	1	T	09:33	X																											
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
410-3144-5	1	T	09:33	X																											
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												
ZZZZZZ			09:33																												

Prep Types: _____
 T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19074 Analysis Method: SM2320 B

Start Date: 06/05/2020 19:42 End Date: 06/06/2020 12:03

Lab Sample Id	D/F	Type	Time	Analytes															
				A l k	B A L K C C	C A r A l k													
ZZZZZZ			19:42																
ZZZZZZ			19:45																
ZZZZZZ			19:49																
ZZZZZZ			19:54																
ZZZZZZ			19:58																
ZZZZZZ			20:03																
ZZZZZZ			20:07																
ZZZZZZ			20:12																
ZZZZZZ			20:17																
ZZZZZZ			20:21																
ZZZZZZ			20:26																
ZZZZZZ			20:30																
ZZZZZZ			20:33																
ZZZZZZ			20:38																
ZZZZZZ			20:42																
ZZZZZZ			20:46																
ZZZZZZ			20:50																
ZZZZZZ			20:55																
ZZZZZZ			21:00																
ZZZZZZ			21:04																
ZZZZZZ			21:09																
ZZZZZZ			21:13																
ZZZZZZ			21:18																
ZZZZZZ			21:22																
ZZZZZZ			21:26																
ZZZZZZ			21:31																
ZZZZZZ			21:35																
ZZZZZZ			21:39																
ZZZZZZ			21:44																
ZZZZZZ			21:48																
ZZZZZZ			21:52																
CCB 410-11240/32			21:58																
CCB 410-11240/33			22:05																
CCB 410-11240/34			22:11																
ZZZZZZ			22:17																
ZZZZZZ			22:25																
ZZZZZZ			22:29																
ZZZZZZ			22:36																

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19074 Analysis Method: SM2320 B

Start Date: 06/05/2020 19:42 End Date: 06/06/2020 12:03

Lab Sample Id	D/F	T y p e	Time	Analytes																			
				A l k	B A L K C C	C A R A l k																	
ZZZZZZ			22:43																				
ZZZZZZ			22:49																				
ZZZZZZ			22:57																				
ZZZZZZ			23:04																				
ZZZZZZ			23:11																				
ZZZZZZ			23:18																				
ZZZZZZ			23:21																				
CCB 410-11240/46			23:28																				
ZZZZZZ			23:36																				
ZZZZZZ			23:43																				
ZZZZZZ			23:50																				
ZZZZZZ			23:58																				
ZZZZZZ			00:05																				
ZZZZZZ			00:13																				
ZZZZZZ			00:20																				
ZZZZZZ			00:27																				
ZZZZZZ			00:33																				
ZZZZZZ			00:41																				
ZZZZZZ			00:44																				
CCB 410-11240/58			00:51																				
ZZZZZZ			00:55																				
ZZZZZZ			01:03																				
ZZZZZZ			01:10																				
ZZZZZZ			01:18																				
ZZZZZZ			01:26																				
ZZZZZZ			01:33																				
ZZZZZZ			01:41																				
ZZZZZZ			01:49																				
ZZZZZZ			01:56																				
ZZZZZZ			02:03																				
ZZZZZZ			02:06																				
CCB 410-11240/70			02:13																				
ZZZZZZ			02:21																				
ZZZZZZ			02:28																				
ZZZZZZ			02:35																				
ZZZZZZ			02:42																				
ZZZZZZ			02:49																				
ZZZZZZ			02:57																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: 19074 Analysis Method: SM2320 B
 Start Date: 06/05/2020 19:42 End Date: 06/06/2020 12:03

Lab Sample Id	D/F	T y p e	Time	Analytes															
				A l k	B A L K C C	C A r A l k													
ZZZZZZ			03:04																
ZZZZZZ			03:11																
ZZZZZZ			03:19																
ZZZZZZ			03:26																
ZZZZZZ			03:30																
CCB 410-11240/82			03:37																
ZZZZZZ			03:45																
ZZZZZZ			03:48																
CCB 410-11240/85			03:55																
CCV 410-11240/86			03:59																
CCB 410-11240/87			04:06																
ZZZZZZ			04:09																
ZZZZZZ			04:14																
ZZZZZZ			04:19																
ZZZZZZ			04:23																
ZZZZZZ			04:28																
ZZZZZZ			04:32																
ZZZZZZ			04:36																
CCV 410-11240/95	1		04:40	X	X	X													
CCB 410-11240/96	1		04:47	X	X	X													
MB 410-11240/97	1	T	04:53	X	X	X													
LCS 410-11240/98	1	T	05:00	X	X	X													
ZZZZZZ			05:04																
ZZZZZZ			05:11																
ZZZZZZ			05:19																
ZZZZZZ			05:26																
ZZZZZZ			05:34																
ZZZZZZ			05:41																
ZZZZZZ			05:49																
CCV 410-11240/106	1		05:53	X	X	X													
CCB 410-11240/107	1		05:59	X	X	X													
ZZZZZZ			06:06																
ZZZZZZ			06:13																
ZZZZZZ			06:19																
ZZZZZZ			06:26																
ZZZZZZ			06:34																
MB 410-11240/113	1	T	06:40	X	X	X													
LCS 410-11240/114	1	T	06:48	X	X	X													

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1
 SDG No.: _____
 Instrument ID: 19074 Analysis Method: SM2320 B
 Start Date: 06/05/2020 19:42 End Date: 06/06/2020 12:03

Lab Sample Id	D/F	T y p e	Time	Analytes															
				A l k	B A L K C C	C A R A l k													
LCSD 410-11240/115	1	T	06:55	X	X	X													
ZZZZZZ			07:01																
ZZZZZZ			07:08																
CCV 410-11240/118	1		07:12	X	X	X													
CCB 410-11240/119	1		07:19	X	X	X													
ZZZZZZ			07:23																
ZZZZZZ			07:30																
ZZZZZZ			07:37																
ZZZZZZ			07:45																
ZZZZZZ			07:54																
ZZZZZZ			08:01																
ZZZZZZ			08:08																
ZZZZZZ			08:15																
ZZZZZZ			08:22																
ZZZZZZ			08:30																
CCV 410-11240/130	1		08:34	X	X	X													
CCB 410-11240/131	1		08:41	X	X	X													
ZZZZZZ			08:49																
ZZZZZZ			08:56																
ZZZZZZ			09:04																
ZZZZZZ			09:11																
ZZZZZZ			09:18																
410-3144-3	1	T	09:25	X	X	X													
410-3144-5	1	T	09:33	X	X	X													
410-3144-4	1	T	09:40	X	X	X													
410-3144-1	1	T	09:47	X	X	X													
410-3144-2	1	T	09:54	X	X	X													
CCV 410-11240/142	1		09:58	X	X	X													
CCB 410-11240/143	1		10:05	X	X	X													
ZZZZZZ			10:12																
ZZZZZZ			10:18																
ZZZZZZ			10:26																
ZZZZZZ			10:31																
ZZZZZZ			10:38																
ZZZZZZ			10:43																
ZZZZZZ			10:51																
ZZZZZZ			10:59																
ZZZZZZ			11:06																

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-3144-1

SDG No.: _____

Instrument ID: 19074 Analysis Method: SM2320 B

Start Date: 06/05/2020 19:42 End Date: 06/06/2020 12:03

Lab Sample Id	D/F	T Y P e	Time	Analytes																			
				A l k	B A L K C C	C A r A l k																	
ZZZZZZ			11:13																				
CCV 410-11240/154			11:16																				
CCB 410-11240/155			11:23																				
ZZZZZZ			11:30																				
ZZZZZZ			11:37																				
ZZZZZZ			11:45																				
ZZZZZZ			11:53																				
CCV 410-11240/160			11:56																				
CCB 410-11240/161			12:03																				

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11207 Batch Start Date: 06/08/20 09:13 Batch Analyst: Cornelius, Ashlynn MBatch Method: 353.2 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC_FL_CCV_NO3 00013	WC_FL_LCS_NO3 00013	WC_FL_SpK_NO3 00013	
ICV 410-11207/18		353.2				# mL			
CCV2 410-11207/65		353.2				# mL			
LCS 410-11207/68		353.2					# mL		
CCV2 410-11207/77		353.2				# mL			
410-3144-J-3 MS	GWK015-2023	353.2	T	10 mL	10 mL			0.5 mL	
CCV2 410-11207/89		353.2				# mL			

Batch Notes

Batch Notes	
Buffer Reagent ID	63771
Carrier Identification	DI Water
Color Reagent ID	87672

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

353.2

Page 1 of 1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11194 Batch Start Date: 06/08/20 12:35 Batch Analyst: Hibner, Susan E

Batch Method: SM 4500 S2 F Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolumel	InitialAmount	FinalAmount
MB 410-11194/1		SM 4500 S2 F		0 mL	10.1 mL	10 mL	10.1 mL	200 mL	200 mL
LCS 410-11194/2		SM 4500 S2 F		0 mL	10.45 mL	20 mL	10.45 mL	200 mL	200 mL
410-3144-E-1	GWVA2-2023	SM 4500 S2 F	T	0 mL	10 mL	10 mL	10 mL	200 mL	200 mL
410-3144-E-2	GWVA2-6023	SM 4500 S2 F	T	0 mL	10.1 mL	10 mL	10.1 mL	200 mL	200 mL
410-3144-E-3	GWK015-2023	SM 4500 S2 F	T	0 mL	9.95 mL	10 mL	9.95 mL	200 mL	200 mL
410-3144-E-4	GWK016-2023	SM 4500 S2 F	T	0 mL	10.05 mL	10 mL	10.05 mL	200 mL	200 mL
410-3144-E-5	GWK003-2023	SM 4500 S2 F	T	0 mL	9.9 mL	10 mL	9.9 mL	200 mL	200 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	WC_S-2_20 00021					
MB 410-11194/1		SM 4500 S2 F							
LCS 410-11194/2		SM 4500 S2 F		200 mL					
410-3144-E-1	GWVA2-2023	SM 4500 S2 F	T						
410-3144-E-2	GWVA2-6023	SM 4500 S2 F	T						
410-3144-E-3	GWK015-2023	SM 4500 S2 F	T						
410-3144-E-4	GWK016-2023	SM 4500 S2 F	T						
410-3144-E-5	GWK003-2023	SM 4500 S2 F	T						

Batch Notes	
Hydrochloric Acid ID	315672 p.29
Iodine ID	315672 p.28
Normality of Iodine Solution	.0249 N
Sodium Thiosulfate ID	315672 p.32
Sodium Hydroxide ID	284547 p.72
Nominal Amount Used	200 mL
Starch Reagent ID	J289-06
Normality of First Titrant	.0249 N
Zinc Acetate Buffer ID	2908A51

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM 4500 S2 F

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 12163 Batch Start Date: 06/11/20 08:39 Batch Analyst: Bunch, Yolunder Y

Batch Method: SM 4500 NH3 B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Final pH	AdjustedpH	WC_500mg/LNH3 00001	
MB 410-12163/1		SM 4500 NH3 B, SM4500 NH3		500 mL	500 mL	9.5 SU	9.5 SU		
LCS 410-12163/2		SM 4500 NH3 B, SM4500 NH3		10 mL	500 mL	9.5 SU	9.5 SU	10 mL	
LCSD 410-12163/3		SM 4500 NH3 B, SM4500 NH3		10 mL	500 mL	9.5 SU	9.5 SU	10 mL	
410-3144-D-4	GWK016-2023	SM 4500 NH3 B, SM4500 NH3	T	350 mL	500 mL	9.5 SU	9.5 SU		
410-3144-D-4 DU	GWK016-2023	SM 4500 NH3 B, SM4500 NH3	T	350 mL	500 mL	9.5 SU	9.5 SU		
410-3144-D-3	GWK015-2023	SM 4500 NH3 B, SM4500 NH3	T	500 mL	500 mL	9.5 SU	9.5 SU		
410-3144-D-2	GWVA2-6023	SM 4500 NH3 B, SM4500 NH3	T	500 mL	500 mL	9.5 SU	9.5 SU		
410-3144-D-1	GWVA2-2023	SM 4500 NH3 B, SM4500 NH3	T	500 mL	500 mL	9.5 SU	9.5 SU		
410-3144-D-5	GWK003-2023	SM 4500 NH3 B, SM4500 NH3	T	500 mL	500 mL	9.5 SU	9.5 SU		

Batch Notes	
Boric Acid ID	315672/35
Buffer Lot #	315672/27
NaOH Lot #	315672/11

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM4500 NH3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 12212 Batch Start Date: 06/11/20 09:33 Batch Analyst: Bunch, Yolunder Y

Batch Method: SM4500 NH3 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TitrantUsed	BuretStart1	BuretStop1	TitrantVolume1
MB 410-12163/1-A		SM4500 NH3		500 mL	500 mL	1	0 mL	0 mL	0 mL
LCS 410-12163/2-A		SM4500 NH3		500 mL	500 mL	1	0 mL	16.35 mL	16.35 mL
ICSD 410-12163/3-A		SM4500 NH3		500 mL	500 mL	1	0 mL	16.25 mL	16.25 mL
410-3144-D-4-A	GWK016-2023	SM4500 NH3	T	500 mL	500 mL	1	0 mL	0 mL	0 mL
410-3144-D-4-B DU	GWK016-2023	SM4500 NH3	T	500 mL	500 mL	1	0 mL	0 mL	0 mL
410-3144-D-3-A	GWK015-2023	SM4500 NH3	T	500 mL	500 mL	1	0 mL	0 mL	0 mL
410-3144-D-2-A	GWVA2-6023	SM4500 NH3	T	500 mL	500 mL	1	0 mL	0 mL	0 mL
410-3144-D-1-A	GWVA2-2023	SM4500 NH3	T	500 mL	500 mL	1	0 mL	0 mL	0 mL
410-3144-D-5-A	GWK003-2023	SM4500 NH3	T	500 mL	500 mL	1	0 mL	0 mL	0 mL

Batch Notes	
Sulfuric Acid ID	315672/35
Nominal Amount Used	500 mL
Normality of First Titrant	0.0217 N
Normality of SecondTitrant	0.1097 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM4500 NH3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11240 Batch Start Date: 06/05/20 19:42 Batch Analyst: Bolf, Jeremy

Batch Method: SM2320 B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	WC Alk LCS 00002	WC_pHBuffer7 00001			
CCV 410-11240/95		SM2320 B		InitialAmount is blank		# mL			
CCB 410-11240/96		SM2320 B		InitialAmount is blank					
MB 410-11240/97		SM2320 B		InitialAmount is blank					
LCS 410-11240/98		SM2320 B		InitialAmount is blank	# mL				
CCV 410-11240/106		SM2320 B		InitialAmount is blank		# mL			
CCB 410-11240/107		SM2320 B		InitialAmount is blank					
MB 410-11240/113		SM2320 B		InitialAmount is blank					
ICS 410-11240/114		SM2320 B		InitialAmount is blank	# mL				
LCSD 410-11240/115		SM2320 B		InitialAmount is blank	# mL				
CCV 410-11240/118		SM2320 B		InitialAmount is blank		# mL			
CCB 410-11240/119		SM2320 B		InitialAmount is blank					
CCV 410-11240/130		SM2320 B		InitialAmount is blank		# mL			
CCB 410-11240/131		SM2320 B		InitialAmount is blank					
410-3144-K-3	GWK015-2023	SM2320 B	T	InitialAmount is blank					
410-3144-K-5	GWK003-2023	SM2320 B	T	InitialAmount is blank					
410-3144-K-4	GWK016-2023	SM2320 B	T	InitialAmount is blank					
410-3144-K-1	GWVA2-2023	SM2320 B	T	InitialAmount is blank					
410-3144-K-2	GWVA2-6023	SM2320 B	T	InitialAmount is blank					
CCV 410-11240/142		SM2320 B		InitialAmount is blank		# mL			
CCB 410-11240/143		SM2320 B		InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-3144-1

SDG No.: _____

Batch Number: 11240 Batch Start Date: 06/05/20 19:42 Batch Analyst: Bolf, JeremyBatch Method: SM2320 B Batch End Date: _____

Batch Notes	
Acid ID	H2SO4
Nominal Amount Used	15 mL
pH Meter ID	19074
Probe ID	19074
Normality of First Titrant	0.0218 N
Titrant Standardization Date	05/08/2020

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM2320 B

Page 2 of 2

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NITRATE:Calibration 1: Peak 4-111

File name: C:\FLOW_4\2016ONO3.RST

Date: 08-Jun-20

Operator: 26520

* Name	Conc	Height
* Cal 4.00 ppm	4.000000	773329.250000
* Cal 3.00 ppm	3.000000	601579.187500
* Cal 1.00 ppm	1.000000	212079.375000
* Cal 0.50 ppm	0.500000	102356.523438
* Cal 0.20 ppm	0.200000	40383.148438
* Cal 0.10 ppm	0.100000	19465.521484
* Cal 0.00 ppm	0.000000	1015.049866

Calib Coef:

y=bx+a

a: (intercept) 3.9314e+03

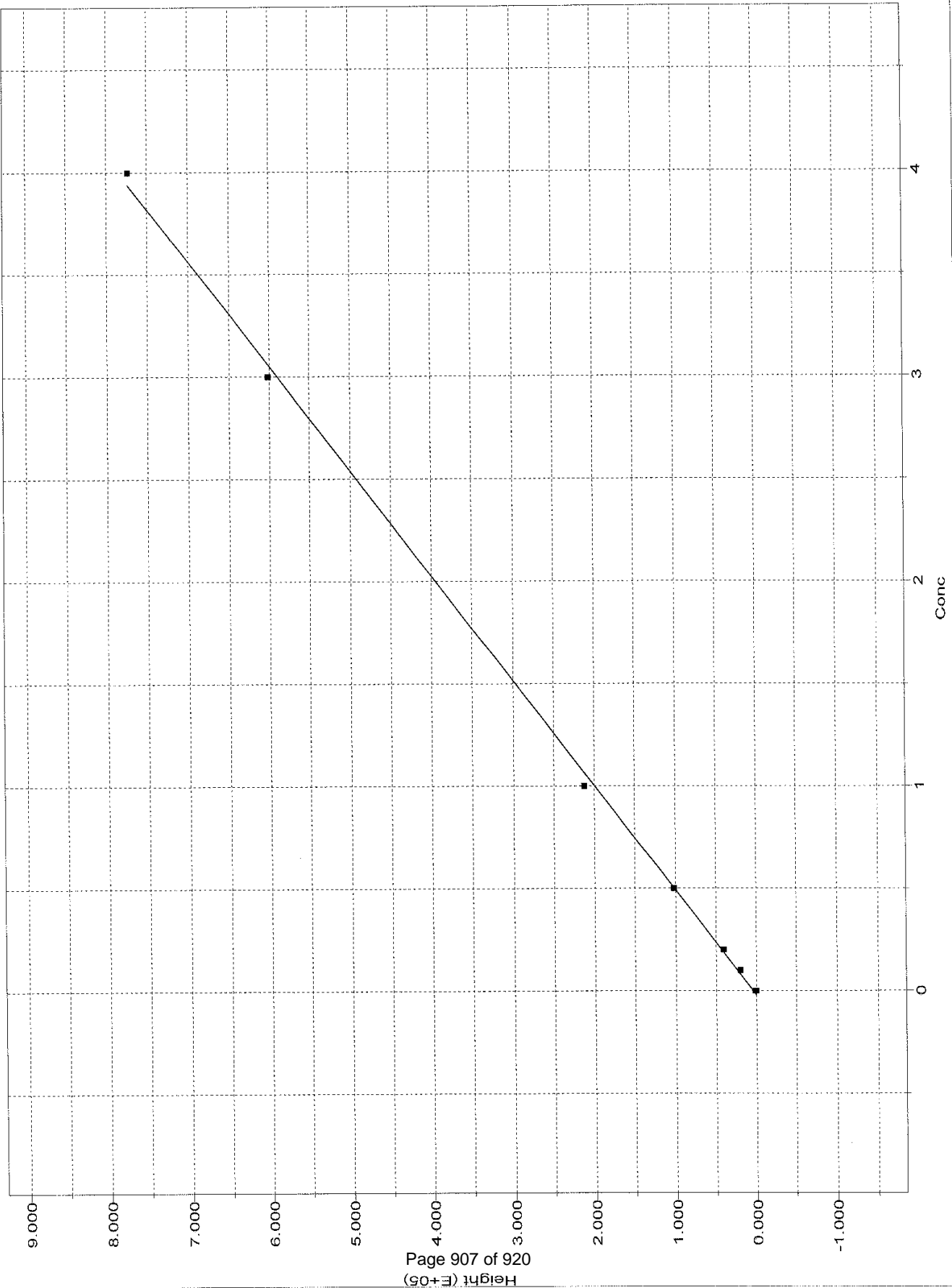
b: 1.9531e+05

Corr Coef: 0.999614

Carryover: 0.66%

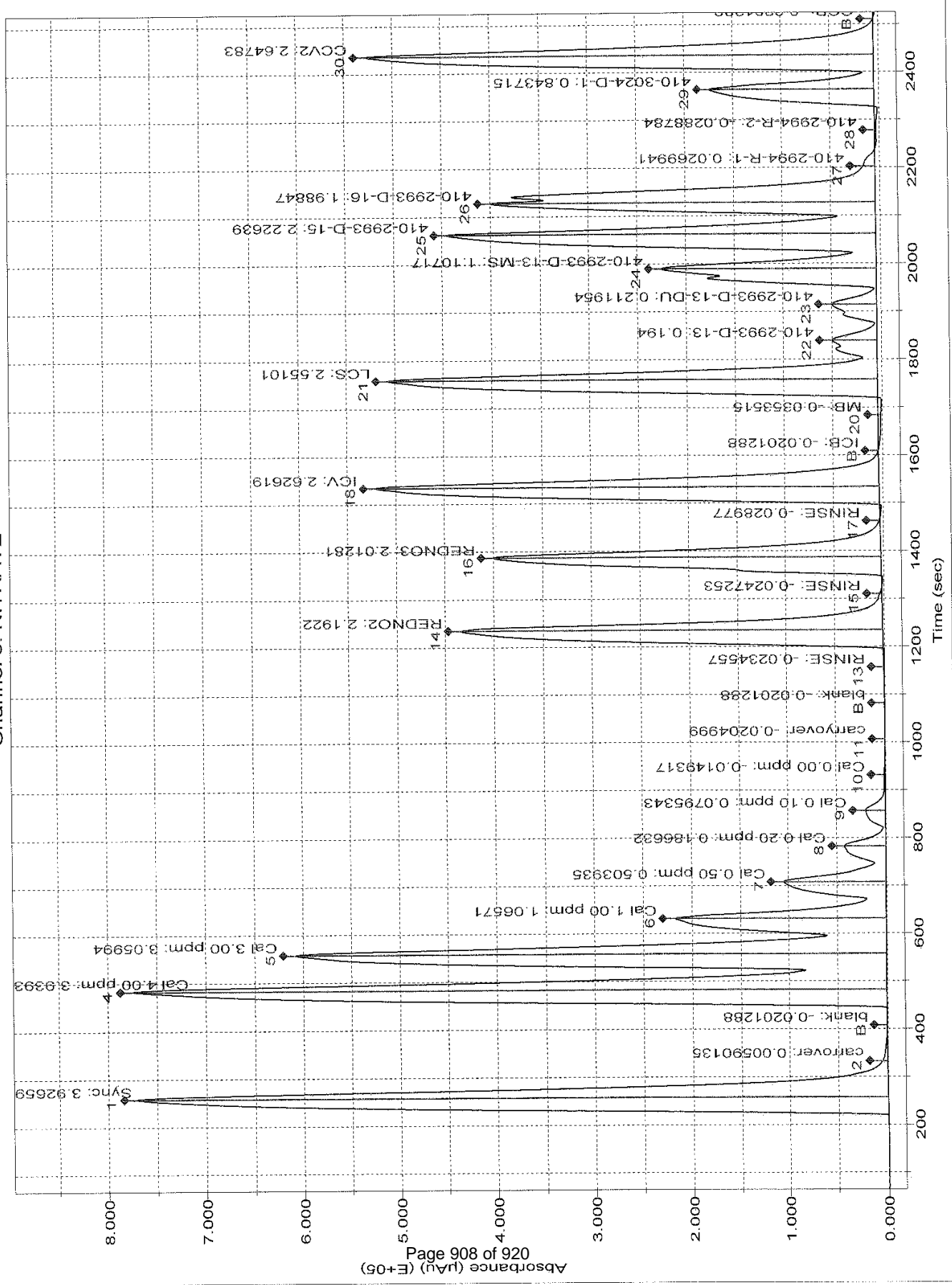
No Drift Peaks

NITRATE:Calibration 1: Peak 4-111

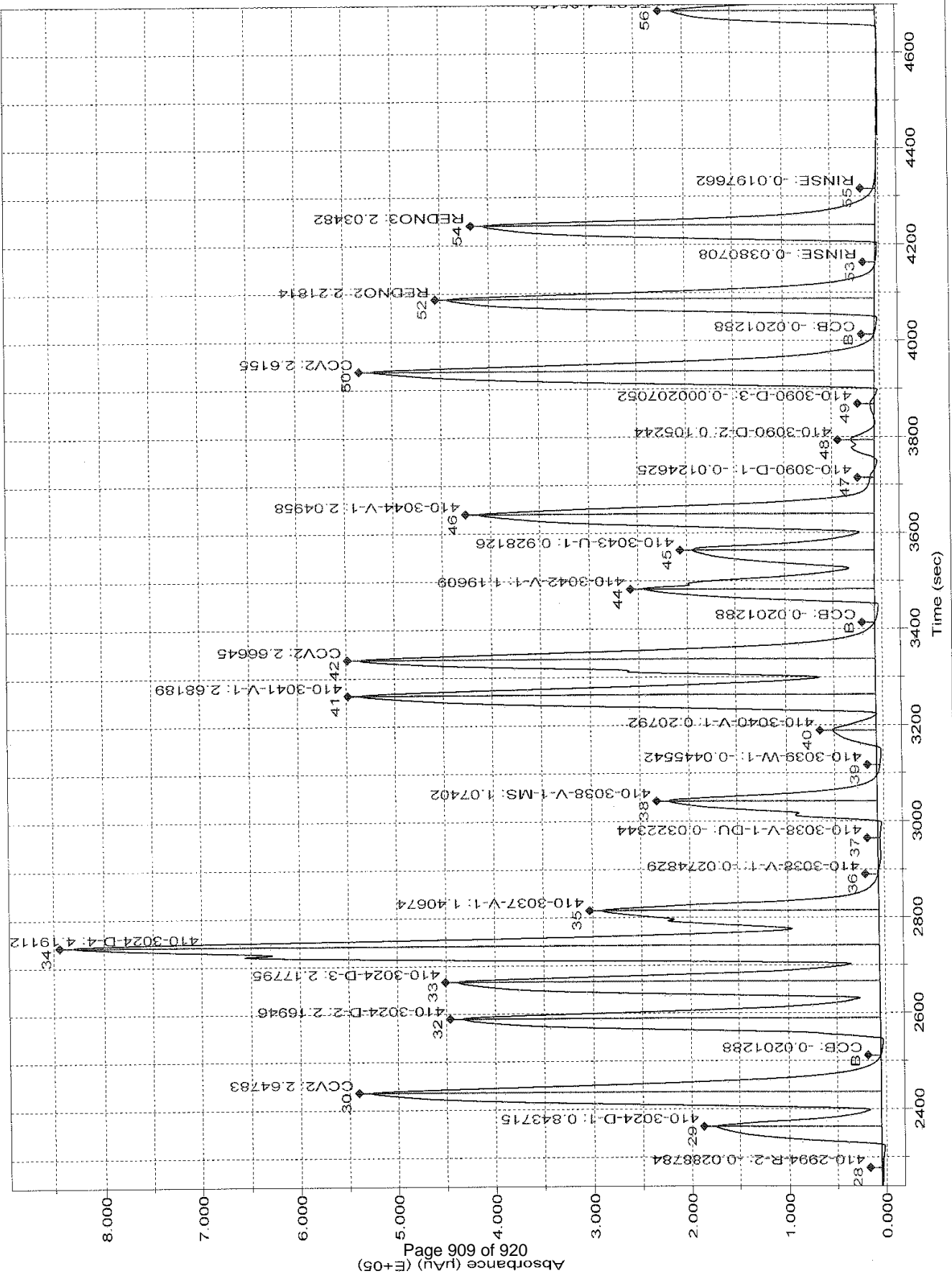


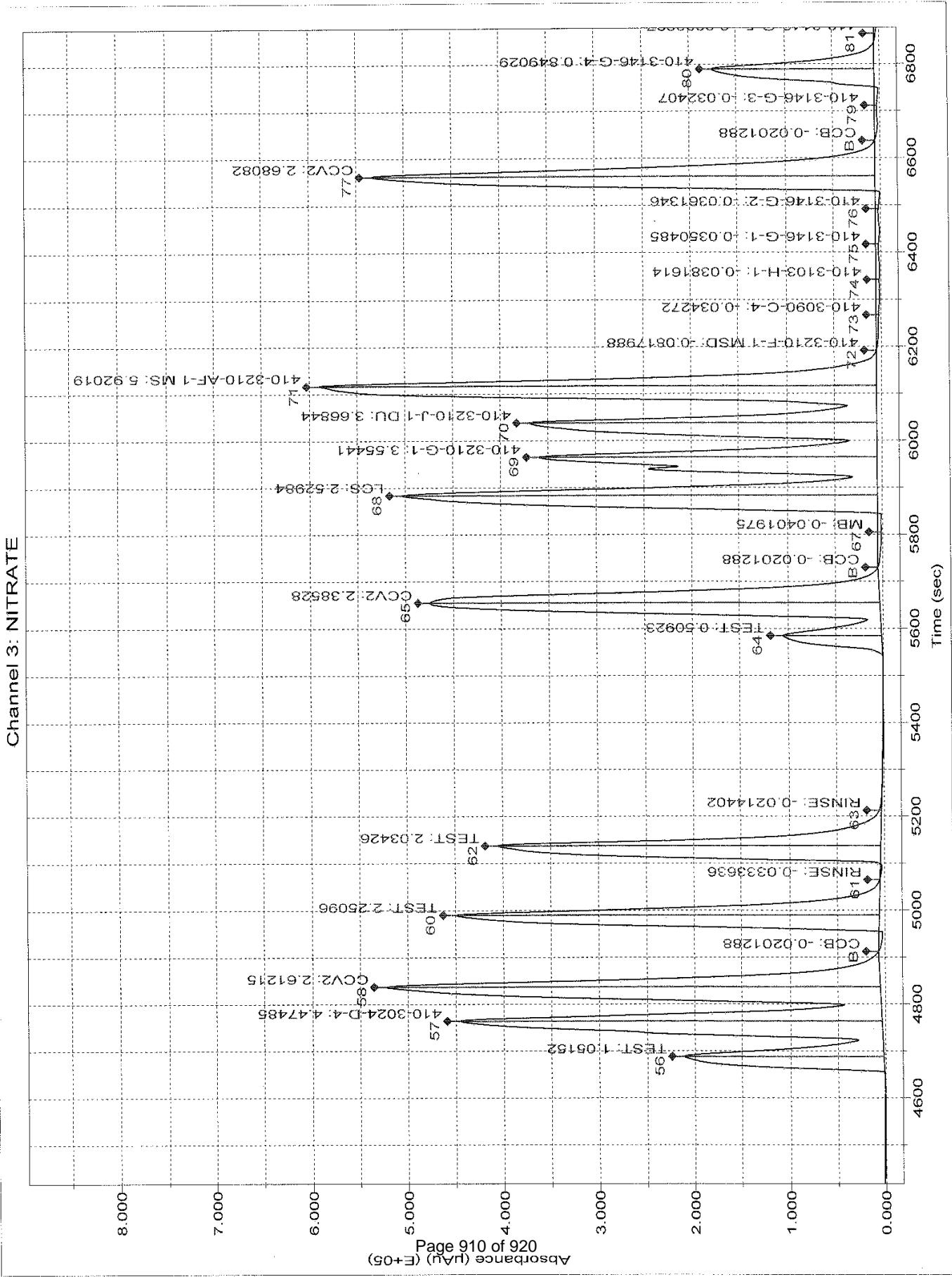
Page 907 of 920

Channel 3: NITRATE

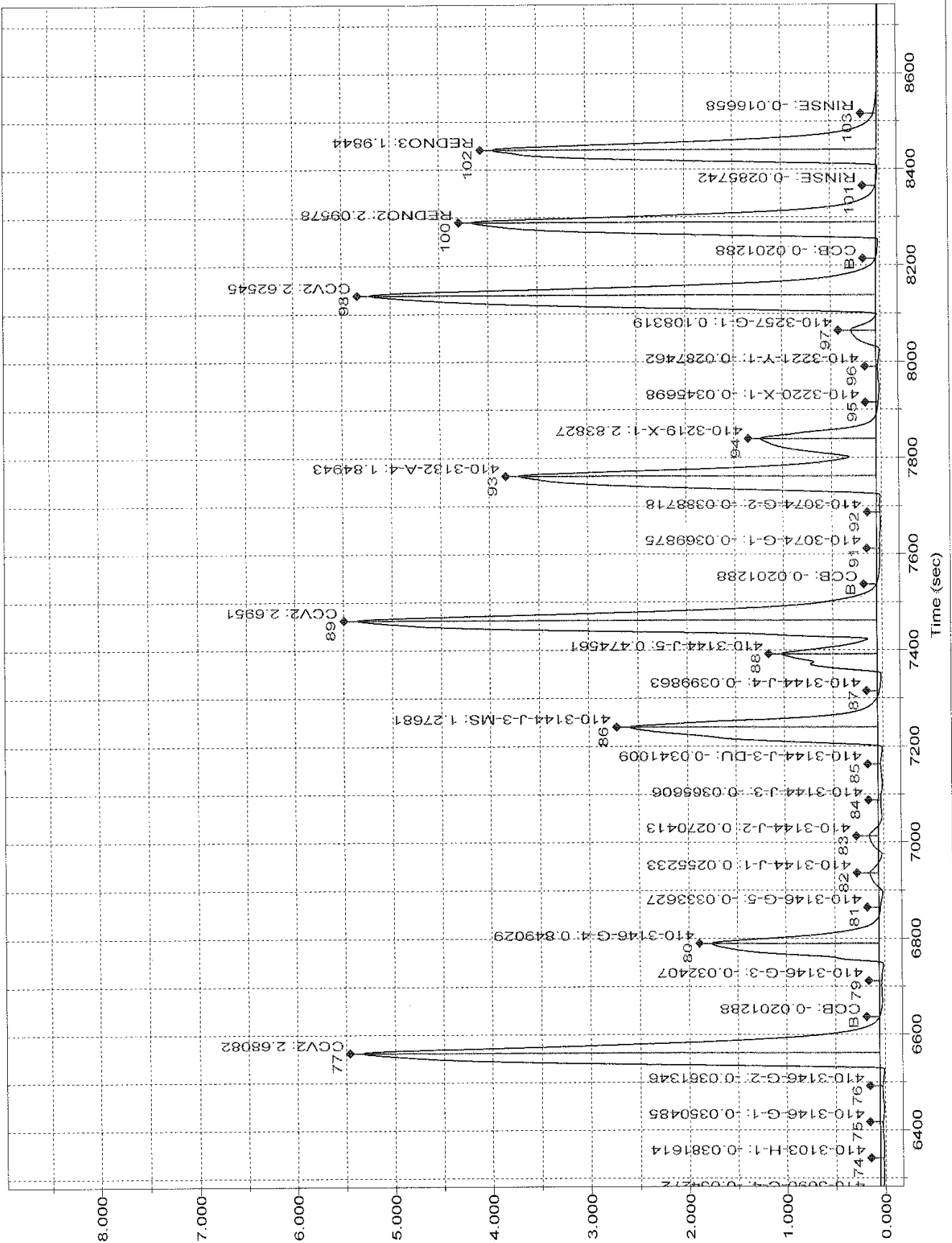


Channel 3: NITRATE

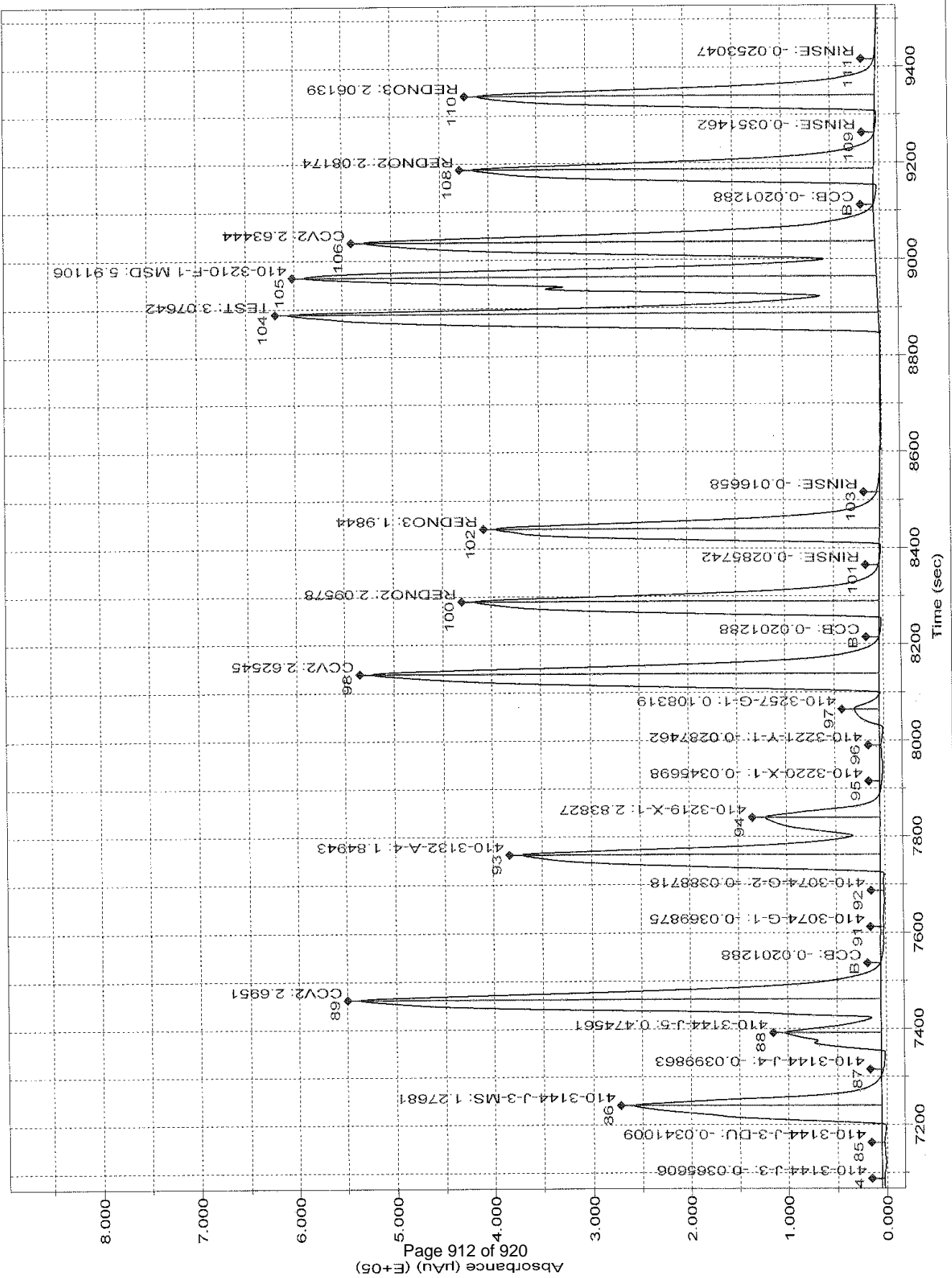




Channel 3: NITRATE



Channel 3: NITRATE



Page 912 of 920
Absorbance (µAu) (E+05)

Peak Table:NITRATE

File name: C:\FLOW_4\2016ONO3.RST

Date: 08-Jun-20

Operator: 26520

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppm)	Flags
1	107	Sync	1	SYNC		1	770846	3.926589	
2	900	carrover	1	CO		1	5084	0.005901	
B	900	blank	1	RB		1	0	-0.020129	BL
4	107	Cal 4.00 ppm	1	C		1	773329	3.939301	
5	106	Cal 3.00 ppm	1	C		1	601579	3.059945	
6	105	Cal 1.00 ppm	1	C		1	212079	1.065713	
7	104	Cal 0.50 ppm	1	C		1	102357	0.503935	
8	103	Cal 0.20 ppm	1	C		1	40383	0.186632	
9	102	Cal 0.10 ppm	1	C		1	19466	0.079534	
10	101	Cal 0.00 ppm	1	C		1	1015	-0.014932	LO
11	900	carryover	1	CO		1	-72	-0.020500	LO
B	900	blank	1	RB		1	0	-0.020129	BL
13	900	RINSE	1	U		1	-650	-0.023456	LO
14	111	REDNO2	1	U		1	432098	2.192202	
15	900	RINSE	1	U		1	-898	-0.024725	LO
16	110	REDNO3	1	U		1	397059	2.012807	
17	900	RINSE	1	U		1	-1728	-0.028977	LO
18	901	ICV	1	ICV		1	516862	2.626193	
B	900	ICB	1	RB		1	0	-0.020129	BL
20	131	MB	1	U		1	-2973	-0.035352	LO
21	132	LCS	1	U		1	502177	2.551009	
22	133	410-2993-D-13	1	U		1	41822	0.194000	
23	133	410-2993-D-13-DU 1	1	U		1	45329	0.211954	
24	134	410-2993-D-13-MS 1	1	U		1	220177	1.107172	
25	135	410-2993-D-15	1	U		1	438775	2.226391	
26	136	410-2993-D-16	1	U		1	392307	1.988473	
27	137	410-2994-R-1	1	U		1	9204	0.026994	
28	138	410-2994-R-2	1	U		1	-1709	-0.028878	LO
29	139	410-3024-D-1	1	U		1	168720	0.843715	
30	901	CCV2	1	CCV		1	521088	2.647831	
B	900	CCB	1	RB		1	0	-0.020129	BL
32	140	410-3024-D-2	1	U		1	427655	2.169458	
33	141	410-3024-D-3	1	U		1	429314	2.177951	
34	142	410-3024-D-4	1	U		1	822512	4.191117	
35	143	410-3037-V-1	1	U		1	278686	1.406740	
36	144	410-3038-V-1	1	U		1	-1436	-0.027483	LO
37	144	410-3038-V-1-DU 1	1	U		1	-2364	-0.032234	LO
38	145	410-3038-V-1-MS 1	1	U		1	213702	1.074022	
39	146	410-3039-W-1	1	U		1	-4771	-0.044554	LO
40	147	410-3040-V-1	1	U		1	44541	0.207920	
41	148	410-3041-V-1	1	U		1	527740	2.681887	
42	901	CCV2	1	CCV		1	524724	2.666448	
B	900	CCB	1	RB		1	0	-0.020129	BL
44	149	410-3042-V-1	1	U		1	237544	1.196091	
45	150	410-3043-U-1	1	U		1	185207	0.928126	
46	151	410-3044-V-1	1	U		1	404241	2.049578	
47	152	410-3090-D-1	1	U		1	1497	-0.012462	LO
48	153	410-3090-D-2	1	U		1	24487	0.105244	
49	154	410-3090-D-3	1	U		1	3891	-0.000207	LO
50	901	CCV2	1	CCV		1	514773	2.615497	
B	900	CCB	1	RB		1	0	-0.020129	BL
52	111	REDNO2	1	U		1	437164	2.218141	
53	900	RINSE	1	U		1	-3504	-0.038071	LO

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Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppm)	Flags
54	110	REDNO3	1	U		1	401358	2.034817	
55	900	RINSE	1	U		1	71	-0.019766	LO
56	105	TEST	1	U		1	209306	1.051515	
57	155	410-3024-D-4	1	U		2	440930	4.474852	
58	901	CCV2	1	CCV		1	514119	2.612149	
B	900	CCB	1	RB		1	0	-0.020129	BL
60	111	TEST	1	U		1	443573	2.250957	
61	900	RINSE	1	U		1	-2585	-0.033364	LO
62	110	TEST	1	U		1	401250	2.034263	
63	900	RINSE	1	U		1	-256	-0.021440	LO
64	104	TEST	1	U		1	103391	0.509230	
65	901	CCV2	1	CCV		1	469808	2.385280	
B	900	CCB	1	RB		1	0	-0.020129	BL
67	131	MB	1	U		1	-3920	-0.040198	LO
68	132	LCS	1	U		1	498043	2.529844	
69	156	410-3210-G-1	1	U		2	351043	3.554406	
70	157	410-3210-J-1 DU	1	U		2	362178	3.668436	
71	158	410-3210-AF-1 MS	1	U		2	582077	5.920190	
72	159	410-3210-F-1 MSD	1	U		2	-4057	-0.081799	LO
73	160	410-3090-C-4	1	U		1	-2762	-0.034272	LO
74	161	410-3103-H-1	1	U		1	-3522	-0.038161	LO
75	162	410-3146-G-1	1	U		1	-2914	-0.035048	LO
76	163	410-3146-G-2	1	U		1	-3126	-0.036135	LO
77	901	CCV2	1	CCV		1	527531	2.680820	
B	900	CCB	1	RB		1	0	-0.020129	BL
79	164	410-3146-G-3	1	U		1	-2398	-0.032407	LO
80	165	410-3146-G-4	1	U		1	169758	0.849029	
81	166	410-3146-G-5	1	U		1	-2585	-0.033363	LO
82	167	410-3144-J-1	1	U		1	8916	0.025523	
83	168	410-3144-J-2	1	U		1	9213	0.027041	
84	169	410-3144-J-3	1	U		1	-3209	-0.036561	LO
85	169	410-3144-J-3-DU	1	U		1	-2729	-0.034101	LO
86	170	410-3144-J-3-MS	1	U		1	253309	1.276806	
87	171	410-3144-J-4	1	U		1	-3878	-0.039986	LO
88	172	410-3144-J-5	1	U		1	96619	0.474561	
89	901	CCV2	1	CCV		1	530320	2.695098	
B	900	CCB	1	RB		1	0	-0.020129	BL
91	173	410-3074-G-1	1	U		1	-3293	-0.036988	LO
92	174	410-3074-G-2	1	U		1	-3661	-0.038872	LO
93	175	410-3132-A-4	1	U		1	365150	1.849432	
94	176	410-3219-X-1	1	U		5	114802	2.838269	
95	177	410-3220-X-1	1	U		1	-2821	-0.034570	LO
96	178	410-3221-Y-1	1	U		1	-1683	-0.028746	LO
97	179	410-3257-G-1	1	U		1	25088	0.108319	
98	901	CCV2	1	CCV		1	516718	2.625454	
B	900	CCB	1	RB		1	0	-0.020129	BL
100	111	REDNO2	1	U		1	413264	2.095777	
101	900	RINSE	1	U		1	-1650	-0.028574	LO
102	110	REDNO3	1	U		1	391510	1.984395	
103	900	RINSE	1	U		1	678	-0.016658	LO
104	106	TEST	1	U		1	604796	3.076417	
105	115	410-3210-F-1 MSD	1	U		2	581186	5.911061	
106	901	CCV2	1	CCV		1	518473	2.634442	
B	900	CCB	1	RB		1	0	-0.020129	BL
108	111	REDNO2	1	U		1	410523	2.081739	
109	900	RINSE	1	U		1	-2933	-0.035146	LO
110	110	REDNO3	1	U		1	406549	2.061392	
111	900	RINSE	1	U		1	-1011	-0.025305	LO

Shipping and Receiving Documents

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410-3144 Chain of Custody



225 Schilling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No. (410) 771-1025

CHAIN-OF-CUSTODY RECORD

COC NUMBER

COC-VA2-2023

PROJECT NAME:
Kirtland AFB Bulk Fuels Facility

PROJECT NUMBER:
62735DM02

LABORATORY NAME AND CONTACT:
**Eurofins Lancaster Laboratories
2425 New Holland Pike Lancaster PA 17601**

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA

YEAR: **2020**

QUARTER: **2 - June**

PROJECT SITE AND PHASE:
ST106/SS111

LAB PO NUMBER:
14800

LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS
					VOCs (8260C)	BTEX (8260C)	BTEXN (8260C)	EDB (8011)	Total (As, Pb, Cd, K, Na, Mg) (6020A, 6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3) (353.2)	Sulfide (SM4500SCF)	Alkalinity (SM2320B)	
1	GWVA2-2023	6/2/2020	11:30	7	1	1*	1	1	1	1	1	1	1	1	1	
2	GWVA2-6023	6/2/2020	11:30	7	1	1*	1	1	1	1	1	1	1	1	1	
3																
4																
5																
6																

GB

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): *G. Bracht*

COURIER AND SHIPPING NUMBER: FedEx 8155 3312 8175

RELINQUISHED BY: *Ginny Bracht* DATE: 6/2/2020 TIME: 1500

RECEIVED BY: _____ DATE: _____ TIME: _____

Printed Name and Signature: _____

Printed Name and Signature: _____

Printed Name and Signature: *Wesley Miller* DATE: 6/3/2020 TIME: *144*



225 Schilling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No: (410) 771-1825

CHAIN-OF-CUSTODY RECORD

COC NUMBER

COC-K015-2023

PROJECT NAME:
Kirtland AFB Bulk Fuels
Facility

PROJECT NUMBER:
62735DM02

LABORATORY NAME AND CONTACT:
Eurofins Lancaster Laboratories
2425 New Holland Pike Lancaster PA 17601

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA

YEAR: 2020
QUARTER: 2 - June

PROJECT SITE AND PHASE:
ST106/SS111

LAB PO NUMBER:
14800

LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS	
					VOCs (8260C)	BTEX (8260C)	BTEXN (8260C)	EDB (8011)	Total (As, Pb, Cd, K, Na, Mg) (8020A/8010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	(SM4500NH3) Ammonia	(SM4500SCF) Sulfide	(SM4500) Alkalinity		
1	GWK015-2023	6/2/2020	1000	7						1	1*	1	1	1	1	1	
2																	
3																	
4																	
5																	
6																	

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): G. Badt

COURIER AND SHIPPING NUMBER: FedEx 8155 3312 8175^{GB} 8137 2565 9507

RELINQUISHED BY: GINNY BRACHT *[Signature]* DATE: 6/2/2020 TIME: 1500

RECEIVED BY: *[Signature]* DATE: TIME:

Printed Name and Signature: _____

Printed Name and Signature: _____

Printed Name and Signature: _____

Printed Name and Signature: _____

Printed Name and Signature: _____

Printed Name and Signature: Wesley Miller *[Signature]* 6/3/20 1042



225 Schling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No: (410) 771-1625

CHAIN-OF-CUSTODY RECORD

COC NUMBER

COC-K016-2023

PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Eurofins Lancaster Laboratories 2425 New Holland Pike Lancaster PA 17601	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA	YEAR: 2020
			FAX AND MAIL REPORTS/EDD TO: Amanda Smith: asmith@eaest.com EA	
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 14800	FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA	QUARTER: 2 - June
LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258				

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS
					VOCs (4250C)	BTEX (4260C)	BTEXN (4260C)	EDB (4011)	Total (As, Pb, Cu, K, Na, Mg) (6030A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (3000)	Nitrate-Nitrite (353.2)	Ammonia (SM450NH13)	Sulfide (SM450S2CF)	Alkalinity (SM4232B)	
1	GWK016-2023	6/2/2020	0930	7					1	1*	1	1	1	1	1	
2																
3																
4																
5																
6																

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): G. Bracht				COURIER AND SHIPPING NUMBER: FedEx 8155 3312 8164			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME
Printed Name and Signature: GINNY BRACHT <i>G. Bracht</i>		6/2/2020	1500	Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature: Nicole Reiff <i>NR</i>		6/3/20	1029



225 Schilling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No: (410) 771-1925

CHAIN-OF-CUSTODY RECORD

COC NUMBER

COC-K003-2023

PROJECT NAME:
Kirtland AFB Bulk Fuels
Facility

PROJECT NUMBER:
62735DM02

LABORATORY NAME AND CONTACT:
Eurofins Lancaster Laboratories
2425 New Holland Pike Lancaster PA 17601

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA

YEAR: 2020
QUARTER: 2 - June

PROJECT SITE AND PHASE:
ST106/SS111

LAB PO NUMBER:
14800

LAB CONTACT: Kate Hower KateHower@eurofinsUS.com Eurofins 1 (717) 556-7258

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	ANALYSIS REQUIRED (Specify number of bottles)											COMMENTS	
					VOCs (8260C)	BTEX (8260C)	BTEXN (8260C)	EDB (8011)	Total (As, Pb, Ca, K, Na, Mg) (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide	(SM2320B) Alkalinity		
1	GWK003-2023	6/2/2020	1040	7						1	1*	1	1	1	1	1	
2																	
3																	
4																	
5																	
6																	

*Dissolved Fe, Mn aliquot was field filtered

SAMPLER(S): G. Bracht				COURIER AND SHIPPING NUMBER: FedEx 8155 3312 8164			
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		DATE	TIME
Ginny Bracht <i>G. Bracht</i>		6/2/2020	1500				
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Printed Name and Signature:			
Printed Name and Signature:				Nicole Reiff <i>NR</i>		6/3/20	1029

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 410-3144-1

Login Number: 3144**List Number: 1****Creator: Colon Martinez, Jessenia C****List Source: Eurofins Lancaster Laboratories Env**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

ANALYTICAL REPORT

Job Number: 680-182910-1

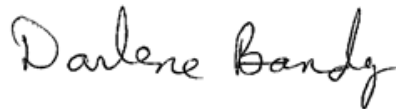
Job Description: Production/Irrigation Well, Kirtland AFB

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
7995 E. Prentice Ave, Suite 206E
Greenwood Village, CO 80111

Attention: Pamela J Moss



Approved for release.
Darlene F Bandy
Project Manager I
4/28/2020 3:06 PM

Darlene F Bandy, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0188
darlene.bandy@testamericainc.com
04/28/2020

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the Eurofins TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Savannah

5102 LaRoche Avenue, Savannah, GA 31404

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Definitions/Glossary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☐	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE**Client: EA Engineering, Science, and Technology****Project: Production/Irrigation Well, Kirtland AFB****Report Number: 680-182910-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 4/17/2020 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3° C.

Receipt Exceptions

Trip blank sample TB2021-03 (680-182910-4) was logged for 524.2 BTEX & TCE, PCE, VC per client instruction on 4/20/20.

DRINKING WATER VOLATILES (GC-MS)

Samples GWK016-2021-1 (680-182910-1), GWK003-2021-1 (680-182910-2), GWVA2-2021-1 (680-182910-3) and TB2021-03 (680-182910-4) were analyzed for drinking water volatiles (GC-MS) in accordance with EPA Method 524.2. The samples were analyzed on 04/26/2020 and 04/27/2020.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-616541. A duplicate LCS (LCSD) was performed.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

EDB

Samples GWK016-2021-1 (680-182910-1), GWK003-2021-1 (680-182910-2), GWVA2-2021-1 (680-182910-3) and TB2021-03 (680-182910-4) were analyzed for EDB in accordance with EPA Method 504.1. The samples were prepared and analyzed on 04/22/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Client Sample ID: GWK016-2021-1

Lab Sample ID: 680-182910-1

No Detections.

Client Sample ID: GWK003-2021-1

Lab Sample ID: 680-182910-2

No Detections.

Client Sample ID: GWVA2-2021-1

Lab Sample ID: 680-182910-3

No Detections.

Client Sample ID: TB2021-03

Lab Sample ID: 680-182910-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Client Sample ID: GWK016-2021-1

Lab Sample ID: 680-182910-1

Date Collected: 04/16/20 13:49

Matrix: Water

Date Received: 04/17/20 09:10

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			04/26/20 22:50	1
Ethylbenzene	ND		0.50	0.099	ug/L			04/26/20 22:50	1
Toluene	ND		0.50	0.086	ug/L			04/26/20 22:50	1
Xylenes, Total	ND		0.50	0.086	ug/L			04/26/20 22:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	101		70 - 130		04/26/20 22:50	1
4-Bromofluorobenzene	86		70 - 130		04/26/20 22:50	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		04/22/20 11:00	04/22/20 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	83		70 - 130	04/22/20 11:00	04/22/20 18:46	1

Client Sample ID: GWK003-2021-1

Lab Sample ID: 680-182910-2

Date Collected: 04/16/20 14:15

Matrix: Water

Date Received: 04/17/20 09:10

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			04/26/20 22:30	1
Ethylbenzene	ND		0.50	0.099	ug/L			04/26/20 22:30	1
Toluene	ND		0.50	0.086	ug/L			04/26/20 22:30	1
Xylenes, Total	ND		0.50	0.086	ug/L			04/26/20 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	97		70 - 130		04/26/20 22:30	1
4-Bromofluorobenzene	74		70 - 130		04/26/20 22:30	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		04/22/20 11:00	04/22/20 18:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	90		70 - 130	04/22/20 11:00	04/22/20 18:56	1

Client Sample ID: GWVA2-2021-1

Lab Sample ID: 680-182910-3

Date Collected: 04/16/20 15:05

Matrix: Water

Date Received: 04/17/20 09:10

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			04/27/20 00:11	1
Ethylbenzene	ND		0.50	0.099	ug/L			04/27/20 00:11	1
Tetrachloroethene	ND		0.50	0.18	ug/L			04/27/20 00:11	1
Toluene	ND		0.50	0.086	ug/L			04/27/20 00:11	1
Trichloroethene	ND		0.50	0.13	ug/L			04/27/20 00:11	1
Vinyl chloride	ND		0.50	0.16	ug/L			04/27/20 00:11	1
Xylenes, Total	ND		0.50	0.086	ug/L			04/27/20 00:11	1

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Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Client Sample ID: GWVA2-2021-1

Lab Sample ID: 680-182910-3

Date Collected: 04/16/20 15:05

Matrix: Water

Date Received: 04/17/20 09:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	102		70 - 130		04/27/20 00:11	1
4-Bromofluorobenzene	83		70 - 130		04/27/20 00:11	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0024	ug/L		04/22/20 11:00	04/22/20 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	89		70 - 130	04/22/20 11:00	04/22/20 19:06	1

Client Sample ID: TB2021-03

Lab Sample ID: 680-182910-4

Date Collected: 04/16/20 16:17

Matrix: Water

Date Received: 04/17/20 09:10

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			04/26/20 20:49	1
Ethylbenzene	ND		0.50	0.099	ug/L			04/26/20 20:49	1
Tetrachloroethene	ND		0.50	0.18	ug/L			04/26/20 20:49	1
Toluene	ND		0.50	0.086	ug/L			04/26/20 20:49	1
Trichloroethene	ND		0.50	0.13	ug/L			04/26/20 20:49	1
Vinyl chloride	ND		0.50	0.16	ug/L			04/26/20 20:49	1
Xylenes, Total	ND		0.50	0.086	ug/L			04/26/20 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	99		70 - 130		04/26/20 20:49	1
4-Bromofluorobenzene	86		70 - 130		04/26/20 20:49	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.017	0.0024	ug/L		04/22/20 11:00	04/22/20 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	89		70 - 130	04/22/20 11:00	04/22/20 19:15	1

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Default Detection Limits

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
Benzene	0.50	0.082	ug/L
Ethylbenzene	0.50	0.099	ug/L
Tetrachloroethene	0.50	0.18	ug/L
Toluene	0.50	0.086	ug/L
Trichloroethene	0.50	0.13	ug/L
Vinyl chloride	0.50	0.16	ug/L
Xylenes, Total	0.50	0.086	ug/L

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Prep: 504.1

Analyte	RL	MDL	Units
Ethylene Dibromide	0.018	0.0025	ug/L

Surrogate Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCZ (70-130)	BFB (70-130)
680-182910-1	GWK016-2021-1	101	86
680-182910-2	GWK003-2021-1	97	74
680-182910-3	GWVA2-2021-1	102	83
680-182910-4	TB2021-03	99	86
LCS 680-616541/4	Lab Control Sample	96	94
LCSD 680-616541/5	Lab Control Sample Dup	99	95
MB 680-616541/10	Method Blank	99	86

Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4 (Surr)

BFB = 4-Bromofluorobenzene

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		PCA2 (70-130)
680-182910-1	GWK016-2021-1	83
MB 680-616089/3-A	Method Blank	80

Surrogate Legend

PCA = Pentachloroethane

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		PCA1 (70-130)
680-182910-2	GWK003-2021-1	90
680-182910-3	GWVA2-2021-1	89
680-182910-4	TB2021-03	89
LCS 680-616089/4-A	Lab Control Sample	77
LCSD 680-616089/5-A	Lab Control Sample Dup	80

Surrogate Legend

PCA = Pentachloroethane

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-616541/10

Matrix: Water

Analysis Batch: 616541

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50	0.082	ug/L			04/26/20 16:30	1
Ethylbenzene	ND		0.50	0.099	ug/L			04/26/20 16:30	1
Tetrachloroethene	ND		0.50	0.18	ug/L			04/26/20 16:30	1
Toluene	ND		0.50	0.086	ug/L			04/26/20 16:30	1
Trichloroethene	ND		0.50	0.13	ug/L			04/26/20 16:30	1
Vinyl chloride	ND		0.50	0.16	ug/L			04/26/20 16:30	1
Xylenes, Total	ND		0.50	0.086	ug/L			04/26/20 16:30	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	99		70 - 130					04/26/20 16:30	1
4-Bromofluorobenzene	86		70 - 130					04/26/20 16:30	1

Lab Sample ID: LCS 680-616541/4

Matrix: Water

Analysis Batch: 616541

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	22.1		ug/L		110	70 - 130
Tetrachloroethene	20.0	20.4		ug/L		102	70 - 130
Toluene	20.0	20.3		ug/L		101	70 - 130
Trichloroethene	20.0	21.0		ug/L		105	70 - 130
Vinyl chloride	20.0	25.1		ug/L		126	70 - 130
Xylenes, Total	40.0	43.7		ug/L		109	70 - 130
Surrogate	LCS LCS		Limits				%Rec. Limits
	%Recovery	Qualifier					
1,2-Dichlorobenzene-d4 (Surr)	96		70 - 130				
4-Bromofluorobenzene	94		70 - 130				

Lab Sample ID: LCSD 680-616541/5

Matrix: Water

Analysis Batch: 616541

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	20.0	20.7		ug/L		103	70 - 130	7	20
Tetrachloroethene	20.0	19.3		ug/L		96	70 - 130	6	20
Toluene	20.0	18.7		ug/L		94	70 - 130	8	20
Trichloroethene	20.0	19.1		ug/L		96	70 - 130	9	20
Vinyl chloride	20.0	23.3		ug/L		116	70 - 130	8	20
Xylenes, Total	40.0	41.0		ug/L		102	70 - 130	6	20
Surrogate	LCSD LCSD		Limits				%Rec. Limits	RPD	RPD Limit
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	99		70 - 130						
4-Bromofluorobenzene	95		70 - 130						

Eurofins TestAmerica, Savannah

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Lab Sample ID: MB 680-616089/3-A
Matrix: Water
Analysis Batch: 616105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		04/22/20 11:00	04/22/20 15:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	80		70 - 130				04/22/20 11:00	04/22/20 15:00	1

Lab Sample ID: LCS 680-616089/4-A
Matrix: Water
Analysis Batch: 616105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616089

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ethylene Dibromide	0.100	0.101		ug/L		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Pentachloroethane	77		70 - 130				

Lab Sample ID: LCSD 680-616089/5-A
Matrix: Water
Analysis Batch: 616105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 616089

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Ethylene Dibromide	0.100	0.0991		ug/L		99	70 - 130	2	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Pentachloroethane	80		70 - 130						

QC Association Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

GC/MS VOA

Analysis Batch: 616541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-182910-1	GWK016-2021-1	Total/NA	Water	524.2	
680-182910-2	GWK003-2021-1	Total/NA	Water	524.2	
680-182910-3	GWVA2-2021-1	Total/NA	Water	524.2	
680-182910-4	TB2021-03	Total/NA	Water	524.2	
MB 680-616541/10	Method Blank	Total/NA	Water	524.2	
LCS 680-616541/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-616541/5	Lab Control Sample Dup	Total/NA	Water	524.2	

GC Semi VOA

Prep Batch: 616089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-182910-1	GWK016-2021-1	Total/NA	Water	504.1	
680-182910-2	GWK003-2021-1	Total/NA	Water	504.1	
680-182910-3	GWVA2-2021-1	Total/NA	Water	504.1	
680-182910-4	TB2021-03	Total/NA	Water	504.1	
MB 680-616089/3-A	Method Blank	Total/NA	Water	504.1	
LCS 680-616089/4-A	Lab Control Sample	Total/NA	Water	504.1	
LCSD 680-616089/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	

Analysis Batch: 616105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-182910-1	GWK016-2021-1	Total/NA	Water	504.1	616089
680-182910-2	GWK003-2021-1	Total/NA	Water	504.1	616089
680-182910-3	GWVA2-2021-1	Total/NA	Water	504.1	616089
680-182910-4	TB2021-03	Total/NA	Water	504.1	616089
MB 680-616089/3-A	Method Blank	Total/NA	Water	504.1	616089
LCS 680-616089/4-A	Lab Control Sample	Total/NA	Water	504.1	616089
LCSD 680-616089/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	616089

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Client Sample ID: GWK016-2021-1**Lab Sample ID: 680-182910-1**

Date Collected: 04/16/20 13:49

Matrix: Water

Date Received: 04/17/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	616541	04/26/20 22:50	UI	TAL SAV
Total/NA	Prep	504.1			616089	04/22/20 11:00	DC	TAL SAV
Total/NA	Analysis	504.1		1	616105	04/22/20 18:46	DC	TAL SAV

Client Sample ID: GWK003-2021-1**Lab Sample ID: 680-182910-2**

Date Collected: 04/16/20 14:15

Matrix: Water

Date Received: 04/17/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	616541	04/26/20 22:30	UI	TAL SAV
Total/NA	Prep	504.1			616089	04/22/20 11:00	DC	TAL SAV
Total/NA	Analysis	504.1		1	616105	04/22/20 18:56	DC	TAL SAV

Client Sample ID: GWVA2-2021-1**Lab Sample ID: 680-182910-3**

Date Collected: 04/16/20 15:05

Matrix: Water

Date Received: 04/17/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	616541	04/27/20 00:11	UI	TAL SAV
Total/NA	Prep	504.1			616089	04/22/20 11:00	DC	TAL SAV
Total/NA	Analysis	504.1		1	616105	04/22/20 19:06	DC	TAL SAV

Client Sample ID: TB2021-03**Lab Sample ID: 680-182910-4**

Date Collected: 04/16/20 16:17

Matrix: Water

Date Received: 04/17/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	616541	04/26/20 20:49	UI	TAL SAV
Total/NA	Prep	504.1			616089	04/22/20 11:00	DC	TAL SAV
Total/NA	Analysis	504.1		1	616105	04/22/20 19:15	DC	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Laboratory: Eurofins TestAmerica, Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	GA00006	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	01-08-20 *
Arizona	State	AZ0713	12-20-20
Arkansas DEQ	State	19-047-0	06-01-20
California	State	2513	01-08-21
Connecticut	State	PH-0686	09-30-20
Florida	NELAP	E87667-57	06-30-20
Iowa	State	IA#370	12-01-20
Louisiana	NELAP	30785	06-30-20
Maine	State	2019011 (231)	03-03-21
Minnesota	NELAP	1788752	12-31-20
Nevada	State	CO000262020-1	07-31-20
New Jersey	NELAP	190002	06-30-20
North Carolina (WW/SW)	State	358	12-31-20
North Dakota	State	R-034	01-08-21
Oklahoma	State	2018-006	08-31-20
Oregon	NELAP	4025-011	01-08-21
Pennsylvania	NELAP	013	08-01-20
South Carolina	State	72002001	01-08-20 *
Texas	NELAP	T104704183-19-17	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00099	03-26-21
Utah	NELAP	CO000262019-11	07-31-20
Virginia	NELAP	10490	06-14-20
Washington	State	C583-19	08-05-20
West Virginia DEP	State	354	11-30-20
Wisconsin	State	999615430	08-31-20
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Savannah

Method Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL SAV
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW	TAL SAV
504.1	Microextraction	EPA-DW	TAL SAV

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-182910-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
680-182910-1	GWK016-2021-1	Water	04/16/20 13:49	04/17/20 09:10	
680-182910-2	GWK003-2021-1	Water	04/16/20 14:15	04/17/20 09:10	
680-182910-3	GWVA2-2021-1	Water	04/16/20 15:05	04/17/20 09:10	
680-182910-4	TB2021-03	Water	04/16/20 16:17	04/17/20 09:10	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 614432Lab Sample ID: IC 680-614432/6 Client Sample ID: _____Date Analyzed: 04/08/20 15:56 Lab File ID: Uc0807.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 12:18
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:20
2-Butanone (MEK)	3.06	Peak assignment corrected	proctors	04/09/20 12:20
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:20
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:21
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 12:18
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:26
1,2-Dichlorobenzene	8.38	Peak assignment corrected	proctors	04/09/20 11:36

Lab Sample ID: IC 680-614432/7 Client Sample ID: _____Date Analyzed: 04/08/20 16:16 Lab File ID: Uc0808.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 12:22
Chloroethane	1.45	Peak assignment corrected	proctors	04/09/20 12:27
Acetone	1.91	Peak assignment corrected	proctors	04/09/20 12:22
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:22
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:22
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:22
4-Bromofluorobenzene	7.12	Incomplete Integration	proctors	04/09/20 12:32
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:26
1,2-Dichlorobenzene	8.39	Peak assignment corrected	proctors	04/09/20 11:36

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 614432Lab Sample ID: IC 680-614432/8 Client Sample ID: _____Date Analyzed: 04/08/20 16:37 Lab File ID: Uc0809.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 12:23
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:23
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:23
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	04/09/20 12:23
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:23
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:23
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 12:23
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:26
1,2-Dichlorobenzene	8.38	Peak assignment corrected	proctors	04/09/20 11:36

Lab Sample ID: IC 680-614432/9 Client Sample ID: _____Date Analyzed: 04/08/20 16:57 Lab File ID: Uc0810.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 12:23
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:23
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:23
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:23
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:23
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 12:23
1,3,5-Trimethylbenzene	7.47	Peak assignment corrected	proctors	04/09/20 12:26

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.:

Instrument ID: CMSU Analysis Batch Number: 614432

Lab Sample ID: IC 680-614432/10 Client Sample ID:

Date Analyzed: 04/08/20 17:17 Lab File ID: Uc0811.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 12:24
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:24
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:24
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	04/09/20 12:28
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:24
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:24
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 12:24
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:25

Lab Sample ID: ICIS 680-614432/11 Client Sample ID:

Date Analyzed: 04/08/20 17:37 Lab File ID: Uc0812.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 09:23
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:24
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:24
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	04/09/20 12:28
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:24
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:24
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 09:23
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:25
1,4-Dichlorobenzene-d4	8.07	Peak assignment corrected	proctors	04/09/20 09:23

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 614432Lab Sample ID: IC 680-614432/12 Client Sample ID: _____Date Analyzed: 04/08/20 17:58 Lab File ID: Uc0813.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 09:22
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:25
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:25
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	04/09/20 09:22
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:25
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:24
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 09:22
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:25
1,4-Dichlorobenzene-d4	8.07	Peak assignment corrected	proctors	04/09/20 11:34

Lab Sample ID: IC 680-614432/13 Client Sample ID: _____Date Analyzed: 04/08/20 18:18 Lab File ID: Uc0814.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	04/09/20 09:20
Acetone	1.90	Peak assignment corrected	proctors	04/09/20 12:25
2-Butanone (MEK)	3.05	Peak assignment corrected	proctors	04/09/20 12:25
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	04/09/20 09:18
4-Methyl-2-pentanone (MIBK)	4.95	Peak assignment corrected	proctors	04/09/20 12:25
2-Hexanone	5.59	Peak assignment corrected	proctors	04/09/20 12:25
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	04/09/20 09:20
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 12:25
1,4-Dichlorobenzene-d4	8.07	Peak assignment corrected	proctors	04/09/20 11:33

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 614624Lab Sample ID: ICV 680-614624/2 Client Sample ID: _____Date Analyzed: 04/09/20 15:11 Lab File ID: Uc0902.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	04/09/20 16:03
4-Bromofluorobenzene	7.12	Peak assignment corrected	seymourc	04/09/20 15:40
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	04/09/20 16:07

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 616541

Lab Sample ID: CCVIS 680-616541/2 Client Sample ID: _____

Date Analyzed: 04/26/20 13:49 Lab File ID: Ud2602.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	diogor	04/26/20 14:33
Chloromethane	1.25	Incomplete Integration	intaracha u	04/28/20 08:16
1,2-Dichloropropane	4.32	Peak assignment corrected	intaracha u	04/28/20 08:15
4-Bromofluorobenzene	7.12	Peak assignment corrected	diogor	04/26/20 14:33
1,3,5-Trimethylbenzene	7.47	Peak assignment corrected	intaracha u	04/28/20 08:15
1,2,4-Trimethylbenzene	7.78	Peak assignment corrected	intaracha u	04/28/20 08:15

Lab Sample ID: LCS 680-616541/4 Client Sample ID: _____

Date Analyzed: 04/26/20 14:29 Lab File ID: Ud2604.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:17

Lab Sample ID: LCSD 680-616541/5 Client Sample ID: _____

Date Analyzed: 04/26/20 14:49 Lab File ID: Ud2605.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:18

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 616541

Lab Sample ID: MB 680-616541/10 Client Sample ID: _____

Date Analyzed: 04/26/20 16:30 Lab File ID: Ud2610.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:31

Lab Sample ID: 680-182910-4 Client Sample ID: TB2021-03

Date Analyzed: 04/26/20 20:49 Lab File ID: Ud2612.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:32

Lab Sample ID: 680-182910-2 Client Sample ID: GWK003-2021-1

Date Analyzed: 04/26/20 22:30 Lab File ID: Ud2617.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:36

Lab Sample ID: 680-182910-1 Client Sample ID: GWK016-2021-1

Date Analyzed: 04/26/20 22:50 Lab File ID: Ud2618.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:36

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 616541

Lab Sample ID: 680-182910-3 Client Sample ID: GWVA2-2021-1

Date Analyzed: 04/27/20 00:11 Lab File ID: Ud2622.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	04/28/20 08:38

524.2

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-182910-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 616105

Lab Sample ID: IC 680-616105/11 Client Sample ID: _____

Date Analyzed: 04/22/20 14:10 Lab File ID: XD22011.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	04/23/20 14:02

Lab Sample ID: IC 680-616105/12 Client Sample ID: _____

Date Analyzed: 04/22/20 14:20 Lab File ID: XD22012.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	04/23/20 14:03

Lab Sample ID: IC 680-616105/12 Client Sample ID: _____

Date Analyzed: 04/22/20 14:20 Lab File ID: XD22012.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	04/23/20 14:03

Lab Sample ID: IC 680-616105/13 Client Sample ID: _____

Date Analyzed: 04/22/20 14:30 Lab File ID: XD22013.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	04/23/20 14:04

Lab Sample ID: IC 680-616105/13 Client Sample ID: _____

Date Analyzed: 04/22/20 14:30 Lab File ID: XD22013.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	04/23/20 14:04

504.1

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
504 Spike_00155	05/13/20	04/13/20	Methanol, Lot 00006479519	25 mL	SG123TCP-2_00005	10 uL	1,2,3-Trichloropropane	0.5 ug/mL
					SG504ICV_00064	12.5 uL	1,2,3-Trichloropropane-(Surr)	0.4 ug/mL
							1,2,3-Trichloropropane	0.5 ug/mL
							1,2-Dibromo-3-Chloropropane	0.1 ug/mL
..SG123TCP-2_00005	07/13/20	Ultra Scientific, Lot CM-2372		(Purchased Reagent)		Ethylene Dibromide	0.1 ug/mL	
..SG504ICV_00064	06/11/20	UltraScientific, Lot CR-2830		(Purchased Reagent)		1,2,3-Trichloropropane	1000 ug/mL	
							1,2,3-Trichloropropane-(Surr)	1000 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							Ethylene Dibromide	200 ug/mL
504 WS #1_00167	05/13/20	04/13/20	Methanol, Lot 00006479519	25 mL	504 INT A_00155	125 uL	1,2,3-Trichloropropane	0.3125 ug/mL
							1,2-Dibromo-3-Chloropropane	0.0625 ug/mL
							Ethylene Dibromide	0.0625 ug/mL
							Pentachloroethane	0.025 ug/mL
..504 INT A_00155	05/13/20	04/13/20	Methanol, Lot 00006479519	2 mL	SG123TCP_00084	125 uL	1,2,3-Trichloropropane	62.5 ug/mL
					SG504CAL_00054	125 uL	1,2-Dibromo-3-Chloropropane	12.5 ug/mL
							Ethylene Dibromide	12.5 ug/mL
..SG123TCP_00084	06/16/20	Ultra Scientific, Lot CM-44822		(Purchased Reagent)		1,2,3-Trichloropropane	1000 ug/mL	
..SG504CAL_00054	10/13/20	AccuStandard, Lot 218111119		(Purchased Reagent)		1,2-Dibromo-3-Chloropropane	200 ug/mL	
							Ethylene Dibromide	200 ug/mL
..504 Penta_00081	05/13/20	04/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL	
504-DBCM_00131	05/13/20	04/13/20	Methanol, Lot 00006479519	2 mL	DBCM (504)_00053	5.6 uL	Chlorodibromomethane	0.28 ug/mL
							..DBCM (504)_00053	09/12/20
504_NewSurr_00125	05/13/20	04/13/20	Methanol, Lot 00006479519	25 mL	504 Penta_00081	1250 uL	Pentachloroethane	0.025 ug/mL
..504 Penta_00081	05/13/20	04/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL	
524 ISSU/2016_00085	04/12/20	03/13/20	Methanol, Lot _00136	50 mL	30241_00519	200 uL	1,4-Dichlorobenzene-d4	10 ug/mL
					31070_00029	250 uL	Chlorobenzene-d5	10 ug/mL
							Fluorobenzene	20 ug/mL
							4-Bromofluorobenzene	10 ug/mL
							Fluorobenzene	20 ug/mL
..30241_00519	01/31/25	Restek, Lot A0156714		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL	
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
..31070_00029	02/28/27	Restek, Lot A0157928		(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL	
							4-Bromofluorobenzene	2000 ug/mL
							Fluorobenzene	2000 ug/mL
524 ISSU/2016_00089	05/07/20	04/08/20	Methanol, Lot _00136	50 mL	30241_00513	200 uL	1,4-Dichlorobenzene-d4	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene-d5	10 ug/mL
							Fluorobenzene	20 ug/mL
.30241_00513	01/31/25		Restek, Lot A0156714		31070_00028	250 uL	Fluorobenzene	20 ug/mL
					(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.31070_00028	02/28/27		Restek, Lot A0157928				Fluorobenzene	2000 ug/mL
					(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	10 ug/mL
524 ISSU/2016_00089	05/07/20	04/08/20	Methanol, Lot _00136	50 mL	31070_00028	250 uL	4-Bromofluorobenzene	10 ug/mL
							1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL
							4-Bromofluorobenzene	2000 ug/mL
.31070_00028	02/28/27		Restek, Lot A0157928				1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL
							4-Bromofluorobenzene	2000 ug/mL
524MMix_00166	04/22/20	04/08/20	Methanol, Lot MeOH_124454	25 mL	567645_00201	500 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
					569721_00265	500 uL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					571992_00132	500 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
.567645_00201	11/30/22		Restek, Lot A0154679			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.569721_00265	04/23/20		Restek, Lot A0152956			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.571992_00132	06/30/21		Restek, Lot A0143774			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
524MMix_00166	04/22/20	04/08/20	Methanol, Lot MeOH_124454	25 mL	31070_00030	500 uL	1,2-Dichlorobenzene-d4 (Surr)	40 ug/mL
							4-Bromofluorobenzene	40 ug/mL
							Xylenes, Total	100 ug/mL
.31070_00030	04/22/20	Absolute Standards, Lot 123118			(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL
							4-Bromofluorobenzene	2000 ug/mL
.571992_00132	06/30/21	Restek, Lot A0143774			(Purchased Reagent)		Xylenes, Total	5000 ug/mL
524MMix_00167	05/06/20	04/24/20	Methanol, Lot MeOH_124454	25 mL	567645_00206	500 uL	Vinyl chloride	50 ug/mL
							Benzene	50 ug/mL
							Ethylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.567645_00206	11/30/22	Restek, Lot A0154679			(Purchased Reagent)		Vinyl chloride	2500 ug/mL
.571992_00128	06/30/21	Restek, Lot A0143774			(Purchased Reagent)		Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
524MMix2nd_00120	04/23/20	04/09/20	Methanol, Lot H45E36	25 mL	571992.sec_00098	500 uL	Benzene	50 ug/mL
							Ethylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.571992.sec_00098	06/30/21	Restek, Lot A0144202			(Purchased Reagent)		Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VM_bfb_00214							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
					VMVG_BFB_00380	125 uL	4-Bromofluorobenzene	25 ug/mL
							BFB	25 ug/mL
.VMVG_BFB_00380	04/22/20	RESTEK, Lot A0156625			(Purchased Reagent)		4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VM_bfb_00215							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
							VMVG_BFB_00384	125 uL
		BFB	25 ug/mL					
.VMVG_BFB_00384	05/07/20		RESTEK, Lot A0156625			(Purchased Reagent)	4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL

Reagent

30241_00513

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0156714
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2025 **Storage:** 0°C or colder

PTP ✓ 3/13/2020
[Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,500.2 µg/mL (Lot BCBZ5549)	+/-	14.5364	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	140.1837	µg/mL	Unstressed
	Purity 99%		+/-	143.4639	µg/mL	Stressed
2	Chlorobenzene-d5	2,500.0 µg/mL (Lot PR-29571)	+/-	14.5352	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,500.6 µg/mL (Lot PR-18488)	+/-	14.5387	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	140.2062	µg/mL	Unstressed
	Purity 99%		+/-	143.4868	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6517443
 ID: 30241_00510
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517444
 ID: 30241_00511
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517446
 ID: 30241_00512
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517448
 ID: 30241_00513
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517450
 ID: 30241_00514
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517452
 ID: 30241_00515
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517455
 ID: 30241_00516
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517460
 ID: 30241_00517
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517462
 ID: 30241_00518
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

6517463
 ID: 30241_00519
 Exp: 01/31/25 Pripd: PEP
 8260A Internal Standard M

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

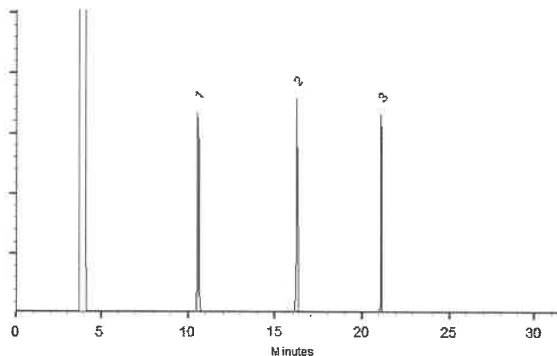
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Greg Dawson
Greg Dawson - Mix Technician

Date Mixed: 14-Jan-2020

Balance: 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM GC

Date Passed: 17-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

30241_00519

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0156714
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2025 **Storage:** 0°C or colder

PDF ✓ 3/13/2020
[Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Fluorobenzene	2,500.2 µg/mL	+/- 14.5364	µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBZ5549)		+/- 140.1837	µg/mL	Unstressed
	Purity 99%		+/- 143.4639	µg/mL	Stressed
2	Chlorobenzene-d5	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-29571)		+/- 140.1725	µg/mL	Unstressed
	Purity 99%		+/- 143.4524	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,500.6 µg/mL	+/- 14.5387	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 140.2062	µg/mL	Unstressed
	Purity 99%		+/- 143.4868	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6517443
 ID: 30241_00510
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517444
 ID: 30241_00511
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517446
 ID: 30241_00512
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517448
 ID: 30241_00513
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517450
 ID: 30241_00514
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517452
 ID: 30241_00515
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517455
 ID: 30241_00516
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517460
 ID: 30241_00517
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517462
 ID: 30241_00518
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

6517463
 ID: 30241_00519
 Exp: 01/31/25 Pp4: PEP
 8260A Internal Standard M

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

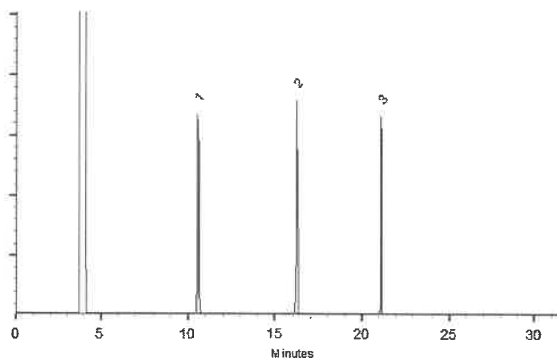
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Greg Dawson
Greg Dawson - Mix Technician

Date Mixed: 14-Jan-2020

Balance: 1127510105

Justine Albertson
Justine Albertson - Operations Tech-ARM GC

Date Passed: 17-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

31070_00028



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30201 **Lot No.:** A0157928
Description : 524 Internal Std / Surrogate Mix
524 Internal Std/Surrogate Mix 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 28, 2027 **Storage:** 0°C or colder

PEP / 3113 12020
Philip J. Runkel

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,019.5 µg/mL (Lot BCBZ5549)	+/-	11.8516	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	113.2428	µg/mL	Unstressed
	Purity 99%		+/-	115.8920	µg/mL	Stressed
2	1-Bromo-4-fluorobenzene (BFB)	2,018.0 µg/mL (Lot 20401KO)	+/-	11.8428	µg/mL	Gravimetric
	CAS # 460-00-4		+/-	113.1587	µg/mL	Unstressed
	Purity 99%		+/-	115.8060	µg/mL	Stressed
3	1,2-Dichlorobenzene-d4	2,014.5 µg/mL (Lot BP-1072)	+/-	11.8222	µg/mL	Gravimetric
	CAS # 2199-69-1		+/-	112.9624	µg/mL	Unstressed
	Purity 99%		+/-	115.6051	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%



6517330
 ID: 31070_00020
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517331
 ID: 31070_00021
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517380
 ID: 31070_00022
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517382
 ID: 31070_00023
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517383
 ID: 31070_00024
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517385
 ID: 31070_00025
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517413
 ID: 31070_00026
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517415
 ID: 31070_00027
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517417
 ID: 31070_00028
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517420
 ID: 31070_00029
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

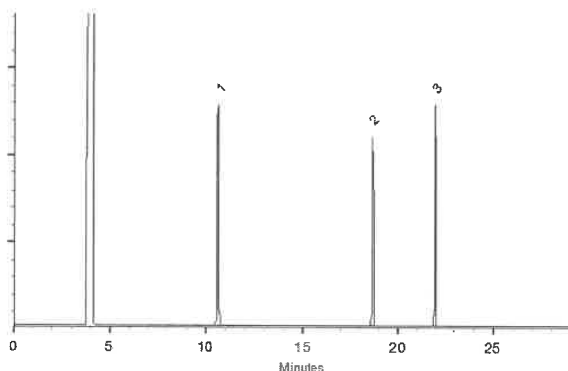
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 18-Feb-2020

Balance: B251644995

Justine A. Davidson - Operations Tech-ARM GC

Date Passed: 20-Feb-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

31070_00029



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30201 **Lot No.:** A0157928
Description : 524 Internal Std / Surrogate Mix
524 Internal Std/Surrogate Mix 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 28, 2027 **Storage:** 0°C or colder

PEP / 3113 12020
Philip J. Runkel

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,019.5 µg/mL (Lot BCBZ5549)	+/-	11.8516	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	113.2428	µg/mL	Unstressed
	Purity 99%		+/-	115.8920	µg/mL	Stressed
2	1-Bromo-4-fluorobenzene (BFB)	2,018.0 µg/mL (Lot 20401KO)	+/-	11.8428	µg/mL	Gravimetric
	CAS # 460-00-4		+/-	113.1587	µg/mL	Unstressed
	Purity 99%		+/-	115.8060	µg/mL	Stressed
3	1,2-Dichlorobenzene-d4	2,014.5 µg/mL (Lot BP-1072)	+/-	11.8222	µg/mL	Gravimetric
	CAS # 2199-69-1		+/-	112.9624	µg/mL	Unstressed
	Purity 99%		+/-	115.6051	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%



6517330
 ID: 31070_00020
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517331
 ID: 31070_00021
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517380
 ID: 31070_00022
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517382
 ID: 31070_00023
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517383
 ID: 31070_00024
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517385
 ID: 31070_00025
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517413
 ID: 31070_00026
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517415
 ID: 31070_00027
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517417
 ID: 31070_00028
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517420
 ID: 31070_00029
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

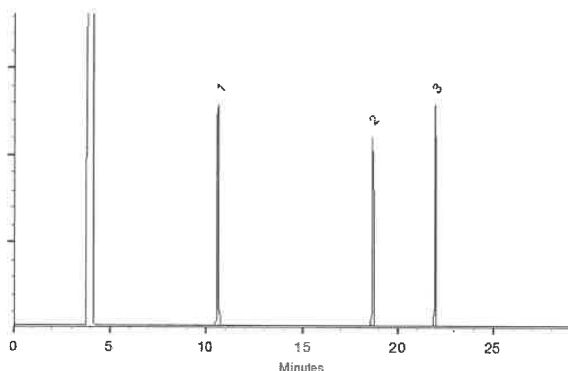
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 18-Feb-2020

Balance: B251644995

Justine A. Davidson - Operations Tech-ARM QC

Date Passed: 20-Feb-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

567645_00206

RESTEK CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 Lot No.: A0154679

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : November 30, 2022 Storage: 0°C or colder



6524234
ID: 567645_00206
Exp: 11/30/22 Pripd: PEP
8260 List 1 / Std #3 Gase



6524118
ID: 567645_00205
Exp: 11/30/22 Pripd: PEP
8260 List 1 / Std #3 Gase



6524245
ID: 567645_00209
Exp: 11/30/22 Pripd: PEP
8260 List 1 / Std #3 Gase



6524238
ID: 567645_00208
Exp: 11/30/22 Pripd: PEP
8260 List 1 / Std #3 Gase



6524236
ID: 567645_00207
Exp: 11/30/22 Pripd: PEP
8260 List 1 / Std #3 Gase

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot 00012554) Purity 99%	2,502.7 µg/mL	+/- 18.2705 µg/mL	+/- 140.7566 µg/mL	+/- 144.0300 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBK6571) Purity 99%	2,500.3 µg/mL	+/- 18.7547 µg/mL	+/- 140.6865 µg/mL	+/- 143.9553 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 00015559) Purity 99%	2,501.1 µg/mL	+/- 18.5858 µg/mL	+/- 140.7083 µg/mL	+/- 143.9787 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene CAS # 106-99-0 (Lot SHBK2299) Purity 99%	2,497.1 µg/mL	+/- 17.5808 µg/mL	+/- 140.3628 µg/mL	+/- 143.6309 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	2,500.8 µg/mL	+/- 23.3138 µg/mL	+/- 141.3956 µg/mL	+/- 144.6498 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot 107-401039114-1) Purity 99%	2,499.0 µg/mL	+/- 21.4252 µg/mL	+/- 140.9973 µg/mL	+/- 144.2558 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 (Lot 4938100) Purity 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL	+/- 140.1725 µg/mL	+/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)	2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%		+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 2 min.) to 240°C
 @ 8°C/min. (hold 5 min.)

Inj. Temp:

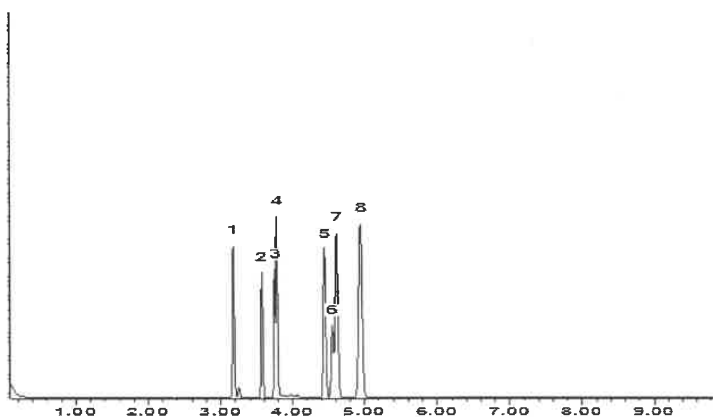
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 Balance: B707717271

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

- k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

571992.sec_00098

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PEP ✓ 3/16/20
 [Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 98%	2,517.0 µg/mL	+/- 14.6339	µg/mL	Gravimetric
			+/- 151.8598	µg/mL	Unstressed
			+/- 152.2203	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,506.7 µg/mL	+/- 14.5740	µg/mL	Gravimetric
			+/- 151.2383	µg/mL	Unstressed
			+/- 151.5974	µg/mL	Stressed
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 7692300) Purity 99%	2,503.3 µg/mL	+/- 14.5546	µg/mL	Gravimetric
			+/- 151.0372	µg/mL	Unstressed
			+/- 151.3958	µg/mL	Stressed
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.8 µg/mL	+/- 145.3491	µg/mL	Gravimetric
			+/- 1,508.4071	µg/mL	Unstressed
			+/- 1,511.9883	µg/mL	Stressed
5	Methyl acetate CAS # 79-20-9.SEC (Lot UCNEL) Purity 99%	5,002.3 µg/mL	+/- 29.0840	µg/mL	Gravimetric
			+/- 301.8129	µg/mL	Unstressed
			+/- 302.5295	µg/mL	Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric
			+/- 151.0472	µg/mL	Unstressed
			+/- 151.4059	µg/mL	Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot H3HGC) Purity 99%	2,511.7 µg/mL	+/- 14.6030	µg/mL	Gravimetric
			+/- 151.5400	µg/mL	Unstressed
			+/- 151.8998	µg/mL	Stressed



6521554
 ID: 571992.sec_00097
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521556
 ID: 571992.sec_00098
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521558
 ID: 571992.sec_00099
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521560
 ID: 571992.sec_00100
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521562
 ID: 571992.sec_00101
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

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8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/- 14.5953 +/- 151.4595 +/- 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/- 14.6040 +/- 151.5500 +/- 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/- 14.5430 +/- 150.9165 +/- 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/- 14.5614 +/- 151.1076 +/- 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/- 14.5585 +/- 151.0774 +/- 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/- 290.7356 +/- 3,017.2028 +/- 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/- 14.5904 +/- 151.4093 +/- 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/- 14.5866 +/- 151.3690 +/- 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/- 14.5520 +/- 151.0098 +/- 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/- 14.5507 +/- 150.9970 +/- 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane		2,502.4	µg/mL	+/-	14.5494	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	150.9832	µg/mL	Unstressed
	Purity 97%				+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene		2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	151.1277	µg/mL	Unstressed
	Purity 99%				+/-	151.4865	µg/mL	Stressed
43	m-Xylene		1,251.7	µg/mL	+/-	7.2941	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.5202	µg/mL	Unstressed
	Purity 99%				+/-	75.6995	µg/mL	Stressed
44	p-Xylene		1,253.7	µg/mL	+/-	7.3058	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.6409	µg/mL	Unstressed
	Purity 99%				+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	151.0472	µg/mL	Unstressed
	Purity 99%				+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
47	o-Xylene		2,504.2	µg/mL	+/-	14.5594	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	151.0875	µg/mL	Unstressed
	Purity 99%				+/-	151.4462	µg/mL	Stressed
48	Styrene		2,507.2	µg/mL	+/-	14.5769	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	151.2685	µg/mL	Unstressed
	Purity 99%				+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,505.2	µg/mL	+/-	14.5653	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	151.1478	µg/mL	Unstressed
	Purity 99%				+/-	151.5067	µg/mL	Stressed
50	Bromoform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5461400)			+/-	150.8661	µg/mL	Unstressed
	Purity 97%				+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,505.7	µg/mL	+/-	14.5682	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	151.1780	µg/mL	Unstressed
	Purity 99%				+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,514.2	µg/mL	+/-	14.6177	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	151.6922	µg/mL	Unstressed
	Purity 98%				+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	151.0573	µg/mL	Unstressed
	Purity 99%				+/-	151.4159	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,506.2 µg/mL	+/- 14.5711 +/- 151.2081 +/- 151.5671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,510.0 µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,509.2 µg/mL	+/- 14.5885 +/- 151.3891 +/- 151.7486	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	2,505.8 µg/mL	+/- 14.5691 +/- 151.1880 +/- 151.5470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot JMIYD)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 6628200)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8562 +/- 151.2143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,506.3 µg/mL	+/- 14.5720 +/- 151.2182 +/- 151.5772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,509.8 µg/mL	+/- 14.5924 +/- 151.4294 +/- 151.7889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	2,513.7 µg/mL	+/- 14.6147 +/- 151.6607 +/- 152.0207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot R6QDM)	2,501.8 µg/mL	+/- 14.5459 +/- 150.9467 +/- 151.3051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	2,508.5 µg/mL	+/- 14.5845 +/- 151.3473 +/- 151.7066	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	2,504.4 µg/mL	+/- 14.5607 +/- 151.1002 +/- 151.4590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

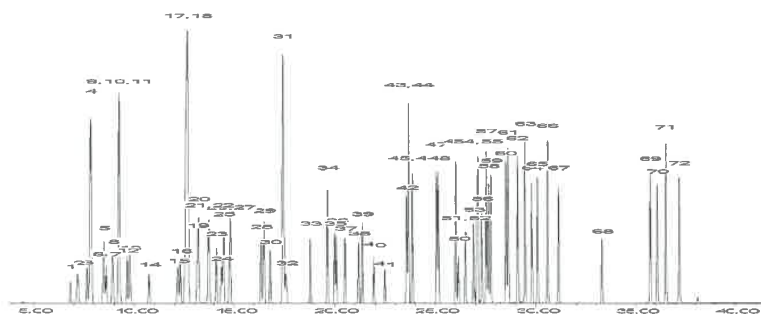
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018 Balance: 1127510105

Diane Shaffer

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

571992_00128

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PPD ✓ 312512020
Patrick P. Paulsen



6533888
 ID: 571992_00131
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533886
 ID: 571992_00130
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533884
 ID: 571992_00129
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533882
 ID: 571992_00128
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 Purity 99% (Lot SHBJ5713)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 99% (Lot 00009482)	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBG8609V)	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBJ9404)	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 Purity 99% (Lot SHBG4345V)	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99% (Lot SHBH4362V)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 99% (Lot WXBB7852V)	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	



6533903
 ID: 571992_00137
 Exp: 06/30/21 Pprd: PEP
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6533901
 ID: 571992_00136
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533899
 ID: 571992_00135
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533897
 ID: 571992_00134
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533892
 ID: 571992_00133
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533890
 ID: 571992_00132
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

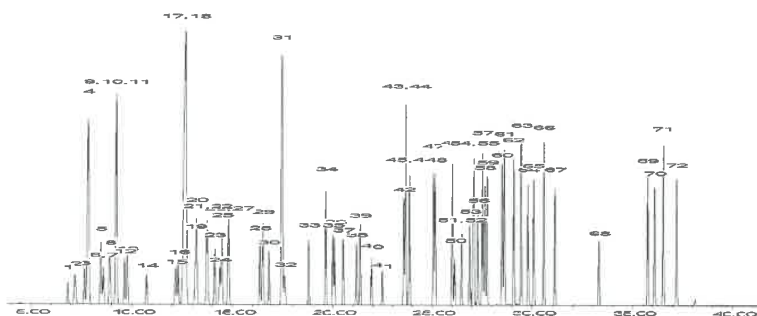
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

571992_00132

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PPD ✓ 312512020
Patrick P. Paulsen



6533888
 ID: 571992_00131
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533886
 ID: 571992_00130
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533884
 ID: 571992_00129
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533882
 ID: 571992_00128
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 Purity 99% (Lot SHBJ5713)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 99% (Lot 00009482)	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBG8609V)	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBJ9404)	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 Purity 99% (Lot SHBG4345V)	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99% (Lot SHBH4362V)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 99% (Lot WXBB7852V)	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	



6533903
 ID: 571992_00137
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533901
 ID: 571992_00136
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533899
 ID: 571992_00135
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533897
 ID: 571992_00134
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533892
 ID: 571992_00133
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533890
 ID: 571992_00132
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

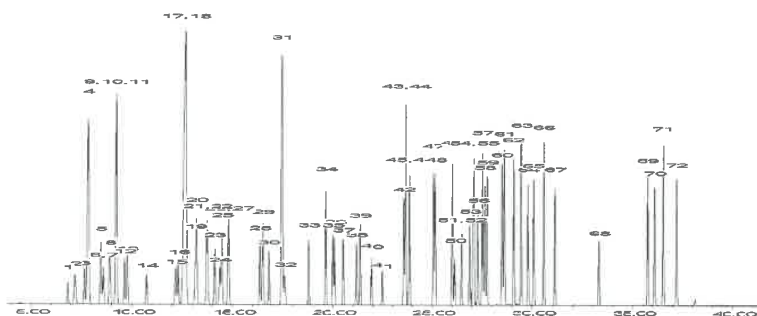
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PTP ✓ 3/25/2020
Patrick P. Paul
2nd level EA 4/12/20

6533888
 ID: 571992_00131
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533886
 ID: 571992_00130
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533884
 ID: 571992_00129
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533882
 ID: 571992_00128
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution-Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 Purity 99% (Lot SHBJ5713)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 99% (Lot 00009482)	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBG8609V)	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBJ9404)	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 Purity 99% (Lot SHBG4345V)	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99% (Lot SHBH4362V)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 99% (Lot WXBB7852V)	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	

6533903
 ID: 571992_00137
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533901
 ID: 571992_00136
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533899
 ID: 571992_00135
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533897
 ID: 571992_00134
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533892
 ID: 571992_00133
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533890
 ID: 571992_00132
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

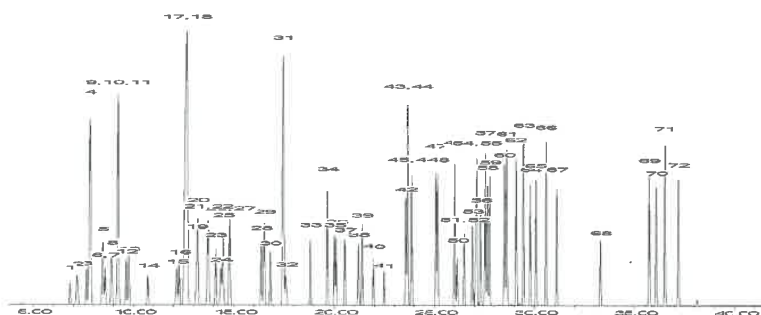
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

DBCM (504)_00053

Certificate of Analysis



Dibromochloromethane Solution

Product Number: HC-100

Page: 1 of 1

Lot Number: CR-0227

Lot Issue Date: 24-Jan-2017

Expiration Date: 28-Feb-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
dibromochloromethane	000124-48-1	RM11370	100.2 ± 0.5 µg/mL

Matrix: methanol (methyl alcohol)

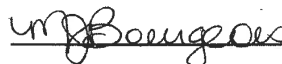
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP-2_00005



Certificate of Analysis



1,2,3-Trichloropropane Solution

Product Number: PPS-250 **Page:** 1 of 1
Lot Number: CR-2372 **Lot Issue Date:** 23-May-2017 **Expiration Date:** 30-Jun-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1004 ± 5 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.

John Russo
President

Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP_00084



Certificate of Analysis

1,2,3-Trichloropropane Solution

Product Number: PPS-251

Page: 1 of 1

Lot Number: CR-4822

Lot Issue Date: 25-Oct-2017

Expiration Date: 30-Nov-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1003 ± 5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

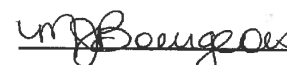
Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSS Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Reagent

SG504ICV_00064



Certificate of Analysis



EPA Method 504.1 Mixture

Product Number: DWM-514 **Page:** 1 of 1
Lot Number: CR-2830 **Lot Issue Date:** 22-Jun-2017 **Expiration Date:** 31-Jul-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2-dibromo-3-chloropropane	000096-12-8	RM11663	200.7 ± 1.0 µg/mL
1,2-dibromoethane	000106-93-4	RM00018	200.8 ± 1.0 µg/mL
1,2,3-trichloropropane	000096-18-4	RM09131	200.8 ± 1.0 µg/mL

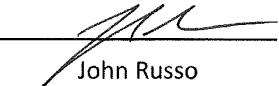
Matrix: methanol (methyl alcohol)

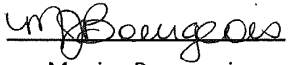
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SGPCE504_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30404 **Lot No.:** A0123209
Description : Pentachloroethane Standard
Pentachloroethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 160830B-BL2)	2,002.0 µg/mL	+/- 11.8913	µg/mL	Gravimetric
			+/- 112.2765	µg/mL	Unstressed
			+/- 114.9024	µg/mL	Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%				

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

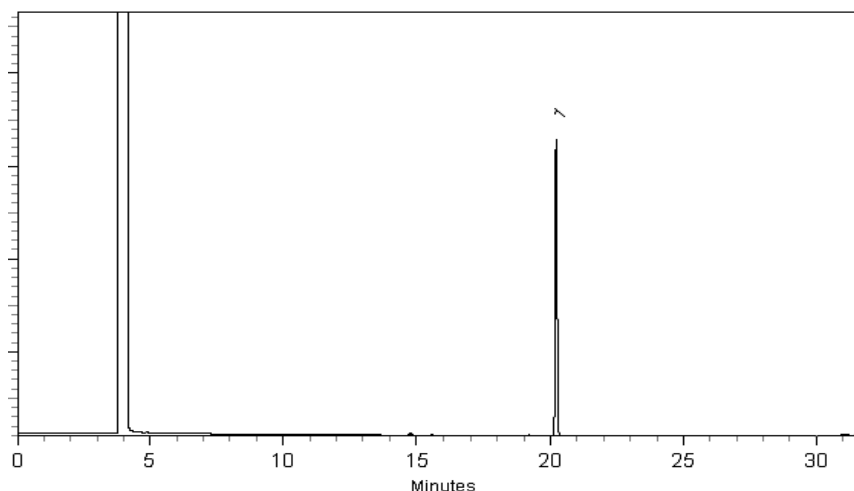
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis
Cathleen Soltis - Mix Technician

Date Mixed: 02-Dec-2016 Balance: 1125113331

Diane Shaffer
Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Dec-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00380



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 Lot No.: A0156625
 Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : January 31, 2025 Storage: 0°C or colder

PPF 3/30/2020
 [Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 112.5980 µg/mL +/- 115.2321 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6540057
 ID: VMVG_BFB_00385
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540055
 ID: VMVG_BFB_00384
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540039
 ID: VMVG_BFB_00383
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540037
 ID: VMVG_BFB_00382
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540035
 ID: VMVG_BFB_00381
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540033
 ID: VMVG_BFB_00380
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

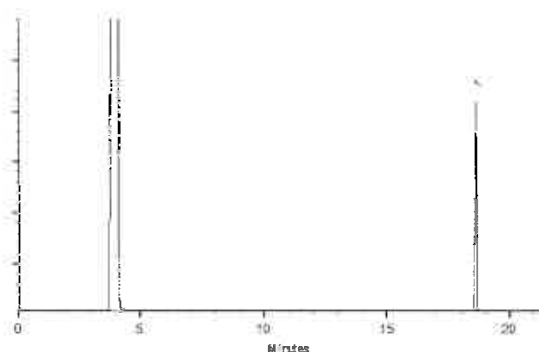
6540031
 ID: VMVG_BFB_00379
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540029
 ID: VMVG_BFB_00378
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540027
 ID: VMVG_BFB_00377
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540025
 ID: VMVG_BFB_00376
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)
Carrier Gas:
hydrogen-constant pressure 11.0 psi.
Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)
Inj. Temp:
200°C
Det. Temp:
250°C
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J. Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 12-Jan-2020 Balance: 1128342314

Justin A. Anderson
Justin Anderson - Operations Tech-ARM CG

Date Passed: 14-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00384



CERTIFIED REFERENCE MATERIAL

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 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
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www.restek.com

Certificate of Analysis



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 Lot No.: A0156625
 Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : January 31, 2025 Storage: 0°C or colder

PPF 3/30/2020
[Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL Gravimetric +/- 112.5980 µg/mL Unstressed +/- 115.2321 µg/mL Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6540057
 ID: VMVG_BFB_00385
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540055
 ID: VMVG_BFB_00384
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540039
 ID: VMVG_BFB_00383
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540037
 ID: VMVG_BFB_00382
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540035
 ID: VMVG_BFB_00381
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540033
 ID: VMVG_BFB_00380
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540031
 ID: VMVG_BFB_00379
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540029
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 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540027
 ID: VMVG_BFB_00377
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540025
 ID: VMVG_BFB_00376
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10919)

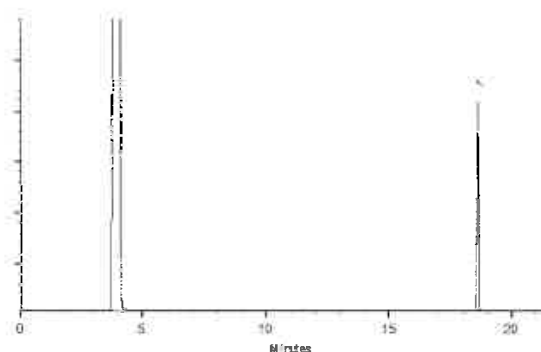
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J. Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 12-Jan-2020 Balance: 1128342314

Justin A. Anderson
Justin Anderson - Operations Tech-ARM CG

Date Passed: 14-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 524.2

Volatile Organic Compounds (GC/MS) by Method 524.2

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	BFB #	DCZ #
GWK016-2021-1	680-182910-1	86	101
GWK003-2021-1	680-182910-2	74	97
GWVA2-2021-1	680-182910-3	83	102
TB2021-03	680-182910-4	86	99
	MB 680-616541/10	86	99
	LCS 680-616541/4	94	96
	LCSD 680-616541/5	95	99

BFB = 4-Bromofluorobenzene
DCZ = 1,2-Dichlorobenzene-d4 (Surr)

QC LIMITS
70-130
70-130

Column to be used to flag recovery values

FORM II 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: Ud2604.D
 Lab ID: LCS 680-616541/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	20.0	21.5	108	70-130	
Ethylbenzene	20.0	22.1	110	70-130	
Tetrachloroethene	20.0	20.4	102	70-130	
Toluene	20.0	20.3	101	70-130	
Trichloroethene	20.0	21.0	105	70-130	
Vinyl chloride	20.0	25.1	126	70-130	
Xylenes, Total	40.0	43.7	109	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III

GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: Ud2605.DLab ID: LCSD 680-616541/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	20.0	20.0	100	8	20	70-130	
Ethylbenzene	20.0	20.7	103	7	20	70-130	
Tetrachloroethene	20.0	19.3	96	6	20	70-130	
Toluene	20.0	18.7	94	8	20	70-130	
Trichloroethene	20.0	19.1	96	9	20	70-130	
Vinyl chloride	20.0	23.3	116	8	20	70-130	
Xylenes, Total	40.0	41.0	102	6	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab File ID: Ud2610.D Lab Sample ID: MB 680-616541/10
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CMSU Date Analyzed: 04/26/2020 16:30
 GC Column: Rtx-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-616541/4	Ud2604.D	04/26/2020 14:29
	LCSD 680-616541/5	Ud2605.D	04/26/2020 14:49
TB2021-03	680-182910-4	Ud2612.D	04/26/2020 20:49
GWK003-2021-1	680-182910-2	Ud2617.D	04/26/2020 22:30
GWK016-2021-1	680-182910-1	Ud2618.D	04/26/2020 22:50
GWVA2-2021-1	680-182910-3	Ud2622.D	04/27/2020 00:11

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab File ID: Uc0801.D BFB Injection Date: 04/08/2020
 Instrument ID: CMSU BFB Injection Time: 13:43
 Analysis Batch No.: 614432

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.6	
75	30.0 - 80.0 % of mass 95	46.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	>50.0 % of mass 95	111.3	
175	5.0 - 9.0 % of mass 174	8.2	(7.4) 1
176	>95.0 but <101.0 % of mass 174	108.6	(97.5) 1
177	5.0 - 9.0 % of mass 176	6.9	(6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-614432/6	Uc0807.D	04/08/2020	15:56
	IC 680-614432/7	Uc0808.D	04/08/2020	16:16
	IC 680-614432/8	Uc0809.D	04/08/2020	16:37
	IC 680-614432/9	Uc0810.D	04/08/2020	16:57
	IC 680-614432/10	Uc0811.D	04/08/2020	17:17
	ICIS 680-614432/11	Uc0812.D	04/08/2020	17:37
	IC 680-614432/12	Uc0813.D	04/08/2020	17:58
	IC 680-614432/13	Uc0814.D	04/08/2020	18:18

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab File ID: Uc0901.D BFB Injection Date: 04/09/2020
 Instrument ID: CMSU BFB Injection Time: 14:42
 Analysis Batch No.: 614624

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.8	
75	30.0 - 80.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	>50.0 % of mass 95	112.2	
175	5.0 - 9.0 % of mass 174	8.6	(7.6) 1
176	>95.0 but <101.0 % of mass 174	109.8	(97.9) 1
177	5.0 - 9.0 % of mass 176	7.2	(6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 680-614624/2	Uc0902.D	04/09/2020	15:11

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab File ID: Ud2601.D BFB Injection Date: 04/26/2020
 Instrument ID: CMSU BFB Injection Time: 13:04
 Analysis Batch No.: 616541

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
75	30.0 - 80.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	>50.0 % of mass 95	105.5	
175	5.0 - 9.0 % of mass 174	7.9	(7.5) 1
176	>95.0 but <101.0 % of mass 174	102.5	(97.2) 1
177	5.0 - 9.0 % of mass 176	6.7	(6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-616541/2	Ud2602.D	04/26/2020	13:49
	LCS 680-616541/4	Ud2604.D	04/26/2020	14:29
	LCSD 680-616541/5	Ud2605.D	04/26/2020	14:49
	MB 680-616541/10	Ud2610.D	04/26/2020	16:30
TB2021-03	680-182910-4	Ud2612.D	04/26/2020	20:49
GWK003-2021-1	680-182910-2	Ud2617.D	04/26/2020	22:30
GWK016-2021-1	680-182910-1	Ud2618.D	04/26/2020	22:50
GWVA2-2021-1	680-182910-3	Ud2622.D	04/27/2020	0:11

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Sample No.: ICIS 680-614432/11 Date Analyzed: 04/08/2020 17:37
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): Uc0812.D Heated Purge: (Y/N) N
 Calibration ID: 74980

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	1117781	3.87	471729	6.17	287006	8.07	
UPPER LIMIT	1453115	4.37	613248	6.67	373108	8.57	
LOWER LIMIT	782447	3.37	330210	5.67	200904	7.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
680-182910-4	TB2021-03	1407807	3.87	524743	6.17	271752	8.07
680-182910-2	GWK003-2021-1	1244273	3.87	462204	6.17	226329	8.07
680-182910-1	GWK016-2021-1	1132211	3.87	415032	6.17	219899	8.07
680-182910-3	GWVA2-2021-1	1263475	3.87	475740	6.17	245234	8.07

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Sample No.: CCVIS 680-616541/2 Date Analyzed: 04/26/2020 13:49
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): Ud2602.D Heated Purge: (Y/N) N
 Calibration ID: 74980

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	1409963	3.87	569821	6.16	312161	8.07	
UPPER LIMIT	1832952	4.37	740767	6.66	405809	8.57	
LOWER LIMIT	986974	3.37	398875	5.66	218513	7.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-616541/4	1415572	3.87	552644	6.17	313705	8.07	
LCSD 680-616541/5	1321858	3.87	527181	6.17	296315	8.07	
MB 680-616541/10	1441211	3.87	541234	6.17	281650	8.07	
680-182910-4	TB2021-03	1407807	3.87	524743	6.17	271752	8.07
680-182910-2	GWK003-2021-1	1244273	3.87	462204	6.17	226329	8.07
680-182910-1	GWK016-2021-1	1132211	3.87	415032	6.17	219899	8.07
680-182910-3	GWVA2-2021-1	1263475	3.87	475740	6.17	245234	8.07

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWK016-2021-1 Lab Sample ID: 680-182910-1
 Matrix: Water Lab File ID: Ud2618.D
 Analysis Method: 524.2 Date Collected: 04/16/2020 13:49
 Sample wt/vol: 5(mL) Date Analyzed: 04/26/2020 22:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	101		70-130
460-00-4	4-Bromofluorobenzene	86		70-130

Report Date: 28-Apr-2020 08:36:43

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2618.D
 Lims ID: 680-182910-A-1
 Client ID: GWK016-2021-1
 Sample Type: Client
 Inject. Date: 26-Apr-2020 22:50:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-018
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:36:43 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau Date: 28-Apr-2020 08:36:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	1132211	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	415032	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	92	219899	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	92	183992	8.57	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	211036	10.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00089 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Apr-2020 08:36:43

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2618.D

Injection Date: 26-Apr-2020 22:50:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-182910-A-1

Lab Sample ID: 680-182910-1

Worklist Smp#: 18

Client ID: GWK016-2021-1

Purge Vol: 5.000 mL

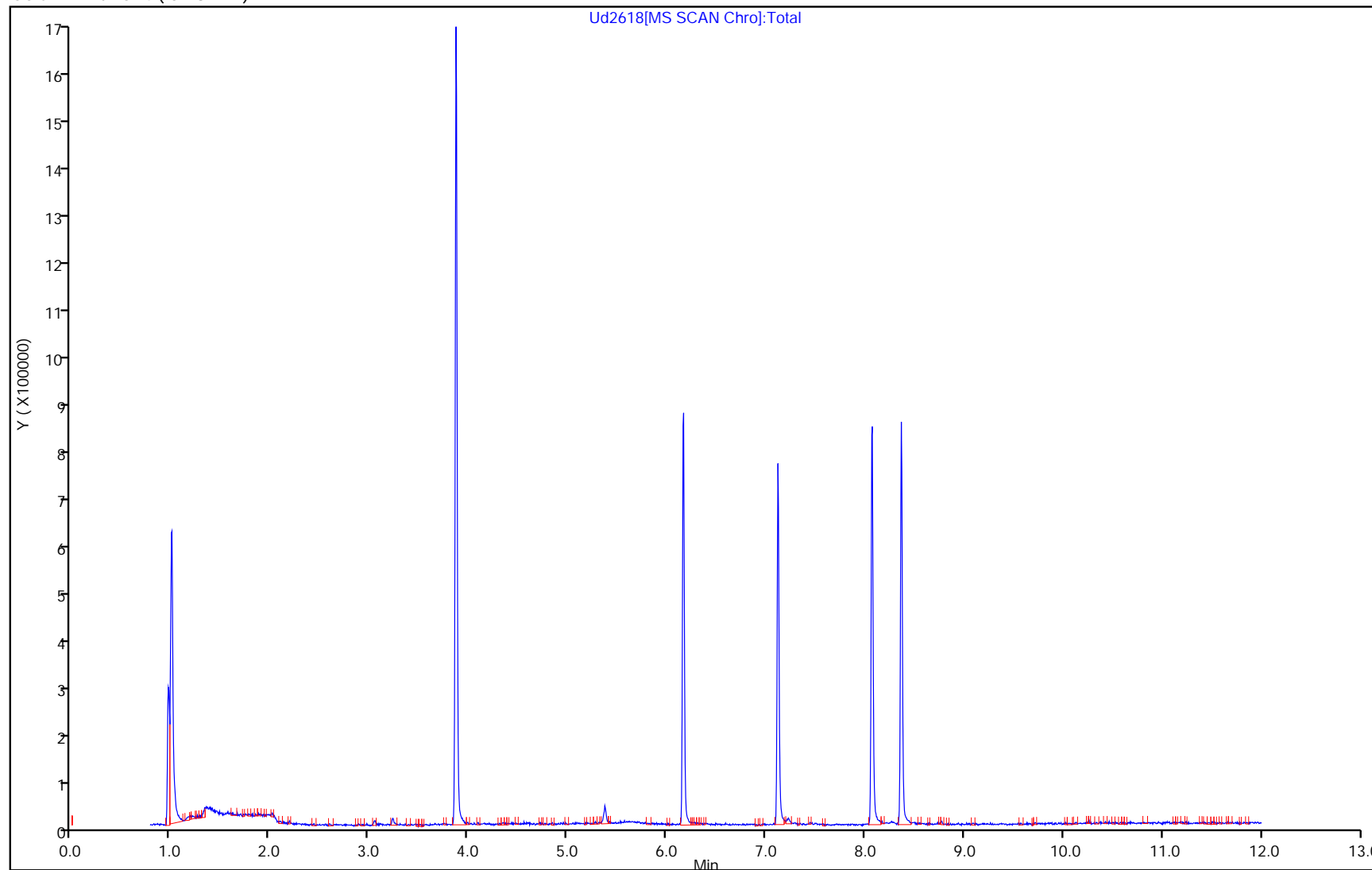
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:36:43

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2618.D
 Lims ID: 680-182910-A-1
 Client ID: GWK016-2021-1
 Sample Type: Client
 Inject. Date: 26-Apr-2020 22:50:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-018
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:36:43 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:36:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	8.57	85.71
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.1	100.96

Report Date: 28-Apr-2020 08:36:43

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

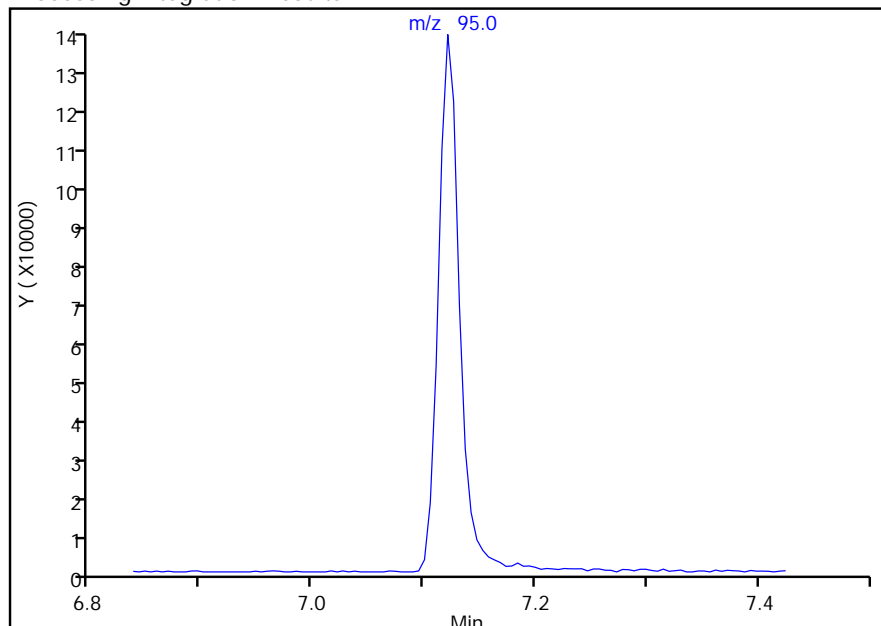
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2618.D		
Injection Date:	26-Apr-2020 22:50:30	Instrument ID:	CMSU
Lims ID:	680-182910-A-1	Lab Sample ID:	680-182910-1
Client ID:	GWK016-2021-1		
Operator ID:	rd	ALS Bottle#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	18

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

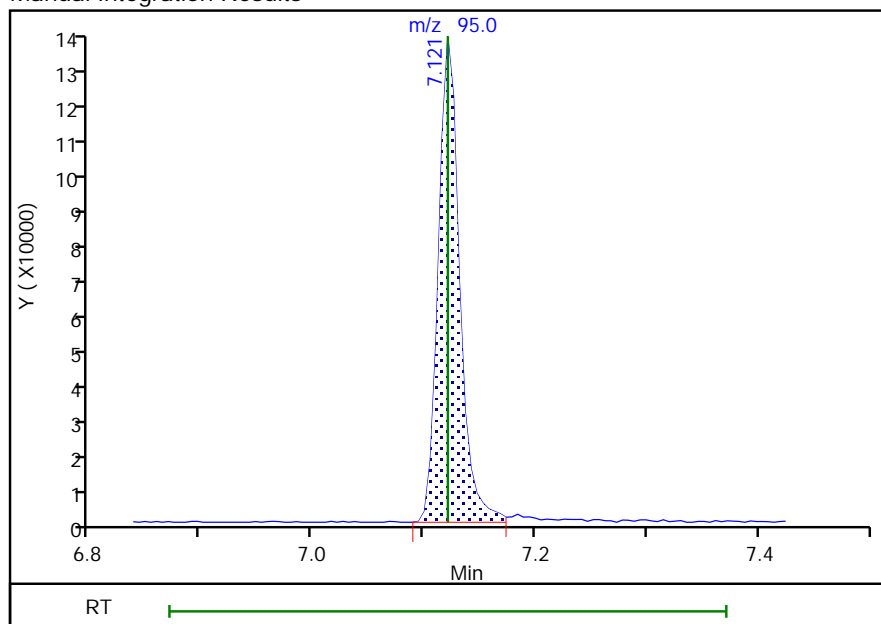
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 183992
Amount: 8.570912
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:36:33

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWK003-2021-1 Lab Sample ID: 680-182910-2
 Matrix: Water Lab File ID: Ud2617.D
 Analysis Method: 524.2 Date Collected: 04/16/2020 14:15
 Sample wt/vol: 5(mL) Date Analyzed: 04/26/2020 22:30
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	97		70-130
460-00-4	4-Bromofluorobenzene	74		70-130

Report Date: 28-Apr-2020 08:36:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2617.D
 Lims ID: 680-182910-A-2
 Client ID: GWK003-2021-1
 Sample Type: Client
 Inject. Date: 26-Apr-2020 22:30:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-017
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:36:28 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau Date: 28-Apr-2020 08:36:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1244273	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	462204	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	92	226329	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	91	174601	7.40	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	209116	9.72	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00089 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Apr-2020 08:36:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2617.D

Injection Date: 26-Apr-2020 22:30:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-182910-A-2

Lab Sample ID: 680-182910-2

Worklist Smp#: 17

Client ID: GWK003-2021-1

Purge Vol: 5.000 mL

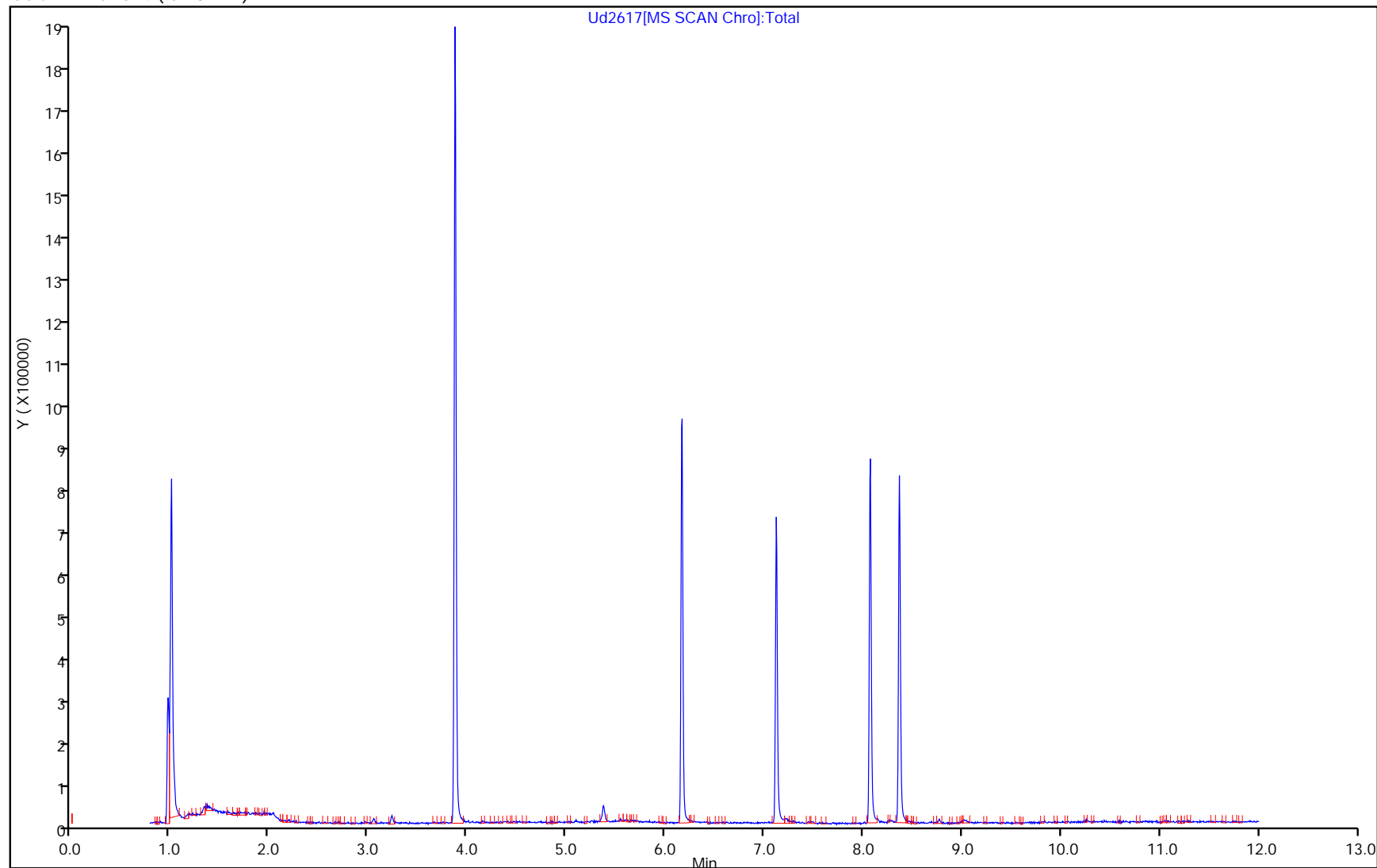
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:36:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2617.D
 Lims ID: 680-182910-A-2
 Client ID: GWK003-2021-1
 Sample Type: Client
 Inject. Date: 26-Apr-2020 22:30:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-017
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:36:28 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:36:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	7.40	74.01
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.72	97.20

Report Date: 28-Apr-2020 08:36:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

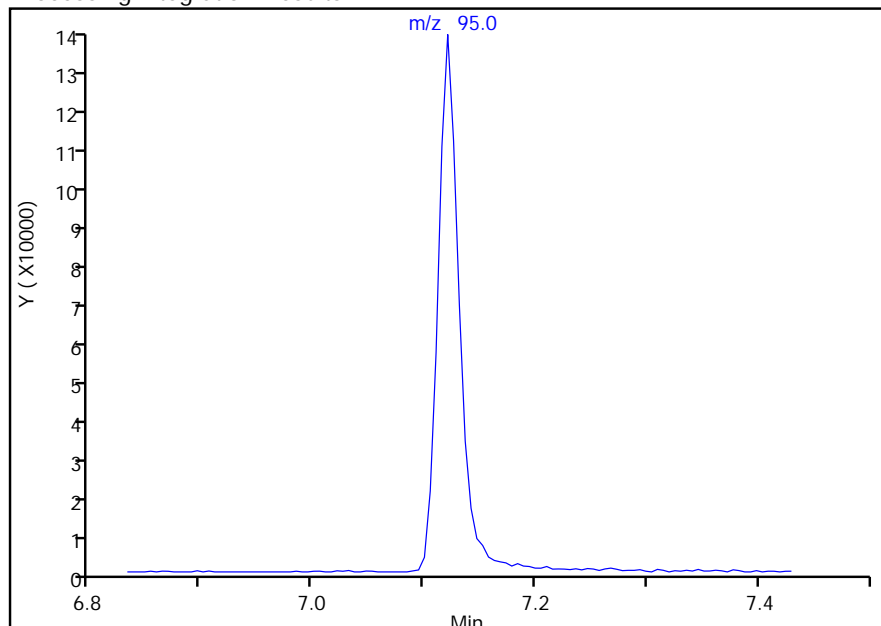
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2617.D				
Injection Date:	26-Apr-2020 22:30:30	Instrument ID:	CMSU		
Lims ID:	680-182910-A-2	Lab Sample ID:	680-182910-2		
Client ID:	GWK003-2021-1				
Operator ID:	rd	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	U524.2	Limit Group:	524.2		
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN		

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

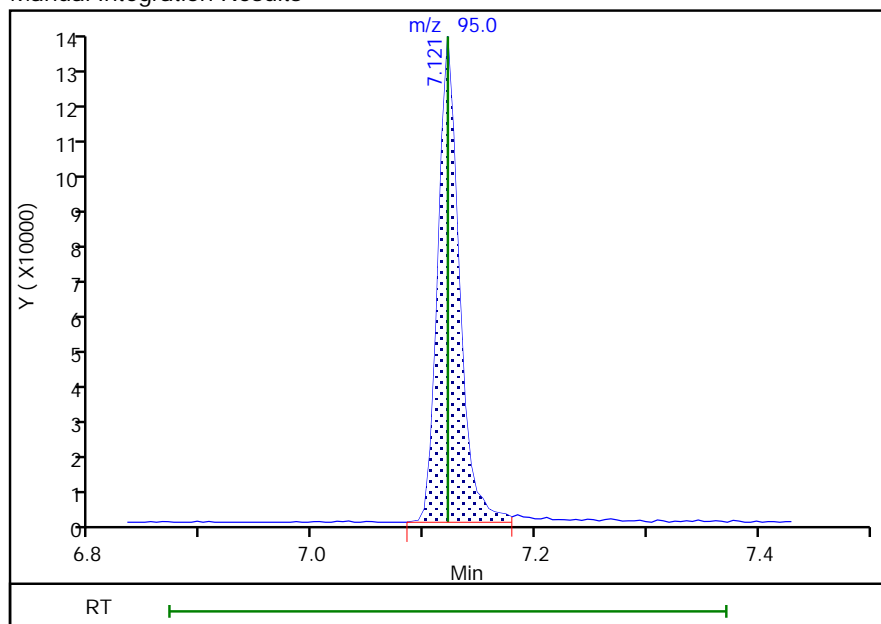
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 174601
Amount: 7.400934
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:36:18

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWVA2-2021-1 Lab Sample ID: 680-182910-3
 Matrix: Water Lab File ID: Ud2622.D
 Analysis Method: 524.2 Date Collected: 04/16/2020 15:05
 Sample wt/vol: 5(mL) Date Analyzed: 04/27/2020 00:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	102		70-130
460-00-4	4-Bromofluorobenzene	83		70-130

Report Date: 28-Apr-2020 08:38:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2622.D
 Lims ID: 680-182910-A-3
 Client ID: GWVA2-2021-1
 Sample Type: Client
 Inject. Date: 27-Apr-2020 00:11:30 ALS Bottle#: 22 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-022
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:38:29 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau Date: 28-Apr-2020 08:38:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1263475	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	475740	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	245234	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	92	198863	8.30	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	236935	10.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00089 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Apr-2020 08:38:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2622.D

Injection Date: 27-Apr-2020 00:11:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-182910-A-3

Lab Sample ID: 680-182910-3

Worklist Smp#: 22

Client ID: GWVA2-2021-1

Purge Vol: 5.000 mL

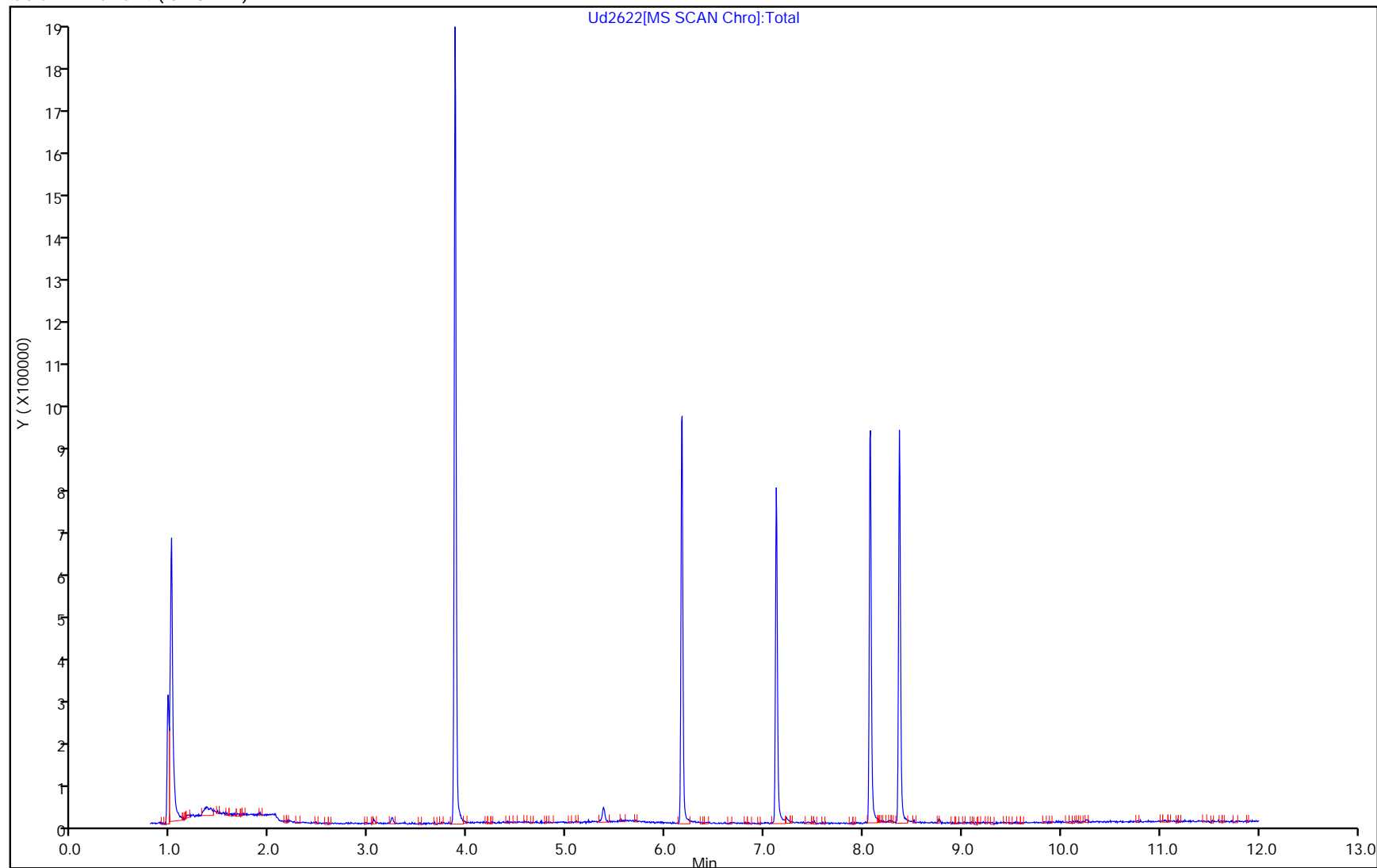
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:38:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2622.D
 Lims ID: 680-182910-A-3
 Client ID: GWVA2-2021-1
 Sample Type: Client
 Inject. Date: 27-Apr-2020 00:11:30 ALS Bottle#: 22 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-022
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:38:29 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:38:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	8.30	83.01
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.2	101.64

Report Date: 28-Apr-2020 08:38:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

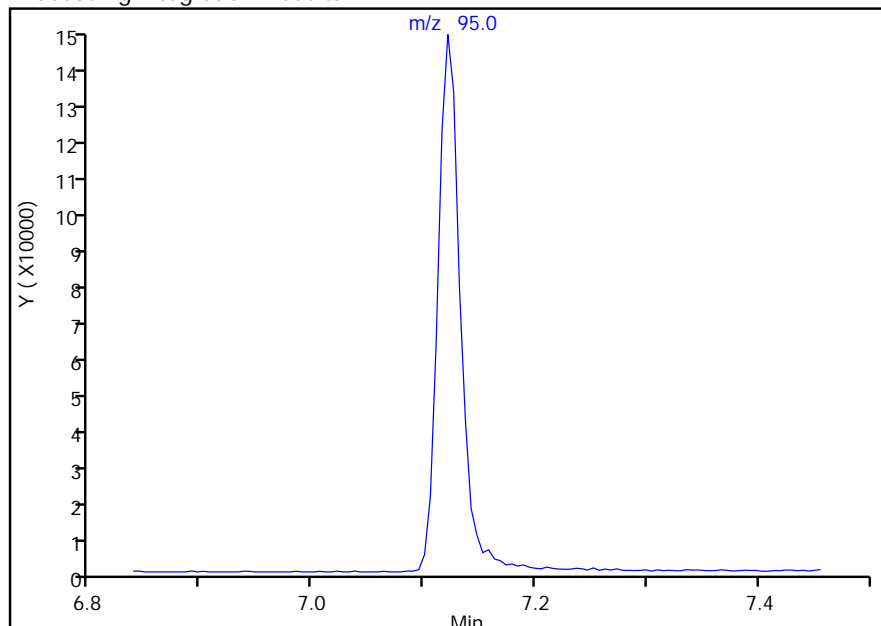
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2622.D		
Injection Date:	27-Apr-2020 00:11:30	Instrument ID:	CMSU
Lims ID:	680-182910-A-3	Lab Sample ID:	680-182910-3
Client ID:	GWVA2-2021-1		
Operator ID:	rd	ALS Bottle#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	22

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

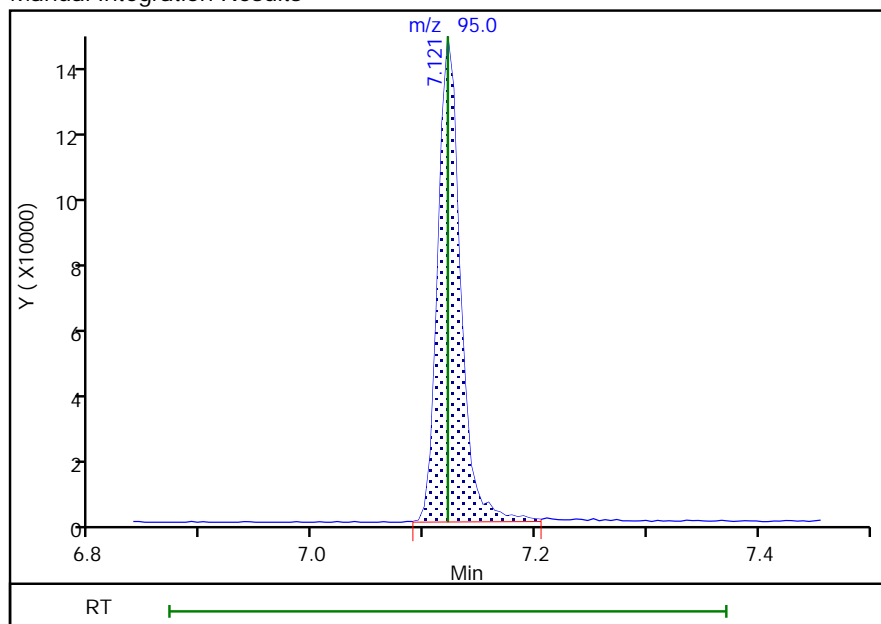
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 198863
Amount: 8.301237
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:38:20

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: TB2021-03 Lab Sample ID: 680-182910-4
 Matrix: Water Lab File ID: Ud2612.D
 Analysis Method: 524.2 Date Collected: 04/16/2020 16:17
 Sample wt/vol: 5(mL) Date Analyzed: 04/26/2020 20:49
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	99		70-130
460-00-4	4-Bromofluorobenzene	86		70-130

Report Date: 28-Apr-2020 08:33:07

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2612.D
 Lims ID: 680-182910-A-4
 Client ID: TB2021-03
 Sample Type: Client
 Inject. Date: 26-Apr-2020 20:49:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-012
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:33:07 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau Date: 28-Apr-2020 08:33:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1407807	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	524743	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	271752	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	229327	8.59	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	255161	9.88	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00089 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Apr-2020 08:33:07

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2612.D

Injection Date: 26-Apr-2020 20:49:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-182910-A-4

Lab Sample ID: 680-182910-4

Worklist Smp#: 12

Client ID: TB2021-03

Purge Vol: 5.000 mL

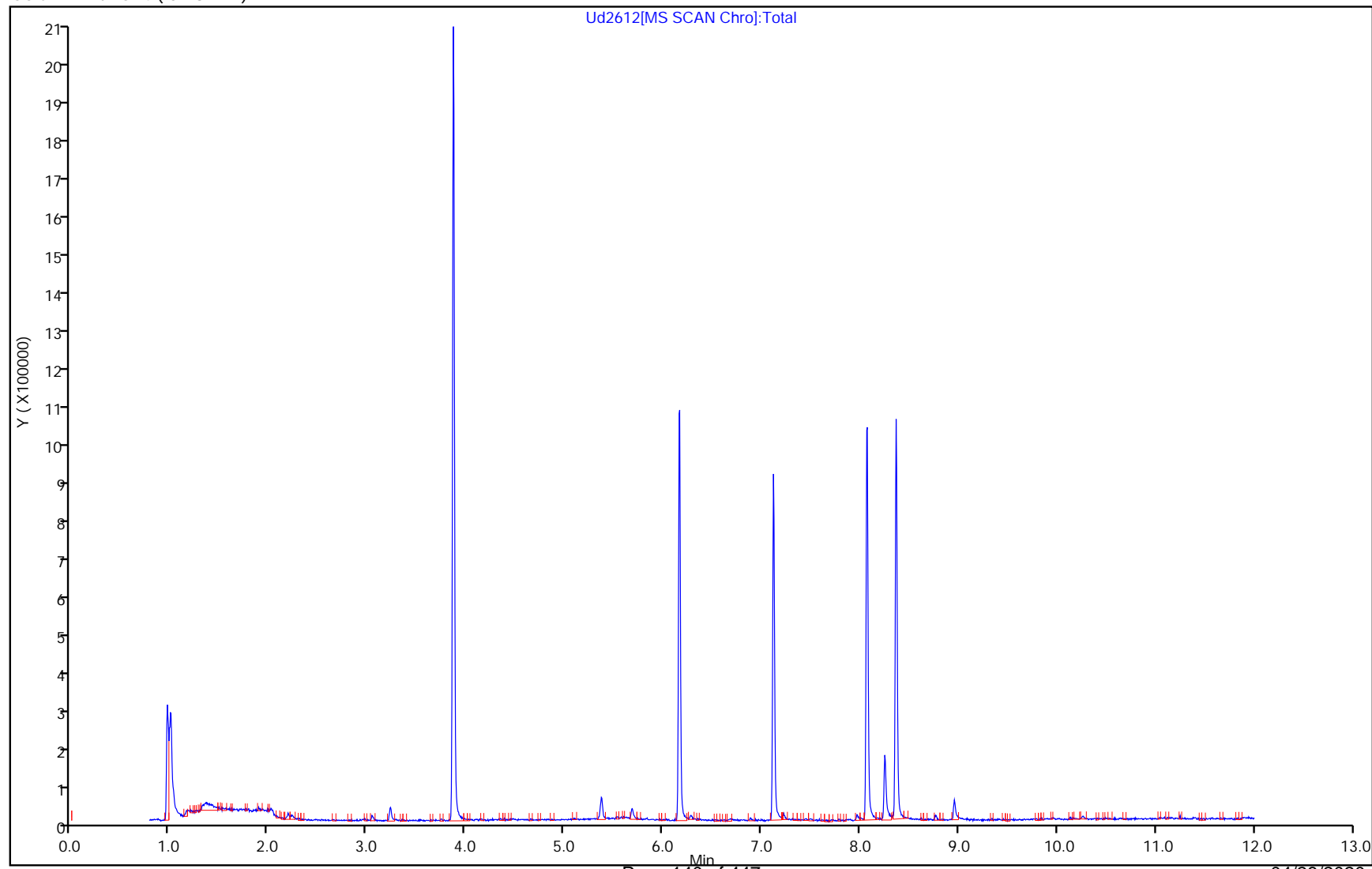
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:33:07

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2612.D
 Lims ID: 680-182910-A-4
 Client ID: TB2021-03
 Sample Type: Client
 Inject. Date: 26-Apr-2020 20:49:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-012
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:33:07 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:33:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	8.59	85.91
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.88	98.78

Report Date: 28-Apr-2020 08:33:07

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

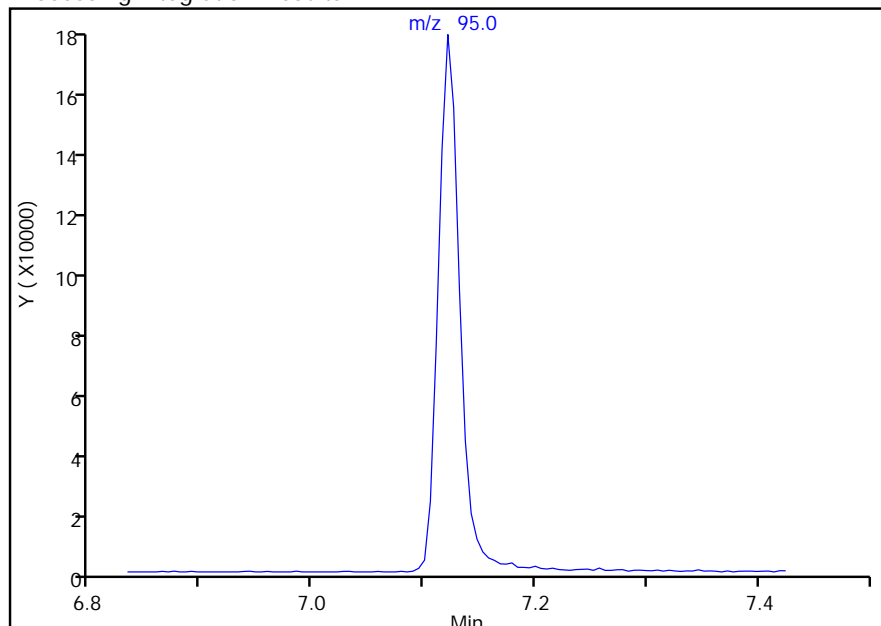
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2612.D				
Injection Date:	26-Apr-2020 20:49:30	Instrument ID:	CMSU		
Lims ID:	680-182910-A-4	Lab Sample ID:	680-182910-4		
Client ID:	TB2021-03				
Operator ID:	rd	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	U524.2	Limit Group:	524.2		
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN		

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

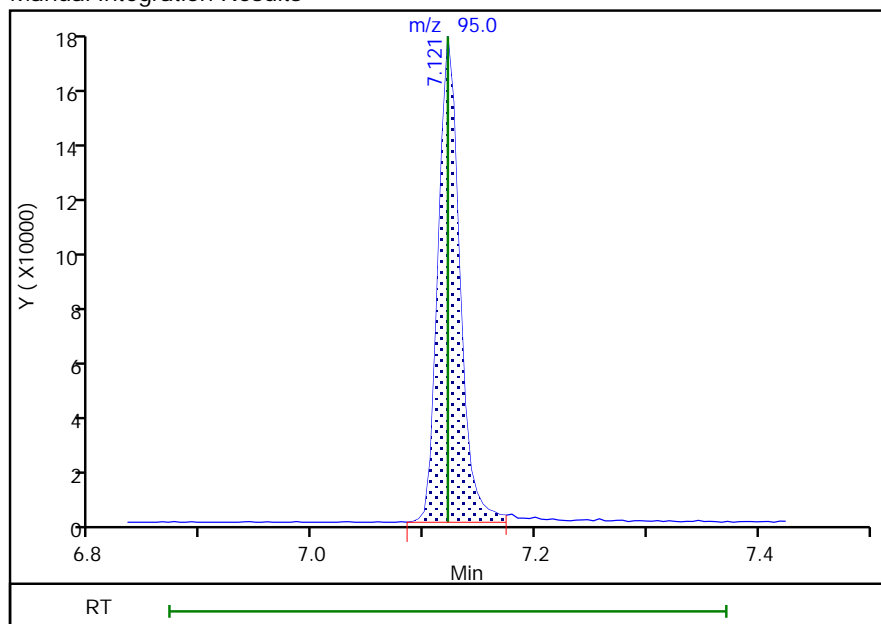
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 229327
Amount: 8.591471
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:32:56

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-614432/6	Uc0807.D
Level 2	IC 680-614432/7	Uc0808.D
Level 3	IC 680-614432/8	Uc0809.D
Level 4	IC 680-614432/9	Uc0810.D
Level 5	IC 680-614432/10	Uc0811.D
Level 6	ICIS 680-614432/11	Uc0812.D
Level 7	IC 680-614432/12	Uc0813.D
Level 8	IC 680-614432/13	Uc0814.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1775 0.2787	0.1750 0.2678	0.1939 0.2650	0.2739	0.2944	Lin1	-0.061	0.2701						0.9980		0.9900	
Vinyl chloride	0.2053 0.2678	0.1514 0.2613	0.2067 0.2520	0.2525	0.2898	Ave		0.2359			19.0		20.0				
Chloromethane	0.1988 0.3129	0.1411 0.2967	0.1388 0.2903	0.2979	0.3107	Lin	0.0250	0.2920						0.9990		0.9900	
Bromomethane	0.1551 0.1954	0.1431 0.1986	0.1300 0.2005	0.1798	0.1855	Ave		0.1735			15.7		20.0				
Chloroethane	0.1277 0.1734	0.1009 0.1675	0.0867 0.1637	0.1302	0.1780	Lin1	-0.053	0.1666						0.9960		0.9900	
Trichlorofluoromethane	0.2274 0.2769	0.1737 0.2319	0.2145 0.3043	0.2325	0.2885	Ave		0.2437			17.7		20.0				
Freon 113	0.2047 0.2508	0.1786 0.2568	0.2181 0.2610	0.2759	0.2939	Ave		0.2425			16.0		20.0				
1,1-Dichloroethene	0.1613 0.1709	0.1286 0.1569	0.1243 0.1787	0.2257	0.1993	Lin1	-0.012	0.1740						0.9920		0.9900	
Acetone	++++ 0.0173	++++ 0.0158	0.0245 0.0182	0.0240	0.0229	Ave		0.0204			18.5		20.0				
Methylene Chloride	0.2939 0.2158	0.1793 0.1800	0.1856 0.2562	0.2123	0.2147	Ave		0.2172			18.5		20.0				
tert-Butyl alcohol	0.0296 0.0232	0.0202 0.0237	0.0245 0.0240	0.0227	0.0256	Ave		0.0242			11.2		20.0				
Methyl tert-butyl ether	0.6932 0.7150	0.5945 0.7231	0.6594 0.7615	0.6800	0.7675	Ave		0.6993			8.1		20.0				
trans-1,2-Dichloroethene	0.2239 0.2555	0.1810 0.2616	0.2059 0.2684	0.2418	0.2693	Ave		0.2384			13.5		20.0				
1,1-Dichloroethane	0.3594 0.3958	0.2638 0.3985	0.3436 0.4057	0.3804	0.4105	Ave		0.3697			13.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Butanone (MEK)	++++ 0.0319	0.0361 0.0310	0.0385 0.0322	0.0335	0.0352	Ave		0.0340			7.9		20.0				
cis-1,2-Dichloroethene	0.3360 0.3605	0.2605 0.3656	0.3019 0.3688	0.3497	0.3693	Ave		0.3390			11.5		20.0				
2,2-Dichloropropane	0.3354 0.3494	0.2738 0.3614	0.2950 0.3743	0.3493	0.3837	Ave		0.3403			11.2		20.0				
Chlorobromomethane	0.1783 0.1916	0.1211 0.1657	0.1621 0.2034	0.2081	0.1884	Ave		0.1773			15.8		20.0				
Chloroform	0.4011 0.4464	0.3282 0.4470	0.3907 0.4568	0.4326	0.4730	Ave		0.4220			11.1		20.0				
1,1,1-Trichloroethane	0.4141 0.4730	0.3371 0.4828	0.4057 0.5073	0.4600	0.5163	Ave		0.4495			13.4		20.0				
Carbon tetrachloride	0.3970 0.4447	0.3113 0.4574	0.3697 0.4911	0.4436	0.4820	Ave		0.4246			14.4		20.0				
1,1-Dichloropropene	0.3753 0.3985	0.2786 0.4025	0.3314 0.4155	0.3838	0.4165	Ave		0.3752			12.7		20.0				
Benzene	1.2146 1.2122	0.9813 1.2320	1.0690 1.3081	1.1845	1.3052	Ave		1.1884			9.5		20.0				
1,2-Dichloroethane	0.3789 0.3778	0.3152 0.3909	0.3422 0.4017	0.3818	0.4203	Ave		0.3761			8.8		20.0				
Trichloroethene	0.3393 0.3767	0.2685 0.3729	0.3227 0.3922	0.3752	0.4200	Ave		0.3584			13.1		20.0				
1,2-Dichloropropane	0.2765 0.2852	0.2151 0.2767	0.2631 0.2870	0.2759	0.2992	Ave		0.2723			9.3		20.0				
Dibromomethane	0.2105 0.2025	0.1667 0.2019	0.1938 0.2085	0.2028	0.2214	Ave		0.2010			8.0		20.0				
Dichlorobromomethane	0.3839 0.4055	0.2971 0.4112	0.3495 0.4307	0.3898	0.4336	Ave		0.3877			11.7		20.0				
cis-1,3-Dichloropropene	0.4507 0.4739	0.3797 0.4781	0.4183 0.5066	0.4576	0.5236	Ave		0.4611			10.0		20.0				
4-Methyl-2-pentanone (MIBK)	0.2529 0.2884	0.2224 0.2918	0.2728 0.3059	0.2646	0.3046	Ave		0.2754			10.3		20.0				
Toluene	0.8728 0.8499	0.6383 0.8553	0.7586 0.9029	0.8001	0.8976	Ave		0.8219			10.8		20.0				
trans-1,3-Dichloropropene	0.3886 0.4522	0.3464 0.4625	0.3896 0.4911	0.4163	0.4853	Ave		0.4290			12.1		20.0				
1,1,2-Trichloroethane	0.2823 0.2459	0.1866 0.2410	0.2230 0.2487	0.2441	0.2629	Ave		0.2418			11.7		20.0				
Tetrachloroethene	0.6550 0.6218	0.4888 0.5743	0.5415 0.5806	0.6003	0.6689	Ave		0.5914			10.0		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3-Dichloropropane	0.4454 0.4716	0.3696 0.4657	0.4582 0.4852	0.4424	0.4967	Ave		0.4544			8.6		20.0				
2-Hexanone	++++ 0.3319	0.2610 0.3211	0.3217 0.3246	0.3161	0.3648	Ave		0.3202			9.6		20.0				
Chlorodibromomethane	0.6033 0.6533	0.4404 0.6286	0.5739 0.6425	0.6123	0.6923	Ave		0.6058			12.5		20.0				
Ethylene Dibromide	0.3388 0.3480	0.2369 0.3439	0.3176 0.3515	0.3170	0.3661	Ave		0.3275			12.3		20.0				
Chlorobenzene	0.9186 1.0211	0.7743 1.0370	0.8821 1.0649	0.9500	1.0566	Ave		0.9631			10.6		20.0				
1,1,1,2-Tetrachloroethane	0.5718 0.6339	0.4650 0.6001	0.5418 0.6065	0.5866	0.6838	Ave		0.5862			11.0		20.0				
Ethylbenzene	2.3859 2.6760	2.0132 2.6345	2.2497 2.6819	2.5977	2.8347	Ave		2.5092			10.8		20.0				
m-Xylene & p-Xylene	1.8573 2.0910	1.4814 2.0345	1.8313 2.0694	2.0362	2.2019	Ave		1.9504			11.5		20.0				
o-Xylene	1.8989 2.1550	1.7043 2.1316	1.8881 2.1722	2.0813	2.2796	Ave		2.0389			9.3		20.0				
Styrene	1.5693 1.8244	1.2408 1.7925	1.5340 1.8622	1.6884	1.9287	Ave		1.6800			13.4		20.0				
Bromoform	0.4756 0.5361	0.3823 0.5269	0.4832 0.5383	0.4947	0.5707	Ave		0.5010			11.5		20.0				
Isopropylbenzene	2.1189 2.7783	1.9503 2.8110	2.3412 2.8738	2.6675	2.9188	Ave		2.5575			14.5		20.0				
Bromobenzene	0.8840 0.8870	0.6891 0.8486	0.8084 0.8600	0.8364	0.9425	Ave		0.8445			8.8		20.0				
1,1,2,2-Tetrachloroethane	0.7107 0.6907	0.4977 0.6626	0.6766 0.6522	0.6513	0.7439	Ave		0.6607			11.1		20.0				
1,2,3-Trichloropropane	0.3037 0.2256	0.1979 0.2134	0.2215 0.2082	0.2117	0.2429	Ave		0.2281			14.6		20.0				
N-Propylbenzene	2.6633 3.1129	2.2974 3.2008	2.5364 3.1985	2.9235	3.2884	Ave		2.9026			12.5		20.0				
2-Chlorotoluene	1.6614 1.8376	1.4084 1.8485	1.6167 1.8744	1.7072	1.9530	Ave		1.7384			10.1		20.0				
1,3,5-Trimethylbenzene	1.8364 2.1013	1.4580 2.1084	1.7743 2.2382	1.9894	2.2163	Ave		1.9653			13.4		20.0				
4-Chlorotoluene	1.9568 2.1372	1.5237 2.1874	1.8051 2.2154	2.0134	2.2871	Ave		2.0158			12.5		20.0				
tert-Butylbenzene	1.6843 2.0502	1.4522 2.0791	1.7817 2.1431	1.9632	2.1706	Ave		1.9156			13.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432
 SDG No.: _____
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	1.8845 1.9880	1.4408 2.0178	1.6844 2.1626	1.8993	2.1098	Ave		1.8984			12.5		20.0				
sec-Butylbenzene	2.4751 2.8415	2.0133 2.9514	2.3177 3.0533	2.6409	2.9920	Ave		2.6606			13.9		20.0				
1,3-Dichlorobenzene	1.4535 1.5816	1.1243 1.5638	1.3874 1.6003	1.5190	1.6526	Ave		1.4853			11.3		20.0				
4-Isopropyltoluene	2.0402 2.4216	1.7728 2.4873	2.0070 2.6397	2.2531	2.5105	Ave		2.2665			13.3		20.0				
1,4-Dichlorobenzene	1.6263 1.6056	1.2156 1.5873	1.4106 1.6250	1.5102	1.6802	Ave		1.5326			10.0		20.0				
1,2-Dichlorobenzene	1.3364 1.5284	1.1810 1.5290	1.3690 1.5465	1.4396	1.6263	Ave		1.4445			9.9		20.0				
n-Butylbenzene	1.4053 1.7154	1.2131 1.8061	1.3790 1.9399	1.6130	1.8195	Ave		1.6114			15.8		20.0				
1,2-Dibromo-3-Chloropropane	0.2100 0.2099	0.1594 0.2051	0.2047 0.2053	0.1917	0.2194	Ave		0.2007			9.2		20.0				
1,2,4-Trichlorobenzene	0.6671 0.7476	0.5339 0.6993	0.6765 0.7298	0.7472	0.7948	Ave		0.6996			11.3		20.0				
Hexachlorobutadiene	0.4214 0.5041	0.3963 0.4856	0.4324 0.4754	0.5066	0.5616	Ave		0.4729			11.4		20.0				
Naphthalene	2.5826 1.9388	1.8162 1.8030	1.9064 1.8008	1.9339	2.1321	Ave		1.9892			13.2		20.0				
1,2,3-Trichlorobenzene	0.7843 0.7071	0.5832 0.6541	0.6270 0.6666	0.6966	0.7521	Ave		0.6839			9.6		20.0				
4-Bromofluorobenzene	0.3561 0.3980	0.3478 0.4163	0.3562 0.4203	0.3570	0.3820	Ave		0.3792			7.7		20.0				
1,2-Dichlorobenzene-d4 (Surr)	0.9424 0.9735	0.9253 0.9652	0.9130 0.9719	0.9358	0.9775	Ave		0.9506			2.6		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-614432/6	Uc0807.D
Level 2	IC 680-614432/7	Uc0808.D
Level 3	IC 680-614432/8	Uc0809.D
Level 4	IC 680-614432/9	Uc0810.D
Level 5	IC 680-614432/10	Uc0811.D
Level 6	ICIS 680-614432/11	Uc0812.D
Level 7	IC 680-614432/12	Uc0813.D
Level 8	IC 680-614432/13	Uc0814.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	4737 311471	9681 762742	20988 1668266	74139	159922	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	5478 299291	8376 744099	22378 1586410	68355	157443	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Lin	5305 349808	7808 844885	15029 1827385	80636	168820	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	4139 218393	7916 565523	14072 1261741	48682	100801	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Lin1	3407 193868	5583 477099	9381 1030508	35238	96702	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6068 309474	9607 660402	23214 1915627	62946	156725	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Freon 113	FB	Ave	5461 280343	9881 731326	23608 1642942	74683	159701	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Lin1	4305 190983	7112 446860	13452 1124770	61089	108303	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	++++ 96660	++++ 225061	13252 572599	32434	62227	++++ 100	++++ 250	10.0 500	25.0	50.0
Methylene Chloride	FB	Ave	7842 241169	9920 512522	20092 1612553	57482	116668	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butyl alcohol	FB	Ave	7907 258898	11191 674037	26473 1510119	61371	139055	5.00 200	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	18495 799181	32890 2059448	71379 4793301	184081	416967	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	5973 285606	10013 745016	22289 1689375	65459	146317	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	9590 442389	14594 1134820	37195 2553276	102983	223019	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	++++ 178076	9976 441044	20832 1014089	45369	95580	++++ 100	5.00 250	10.0 500	25.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432
SDG No.: _____
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	8964 402978	14409 1041121	32675 2321117	94664	200627	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2,2-Dichloropropane	FB	Ave	8948 390544	15147 1029175	31931 2356152	94549	208489	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobromomethane	FB	Ave	4757 214176	6699 471910	17543 1280351	56339	102358	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroform	FB	Ave	10703 498940	18154 1273154	42296 2875227	117102	256989	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	CBNZ d5	Ave	9093 446262	14960 1171911	36424 2669381	102777	229986	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	CBNZ d5	Ave	8717 419549	13813 1110100	33191 2584017	99116	214713	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	CBNZ d5	Ave	8239 375964	12362 976786	29751 2186415	85757	185530	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	CBNZ d5	Ave	26668 1143614	43543 2990294	95971 6882808	264674	581464	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloroethane	CBNZ d5	Ave	8319 356421	13985 948844	30726 2113512	85305	187225	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	CBNZ d5	Ave	7449 355397	11914 905016	28968 2063481	83846	187110	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	CBNZ d5	Ave	6070 269032	9544 671607	23623 1510026	61643	133296	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	CBNZ d5	Ave	4621 191023	7397 490101	17403 1096882	45307	98634	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorobromomethane	CBNZ d5	Ave	8429 382593	13183 997944	31375 2266322	87102	193142	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	9895 447077	16850 1160342	37557 2665445	102241	233264	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	27768 1360277	49344 3540732	122451 8048503	295596	678389	2.50 100	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	19164 801839	28322 2075924	68104 4750648	178775	399886	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	8532 426624	15372 1122602	34974 2583846	93013	216196	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	6199 231997	8280 585000	20017 1308736	54535	117128	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	DCBd 4	Ave	8175 356893	12444 902883	28180 2021733	78386	177106	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	9779 444918	16402 1130402	41140 2553163	98853	221277	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	DCBd 4	Ave	++++ 952584	33222 2524228	83702 5650574	206396	482908	++++ 100	5.00 250	10.0 500	25.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	DCBd 4	Ave	7529 375004	11211 988209	29863 2237083	79953	183299	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	7438 328348	10511 834631	28509 1849279	70833	163082	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	20169 963397	34360 2516851	79190 5603140	212267	470693	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	DCBd 4	Ave	7136 363877	11838 943384	28193 2111924	76603	181057	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	DCBd 4	Ave	29777 1536072	51250 4141812	117072 9338516	339215	750570	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
m-Xylene & p-Xylene	DCBd 4	Ave	23179 1200267	37714 3198516	95299 7205647	265896	583035	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	DCBd 4	Ave	23698 1236996	43388 3351161	98255 7563495	271779	603595	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	DCBd 4	Ave	19585 1047231	31587 2818030	79827 6484221	220478	510675	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	DCBd 4	Ave	5935 307725	9732 828406	25147 1874404	64599	151100	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	26444 1594773	49649 4419204	121833 10006474	348325	772841	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	11032 509168	17542 1334166	42066 2994528	109221	249554	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8870 396470	12669 1041724	35210 2271070	85048	196966	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	3790 129484	5037 335438	11529 725085	27639	64312	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	33238 1786862	58486 5031983	131991 11137210	381765	870700	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	20735 1054795	35855 2906016	84132 6526728	222929	517131	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	22919 1206157	37118 3314707	92333 7793393	259781	586842	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	24421 1226795	38789 3438808	93932 7714115	262916	605581	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	21020 1176827	36969 3268624	92715 7462406	256367	574746	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	23519 1141158	36679 3172296	87654 7530354	248017	558651	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	30890 1631066	51253 4639995	120607 10631683	344855	792220	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	18140 907882	28623 2458495	72198 5572360	198353	437576	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 614432
SDG No.:
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/08/2020 15:56 Calibration End Date: 04/08/2020 18:18 Calibration ID: 74980

Table with columns: ANALYTE, IS REF, CURVE TYPE, RESPONSE (LVL 1-5), CONCENTRATION (UG/L) (LVL 1-5). Rows include various chemical compounds like 4-Isopropyltoluene, 1,4-Dichlorobenzene, etc.

Curve Type Legend:
Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD

Report Date: 09-Apr-2020 12:36:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-Apr-2020 15:56:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-006
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:36:25 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 12:32:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1067272	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	439118	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	249603	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	91	197649	10.4	9.77	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.371	8.366	0.005	83	244642	10.4	10.3	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	95	4737	0.5000	0.5526	a
9 Vinyl chloride	62	1.232	1.232	0.000	95	5478	0.5000	0.4352	
8 Chloromethane	50	1.253	1.253	0.000	55	5305	0.5000	0.2547	
10 Bromomethane	94	1.404	1.399	0.005	86	4139	0.5000	0.4470	
11 Chloroethane	64	1.451	1.451	0.000	82	3407	0.5000	0.7001	
12 Trichlorofluoromethane	101	1.582	1.587	-0.005	90	6068	0.5000	0.4666	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	95	5461	0.5000	0.4220	
13 1,1-Dichloroethene	96	1.886	1.880	0.006	92	4305	0.5000	0.5327	
15 Acetone	58	1.901	1.901	0.000	20	2962	2.50	2.72	a
16 Methylene Chloride	84	2.194	2.194	0.000	91	7842	0.5000	0.6765	
17 2-Methyl-2-propanol	59	2.246	2.241	0.005	92	7907	5.00	6.13	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	18495	0.5000	0.4956	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	86	5973	0.5000	0.4695	
20 1,1-Dichloroethane	63	2.665	2.670	-0.005	98	9590	0.5000	0.4861	
23 2-Butanone (MEK)	72	3.057	3.047	0.010	99	6874	2.50	3.78	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	67	8964	0.5000	0.4955	
25 2,2-Dichloropropane	77	3.057	3.062	-0.005	62	8948	0.5000	0.4928	
26 Chlorobromomethane	130	3.225	3.225	0.000	60	4757	0.5000	0.5027	
27 Chloroform	83	3.293	3.293	-0.001	97	10703	0.5000	0.4753	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	93	9093	0.5000	0.4606	
29 Carbon tetrachloride	117	3.523	3.517	0.006	89	8717	0.5000	0.4675	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	93	8239	0.5000	0.5000	
31 Benzene	78	3.664	3.664	0.000	95	26668	0.5000	0.5110	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	95	8319	0.5000	0.5037	
34 Trichloroethene	132	4.135	4.135	0.000	89	7449	0.5000	0.4733	
35 1,2-Dichloropropane	63	4.328	4.323	0.005	90	6070	0.5000	0.5076	

Report Date: 09-Apr-2020 12:36:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	86	4621	0.5000	0.5235	
37 Dichlorobromomethane	83	4.522	4.516	0.006	98	8429	0.5000	0.4952	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	90	9895	0.5000	0.4887	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	0.000	97	27768	2.50	2.30	a
40 Toluene	92	5.097	5.092	0.005	94	19164	0.5000	0.5310	
41 trans-1,3-Dichloropropene	75	5.280	5.275	0.005	95	8532	0.5000	0.4529	
42 1,1,2-Trichloroethane	83	5.426	5.421	0.005	92	6199	0.5000	0.5838	
43 Tetrachloroethene	164	5.484	5.484	0.000	93	8175	0.5000	0.5538	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	93	9779	0.5000	0.4901	
45 2-Hexanone	43	5.594	5.594	0.000	95	20345	2.50	2.55	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	94	7529	0.5000	0.4979	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	7438	0.5000	0.5173	
48 Chlorobenzene	112	6.190	6.190	0.000	94	20169	0.5000	0.4769	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	89	7136	0.5000	0.4877	
50 Ethylbenzene	91	6.274	6.269	0.005	98	29777	0.5000	0.4754	
51 m-Xylene & p-Xylene	91	6.373	6.378	-0.005	96	23179	0.5000	0.4761	
52 o-Xylene	91	6.682	6.682	0.000	96	23698	0.5000	0.4657	
53 Styrene	104	6.703	6.703	0.000	95	19585	0.5000	0.4670	
54 Bromoform	173	6.839	6.844	-0.005	94	5935	0.5000	0.4746	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	26444	0.5000	0.4143	
56 Bromobenzene	156	7.236	7.231	0.005	79	11032	0.5000	0.5234	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.241	-0.005	90	8870	0.5000	0.5378	
58 1,2,3-Trichloropropane	110	7.288	7.283	0.005	93	3790	0.5000	0.6657	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	33238	0.5000	0.4588	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	20735	0.5000	0.4779	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	92	22919	0.5000	0.4672	a
62 4-Chlorotoluene	91	7.498	7.492	0.006	98	24421	0.5000	0.4854	
63 tert-Butylbenzene	119	7.728	7.728	0.000	93	21020	0.5000	0.4396	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	23519	0.5000	0.4963	
65 sec-Butylbenzene	105	7.916	7.911	0.005	99	30890	0.5000	0.4651	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	98	18140	0.5000	0.4893	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	96	25462	0.5000	0.4501	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	96	20296	0.5000	0.5306	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	95	16679	0.5000	0.4626	a
70 n-Butylbenzene	91	8.387	8.382	0.005	95	17538	0.5000	0.4360	
71 1,2-Dibromo-3-Chloropropan	157	9.041	9.035	0.006	63	2621	0.5000	0.5232	
72 1,2,4-Trichlorobenzene	180	9.720	9.715	0.005	91	8326	0.5000	0.4768	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	88	5259	0.5000	0.4455	
74 Naphthalene	128	9.940	9.935	0.005	99	32231	0.5000	0.6491	
75 1,2,3-Trichlorobenzene	180	10.123	10.118	0.005	92	9788	0.5000	0.5734	
S 76 Xylenes, Total	1				0		1.00	0.9418	
S 77 Trihalomethanes, Total	1				0			1.94	
S 78 1,3-Dichloropropene, Total	1				0		1.00	0.9417	

QC Flag Legend

Review Flags

a - User Assigned ID

Report Date: 09-Apr-2020 12:36:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00166

Amount Added: 0.05

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:36:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D

Injection Date: 08-Apr-2020 15:56:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

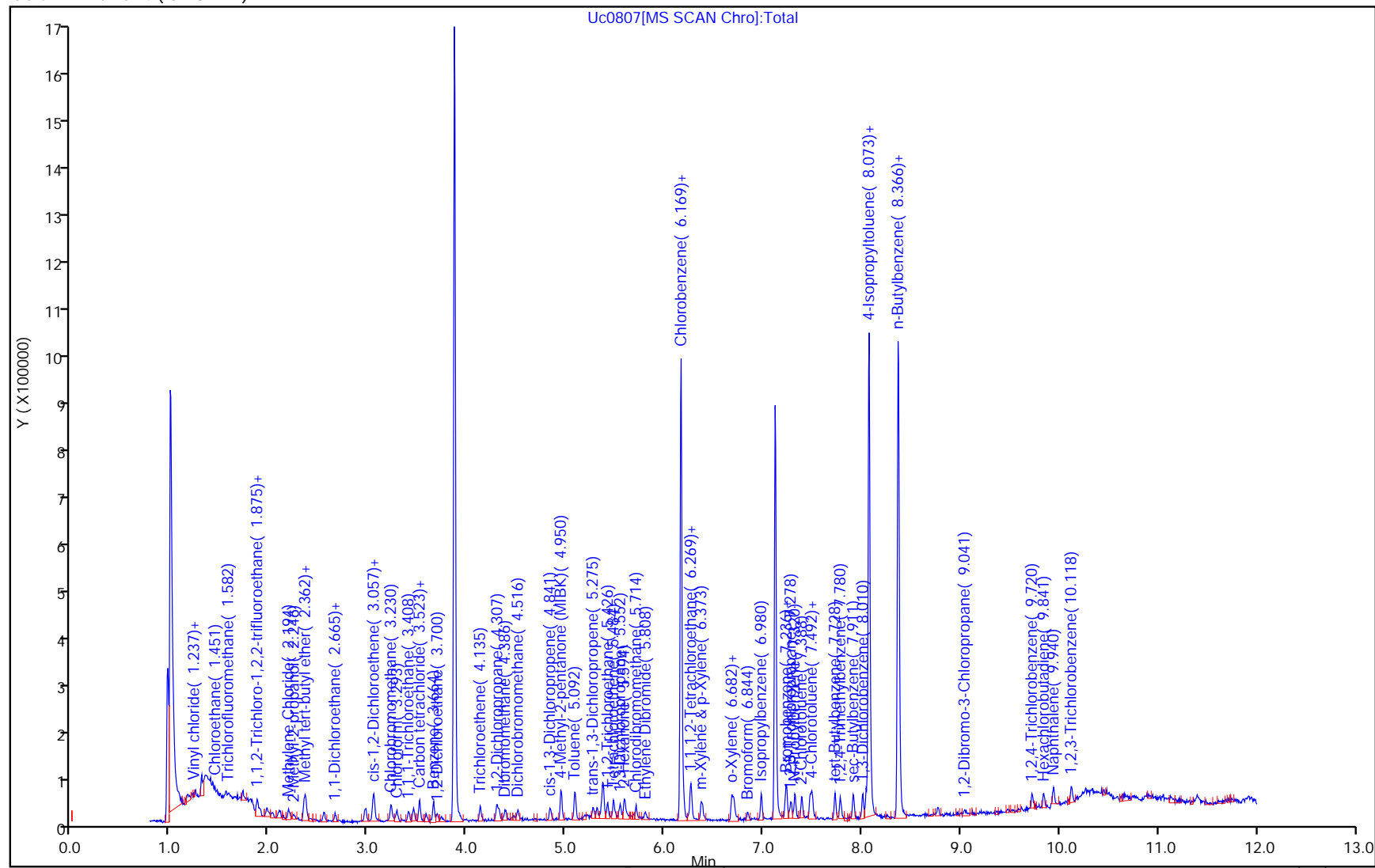
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:36:26

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

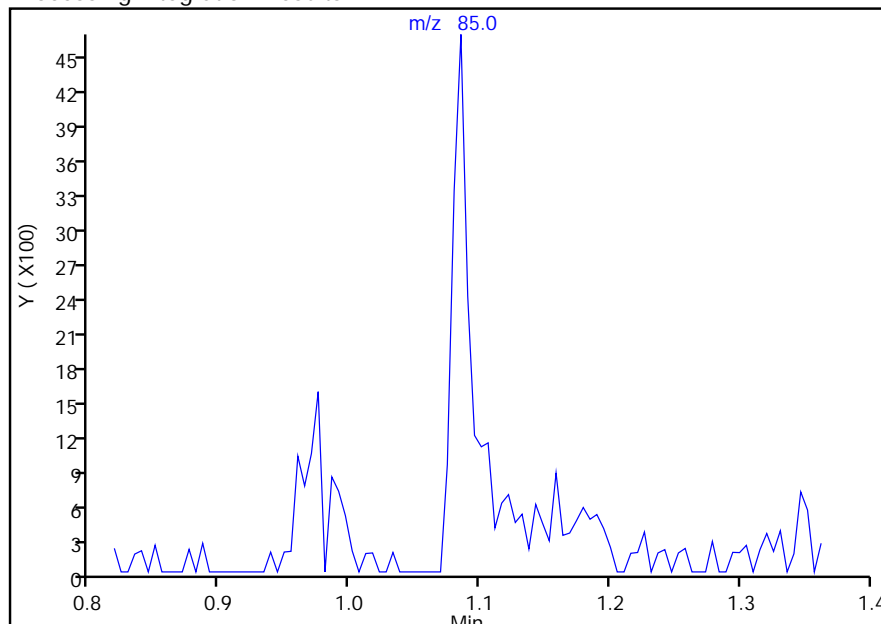
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D
Injection Date: 08-Apr-2020 15:56:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

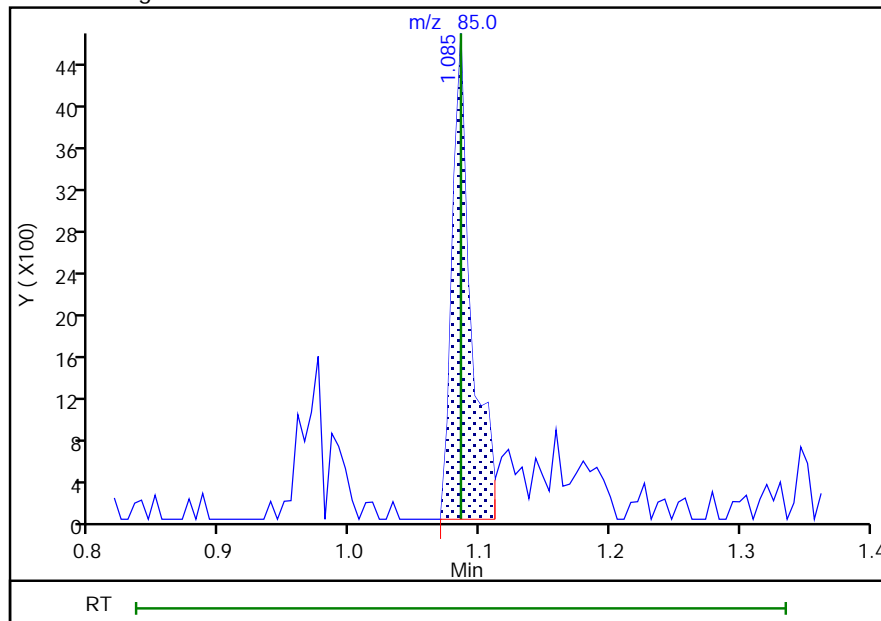
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 4737
Amount: 0.552637
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:18:20

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D
 Injection Date: 08-Apr-2020 15:56:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

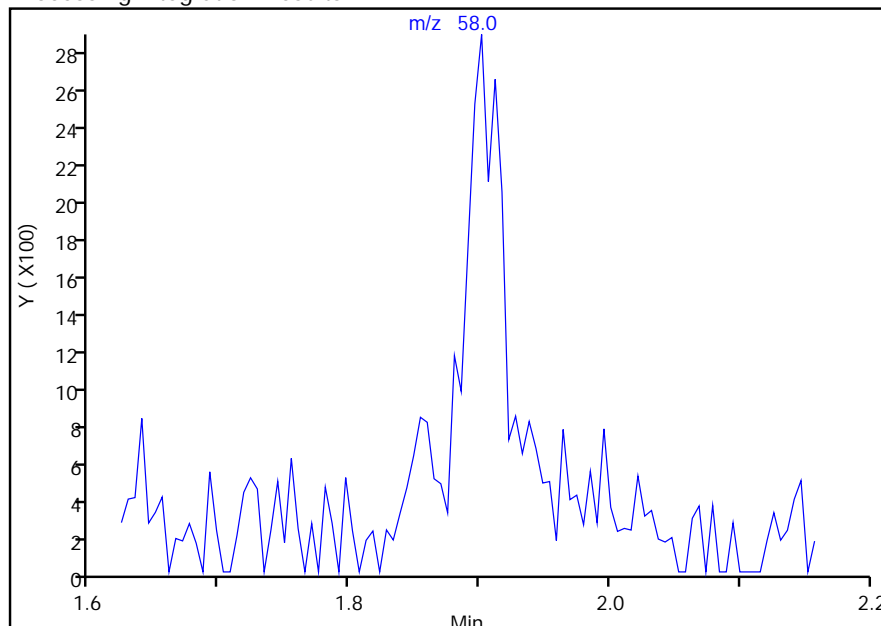
15 Acetone, CAS: 67-64-1

Signal: 1

Not Detected

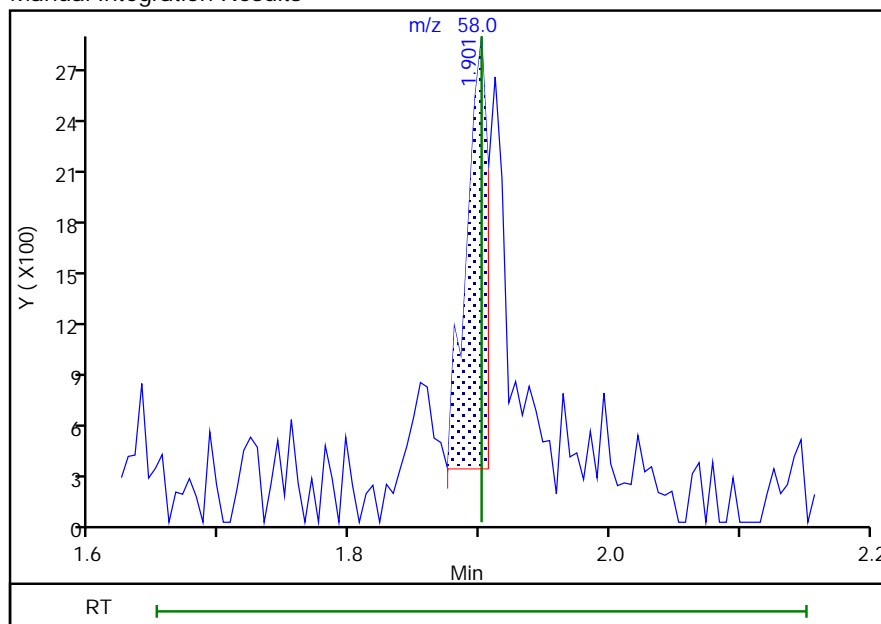
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
 Area: 2962
 Amount: 2.715337
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:20:53

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D
 Injection Date: 08-Apr-2020 15:56:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector MS SCAN

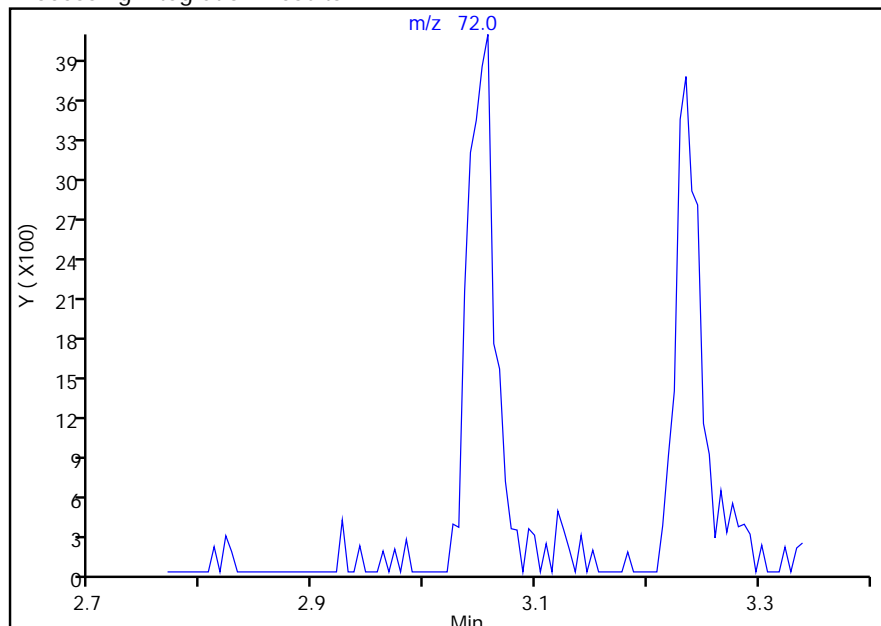
23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

Not Detected

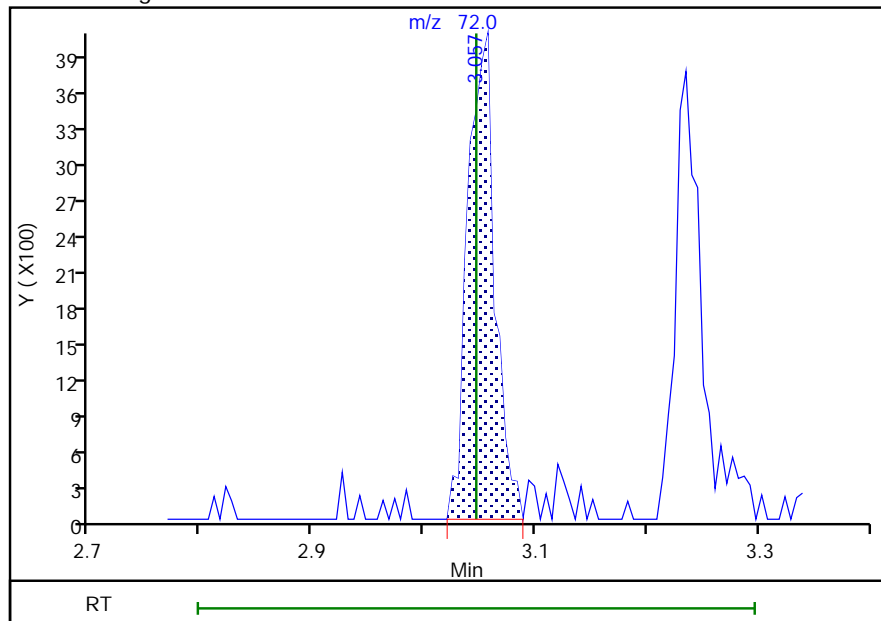
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.06
 Area: 6874
 Amount: 3.783589
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:20:57

Audit Action: Assigned Compound ID

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D

Injection Date: 08-Apr-2020 15:56:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 7

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

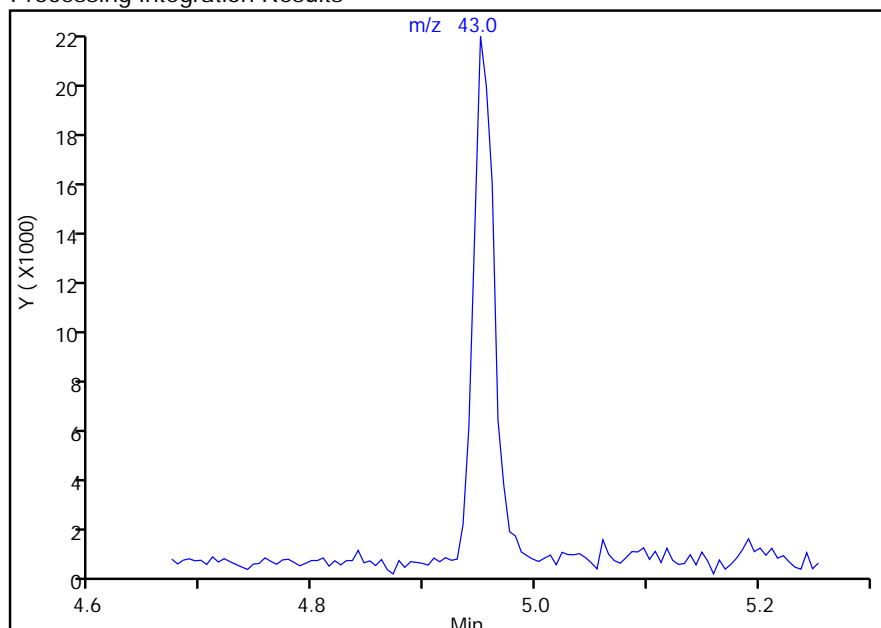
39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

Not Detected

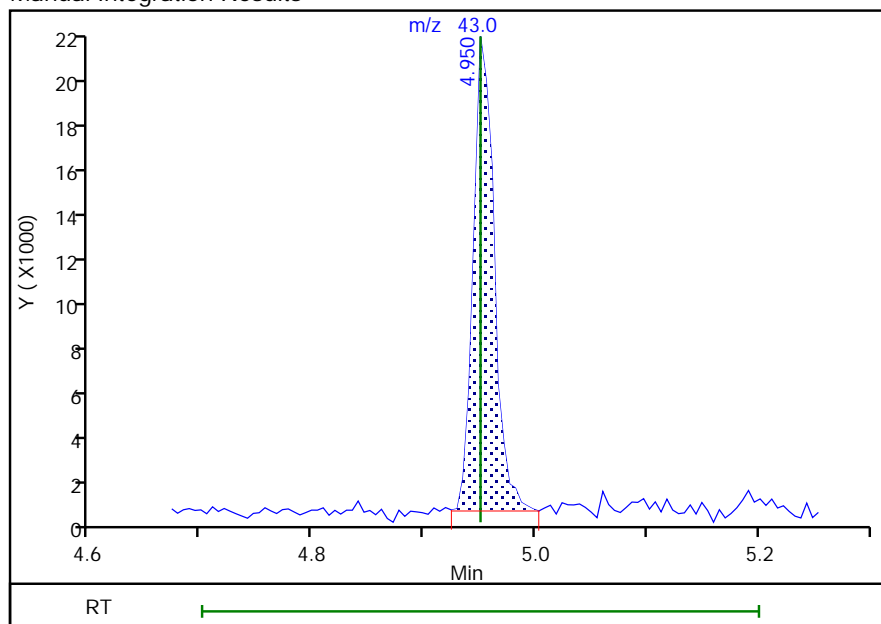
Expected RT: 4.95

Processing Integration Results



Manual Integration Results

RT: 4.95
 Area: 27768
 Amount: 2.296011
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:20:59

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

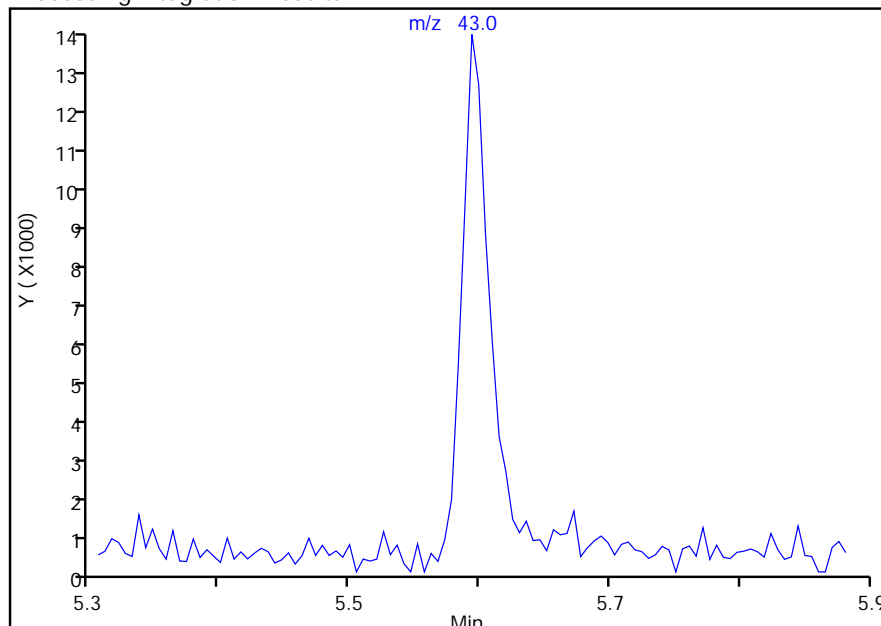
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D
 Injection Date: 08-Apr-2020 15:56:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

45 2-Hexanone, CAS: 591-78-6

Signal: 1

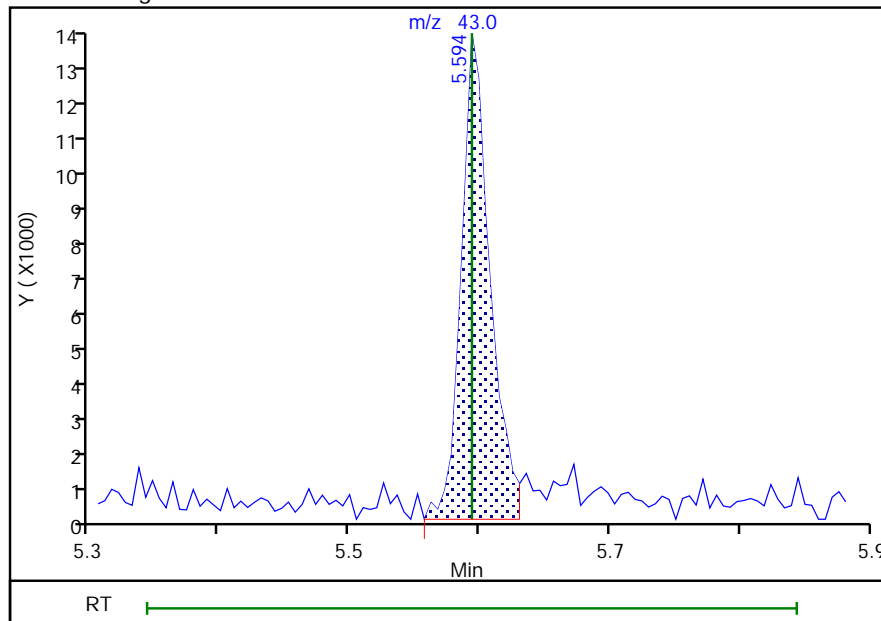
Not Detected
Expected RT: 5.59

Processing Integration Results



Manual Integration Results

RT: 5.59
 Area: 20345
 Amount: 2.545863
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:21:02

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

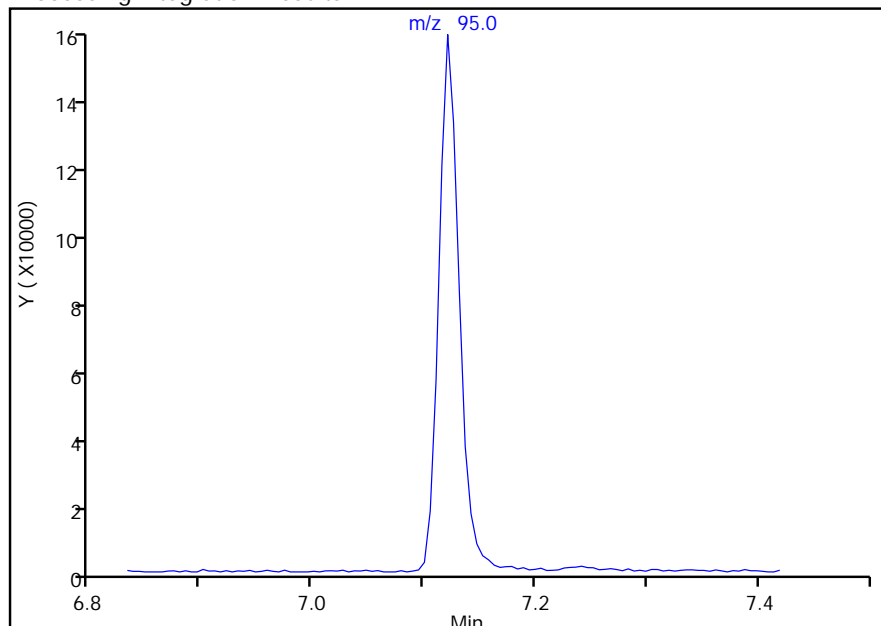
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D		
Injection Date:	08-Apr-2020 15:56:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	6

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

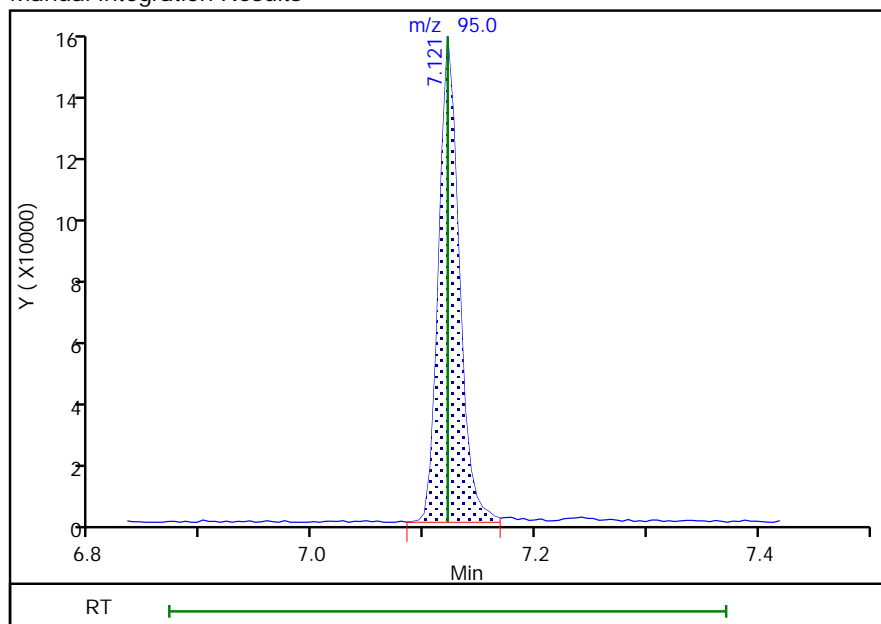
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	197649
Amount:	9.767310
Amount Units:	ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:18:17

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:26

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

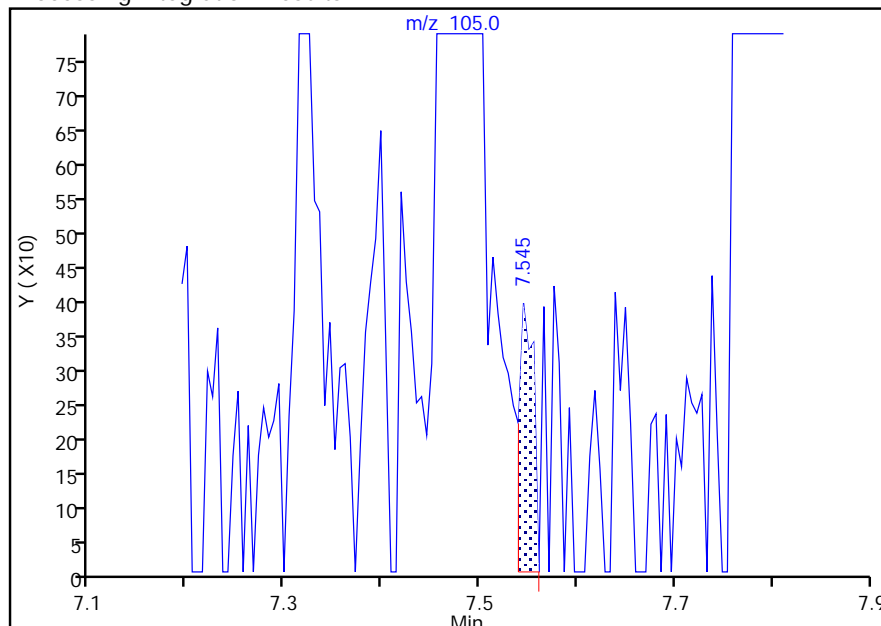
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D
 Injection Date: 08-Apr-2020 15:56:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

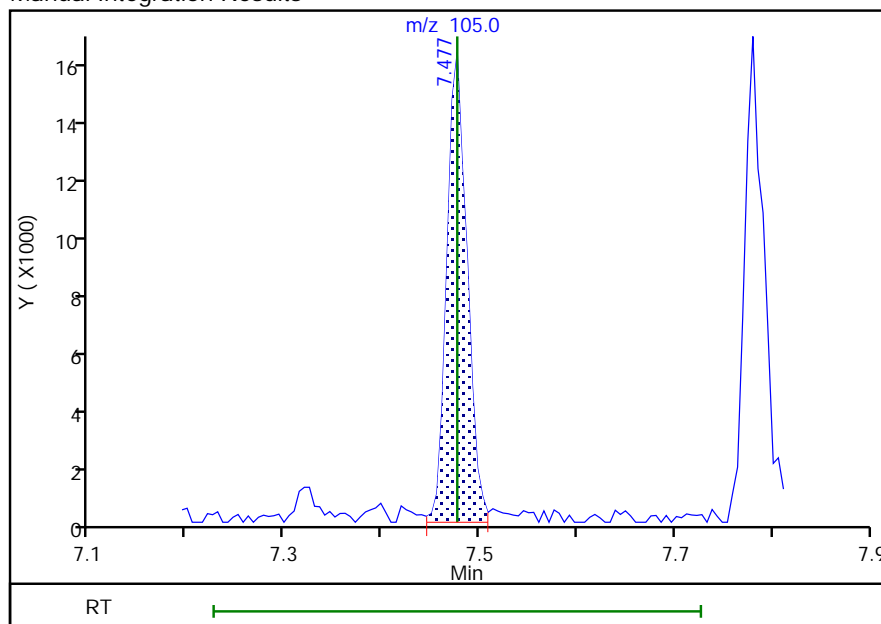
RT: 7.54
 Area: 397
 Amount: 0.080370
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 22919
 Amount: 0.467216
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:26:24

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:26

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0807.D

Injection Date: 08-Apr-2020 15:56:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 7

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

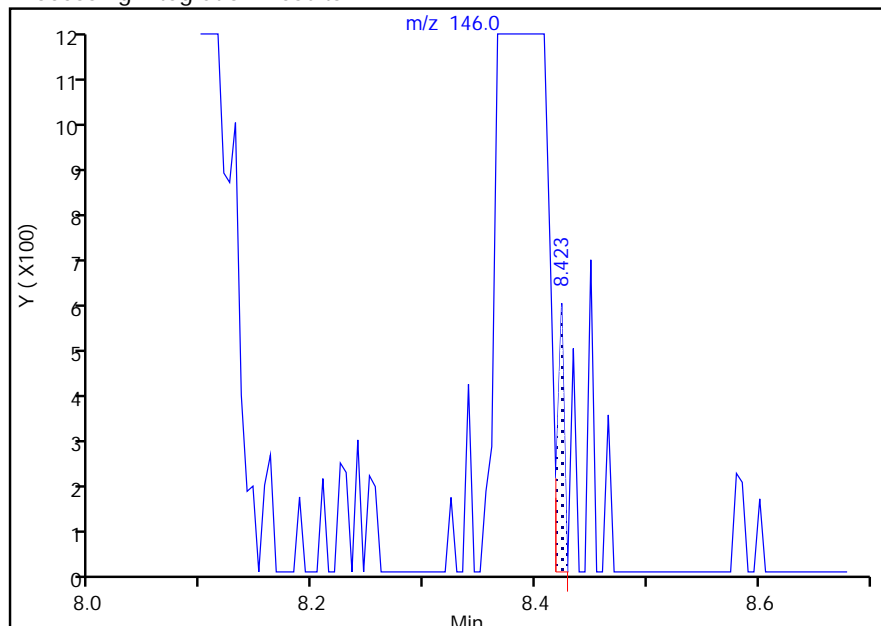
Detector: MS SCAN

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

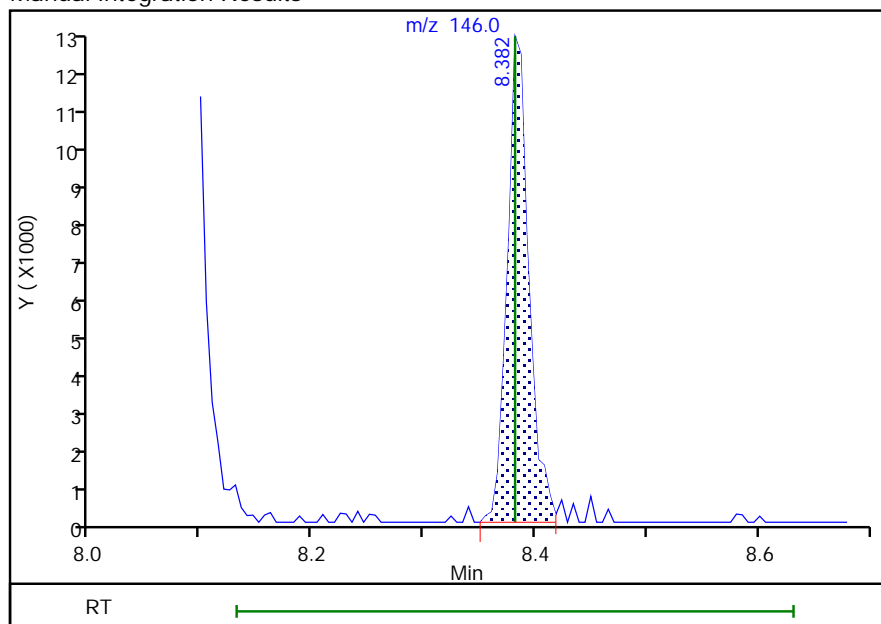
RT: 8.42
 Area: 241
 Amount: 0.010017
 Amount Units: ug/l

Processing Integration Results



RT: 8.38
 Area: 16679
 Amount: 0.462584
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 11:36:04

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:34

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-Apr-2020 16:16:30 ALS Bottle#: 8 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-007
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:36:33 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 11:36:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	1106436	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	443727	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	92	254576	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	90	207795	10.8	9.91	Ma
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	254416	10.8	10.5	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	98	9681	1.00	0.8719	a
9 Vinyl chloride	62	1.232	1.232	0.000	96	8376	1.00	0.6419	
8 Chloromethane	50	1.253	1.253	0.000	92	7808	1.00	0.3976	
10 Bromomethane	94	1.405	1.399	0.005	92	7916	1.00	0.8247	
11 Chloroethane	64	1.452	1.451	0.001	91	5583	1.00	0.9226	a
12 Trichlorofluoromethane	101	1.582	1.587	-0.005	97	9607	1.00	0.7126	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	95	9881	1.00	0.7366	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	95	7112	1.00	0.8078	
15 Acetone	58	1.907	1.901	0.006	86	7864	5.00	6.95	a
16 Methylene Chloride	84	2.194	2.194	0.000	92	9920	1.00	0.8255	
17 2-Methyl-2-propanol	59	2.247	2.241	0.006	99	11191	10.0	8.37	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	97	32890	1.00	0.8502	
19 trans-1,2-Dichloroethene	96	2.367	2.372	-0.005	65	10013	1.00	0.7591	
20 1,1-Dichloroethane	63	2.665	2.670	-0.005	98	14594	1.00	0.7135	
23 2-Butanone (MEK)	72	3.052	3.047	0.005	99	9976	5.00	5.30	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	97	14409	1.00	0.7683	
25 2,2-Dichloropropane	77	3.063	3.062	0.000	79	15147	1.00	0.8046	
26 Chlorobromomethane	130	3.225	3.225	0.000	77	6699	1.00	0.6828	
27 Chloroform	83	3.293	3.293	0.000	97	18154	1.00	0.7776	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	97	14960	1.00	0.7500	
29 Carbon tetrachloride	117	3.518	3.517	0.001	93	13813	1.00	0.7332	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	92	12362	1.00	0.7424	
31 Benzene	78	3.664	3.664	0.000	95	43543	1.00	0.8258	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	98	13985	1.00	0.8380	
34 Trichloroethene	132	4.129	4.135	-0.006	91	11914	1.00	0.7491	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	9544	1.00	0.7898	

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Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	86	7397	1.00	0.8293	
37 Dichlorobromomethane	83	4.517	4.516	0.000	97	13183	1.00	0.7664	
38 cis-1,3-Dichloropropene	75	4.846	4.841	0.005	93	16850	1.00	0.8236	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	96	49344	5.00	4.04	a
40 Toluene	92	5.092	5.092	0.000	92	28322	1.00	0.7766	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	95	15372	1.00	0.8075	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	91	8280	1.00	0.7717	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	12444	1.00	0.8265	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	91	16402	1.00	0.8135	
45 2-Hexanone	43	5.594	5.594	0.000	97	33222	5.00	4.08	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	95	11211	1.00	0.7269	
47 Ethylene Dibromide	107	5.808	5.803	0.005	95	10511	1.00	0.7234	
48 Chlorobenzene	112	6.190	6.190	0.000	97	34360	1.00	0.8040	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	49	11838	1.00	0.7933	
50 Ethylbenzene	91	6.269	6.269	0.000	97	51250	1.00	0.8023	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	96	37714	1.00	0.7596	
52 o-Xylene	91	6.682	6.682	0.000	94	43388	1.00	0.8359	
53 Styrene	104	6.703	6.703	0.000	97	31587	1.00	0.7385	
54 Bromoform	173	6.844	6.844	0.000	89	9732	1.00	0.7631	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	49649	1.00	0.7626	
56 Bromobenzene	156	7.236	7.231	0.005	85	17542	1.00	0.8160	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.241	0.000	85	12669	1.00	0.7532	
58 1,2,3-Trichloropropane	110	7.289	7.283	0.006	95	5037	1.00	0.8674	
59 N-Propylbenzene	91	7.325	7.320	0.005	100	58486	1.00	0.7915	
60 2-Chlorotoluene	91	7.393	7.388	0.005	96	35855	1.00	0.8102	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	94	37118	1.00	0.7419	a
62 4-Chlorotoluene	91	7.493	7.492	0.000	96	38789	1.00	0.7559	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	36969	1.00	0.7581	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	36679	1.00	0.7589	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	51253	1.00	0.7567	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	98	28623	1.00	0.7570	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	97	45130	1.00	0.7821	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	95	30946	1.00	0.7932	
70 n-Butylbenzene	91	8.382	8.382	0.000	94	30883	1.00	0.7528	
69 1,2-Dichlorobenzene	146	8.387	8.382	0.005	95	30066	1.00	0.8176	a
71 1,2-Dibromo-3-Chloropropan	157	9.041	9.035	0.006	89	4059	1.00	0.7944	
72 1,2,4-Trichlorobenzene	180	9.721	9.715	0.006	92	13593	1.00	0.7633	
73 Hexachlorobutadiene	225	9.846	9.841	0.005	92	10089	1.00	0.8380	
74 Naphthalene	128	9.935	9.935	0.000	99	46235	1.00	0.9130	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	92	14847	1.00	0.8528	
S 76 Xylenes, Total	1				0		2.00	1.60	
S 77 Trihalomethanes, Total	1				0			3.03	
S 78 1,3-Dichloropropene, Total	1				0		2.00	1.63	

Report Date: 09-Apr-2020 12:36:34

Chrom Revision: 2.3 11-Mar-2020 18:53:20

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00166

Amount Added: 0.10

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:36:34

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Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D

Injection Date: 08-Apr-2020 16:16:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

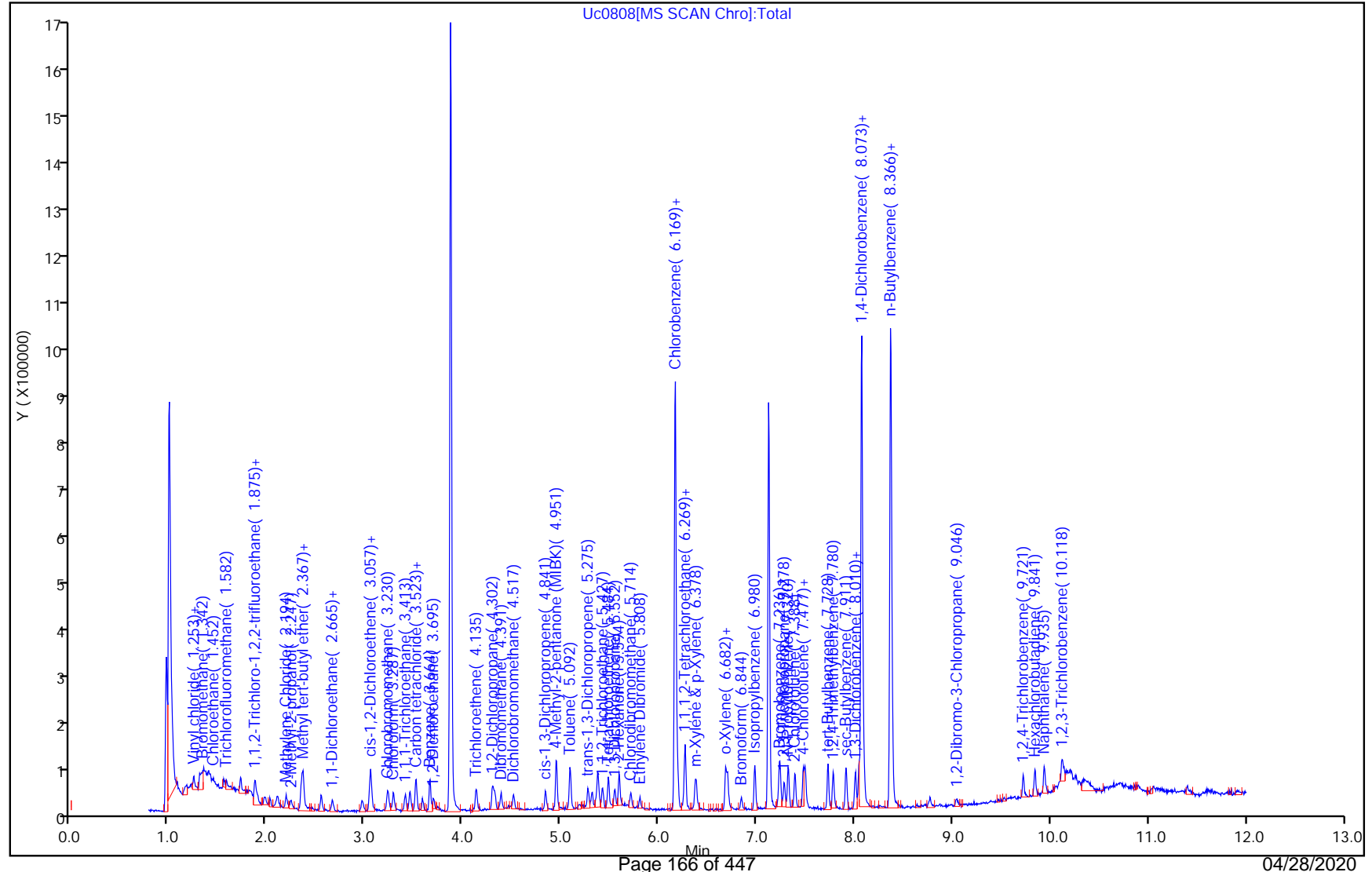
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:36:34

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

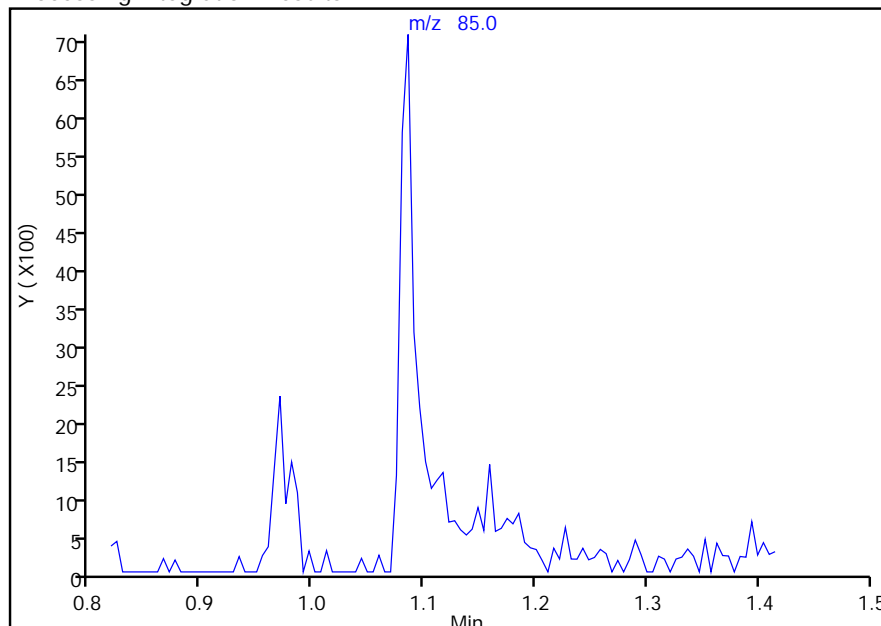
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D		
Injection Date:	08-Apr-2020 16:16:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

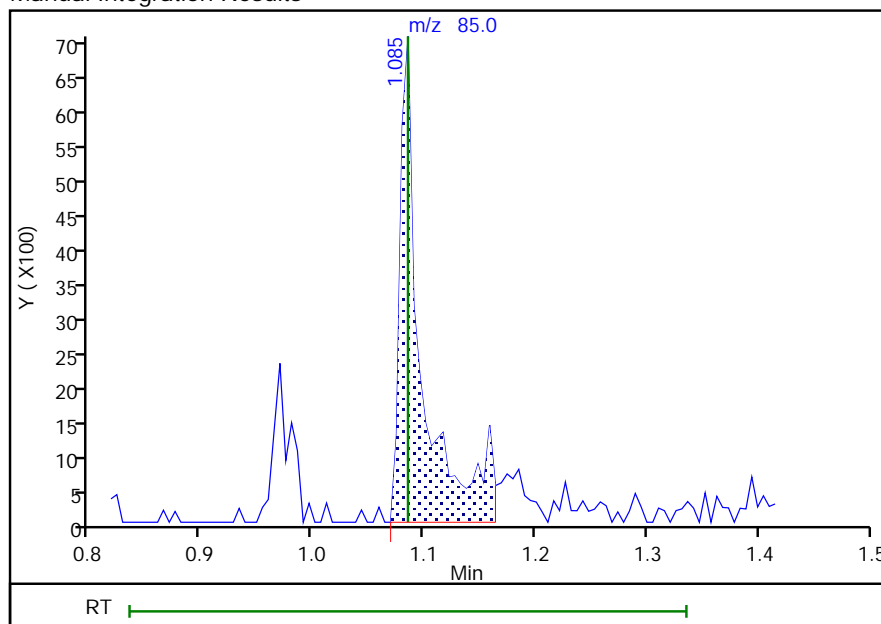
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 9681
Amount: 0.871852
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:22:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

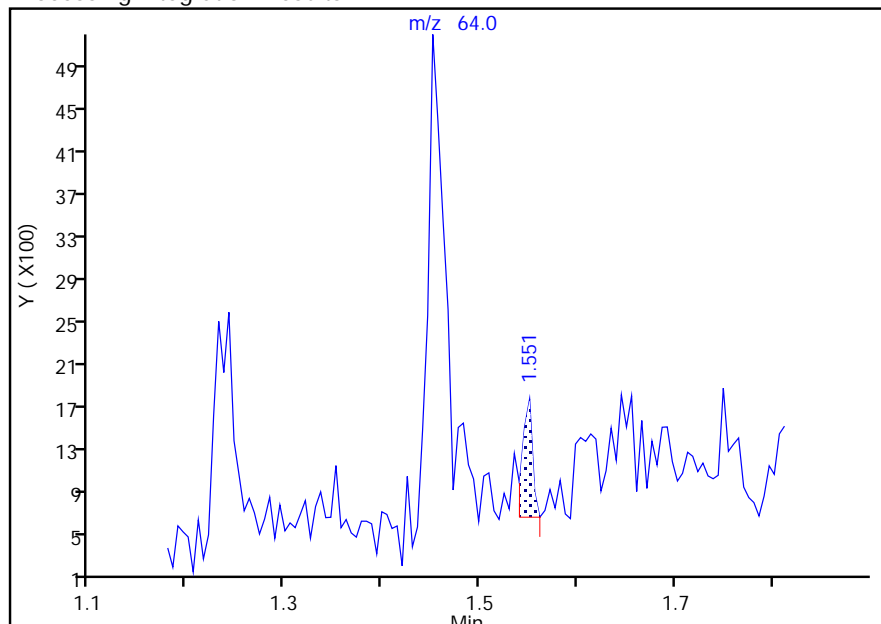
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D		
Injection Date:	08-Apr-2020 16:16:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

11 Chloroethane, CAS: 75-00-3

Signal: 1

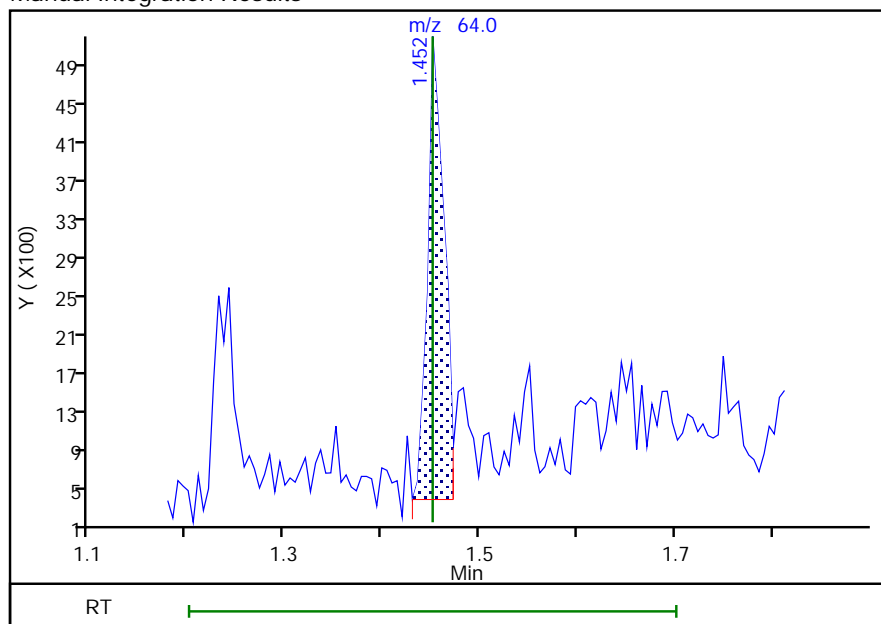
RT: 1.55
Area: 773
Amount: 0.107361
Amount Units: ug/l

Processing Integration Results



RT: 1.45
Area: 5583
Amount: 0.922554
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:27:43

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:34

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D
 Injection Date: 08-Apr-2020 16:16:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 8 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

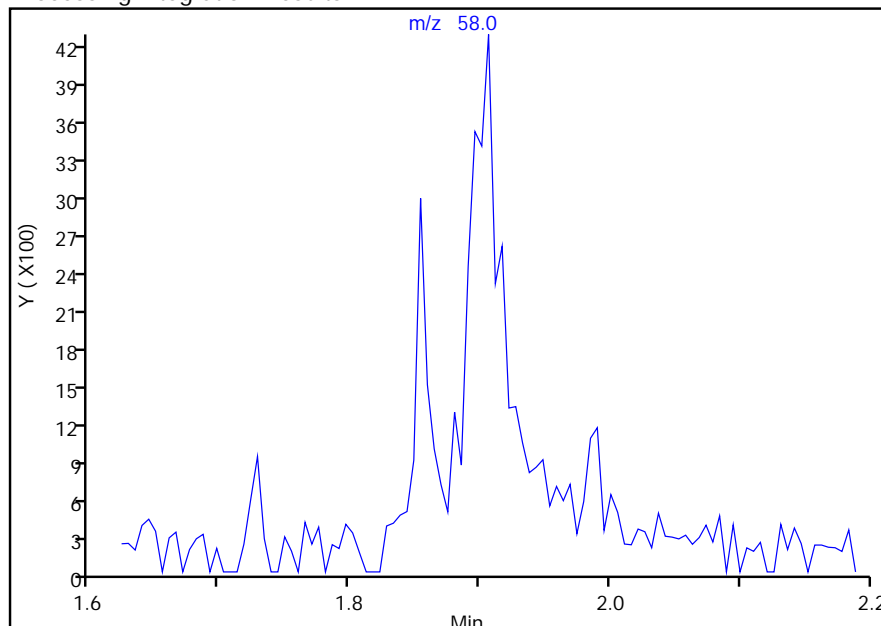
15 Acetone, CAS: 67-64-1

Signal: 1

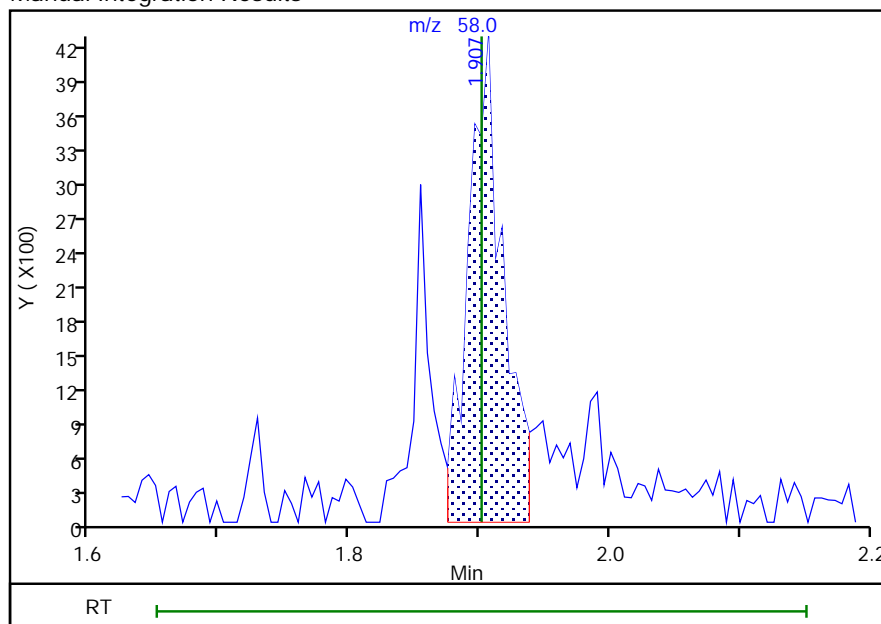
Not Detected

Expected RT: 1.90

Processing Integration Results



Manual Integration Results



RT: 1.91
 Area: 7864
 Amount: 6.953941
 Amount Units: ug/l

Reviewer: proctors, 09-Apr-2020 12:22:36

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

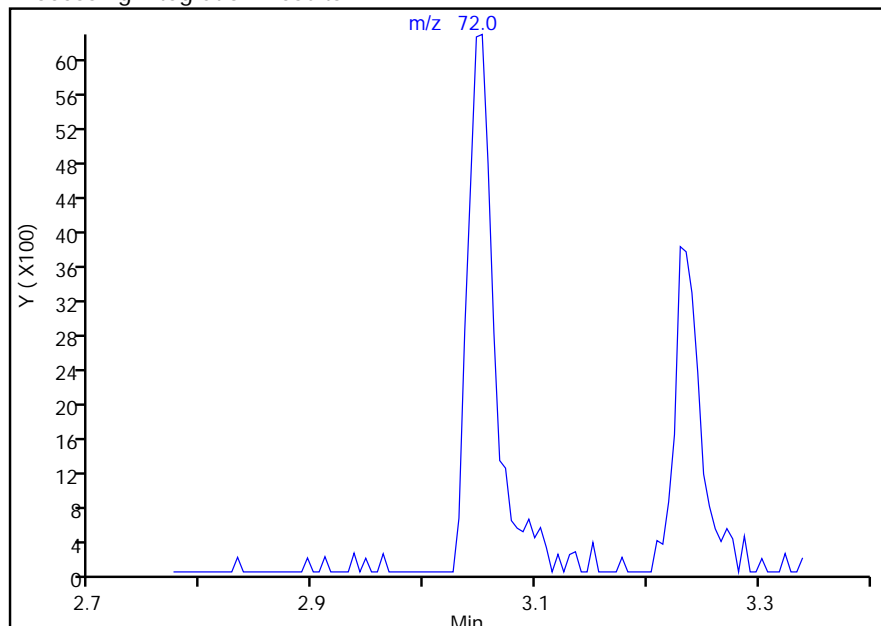
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D		
Injection Date:	08-Apr-2020 16:16:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

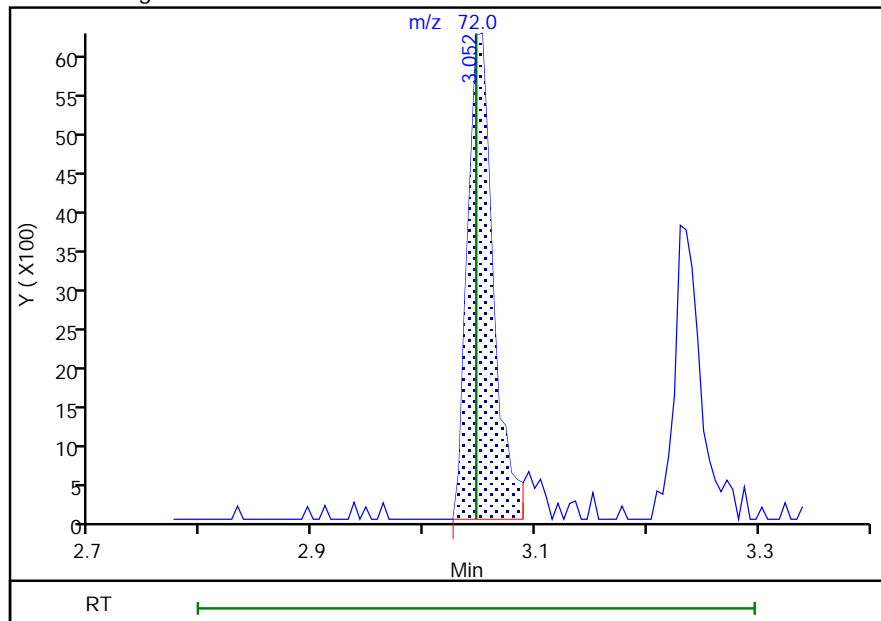
Not Detected
Expected RT: 3.05

Processing Integration Results



RT: 3.05
Area: 9976
Amount: 5.296631
Amount Units: ug/l

Manual Integration Results

Reviewer: proctors, 09-Apr-2020 12:22:39
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

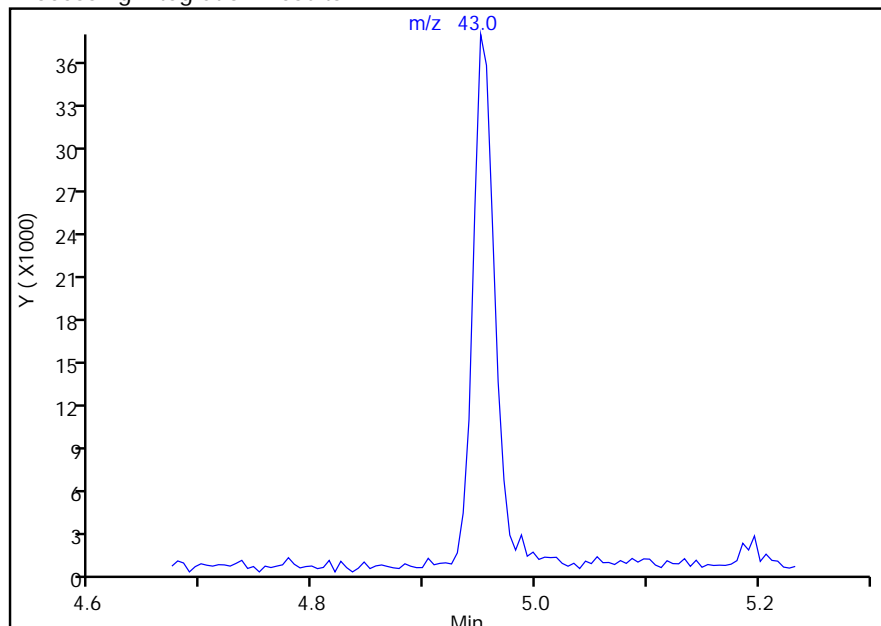
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D		
Injection Date:	08-Apr-2020 16:16:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

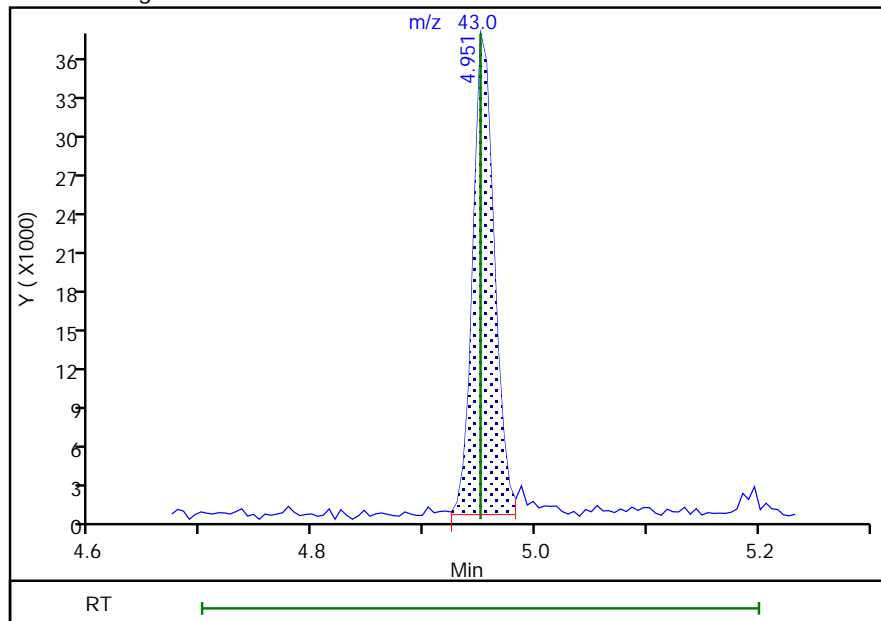
Not Detected
Expected RT: 4.95

Processing Integration Results



Manual Integration Results

RT: 4.95
Area: 49344
Amount: 4.037654
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:22:48

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D
 Injection Date: 08-Apr-2020 16:16:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 8 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

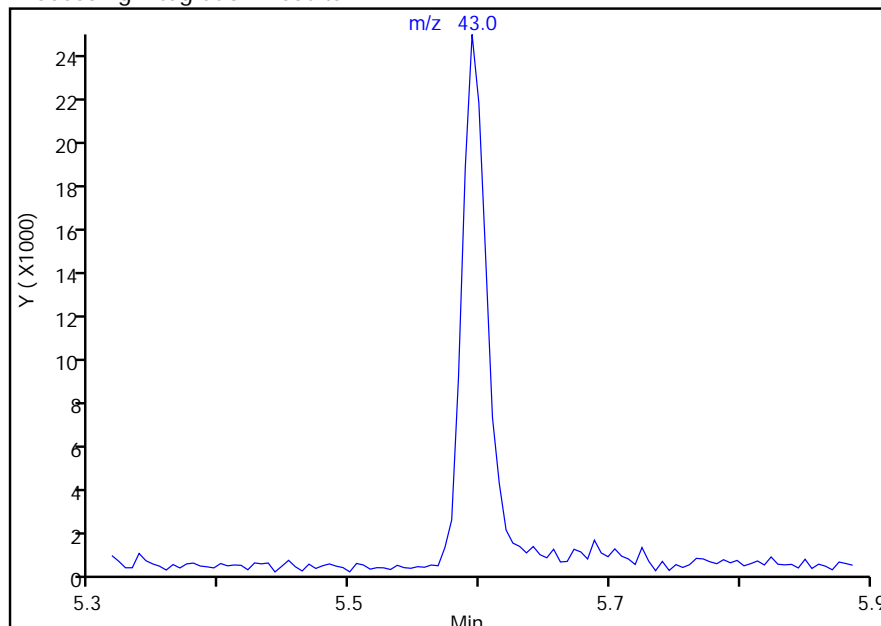
45 2-Hexanone, CAS: 591-78-6

Signal: 1

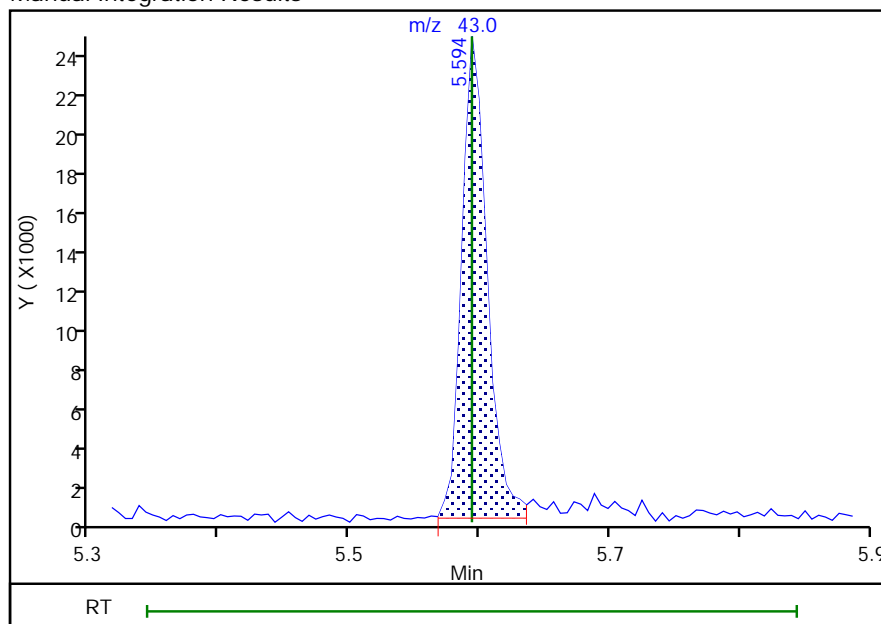
Not Detected

Expected RT: 5.59

Processing Integration Results



Manual Integration Results



RT: 5.59
 Area: 33222
 Amount: 4.076013
 Amount Units: ug/l

Reviewer: proctors, 09-Apr-2020 12:22:42

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:34

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D

Injection Date: 08-Apr-2020 16:16:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 8

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

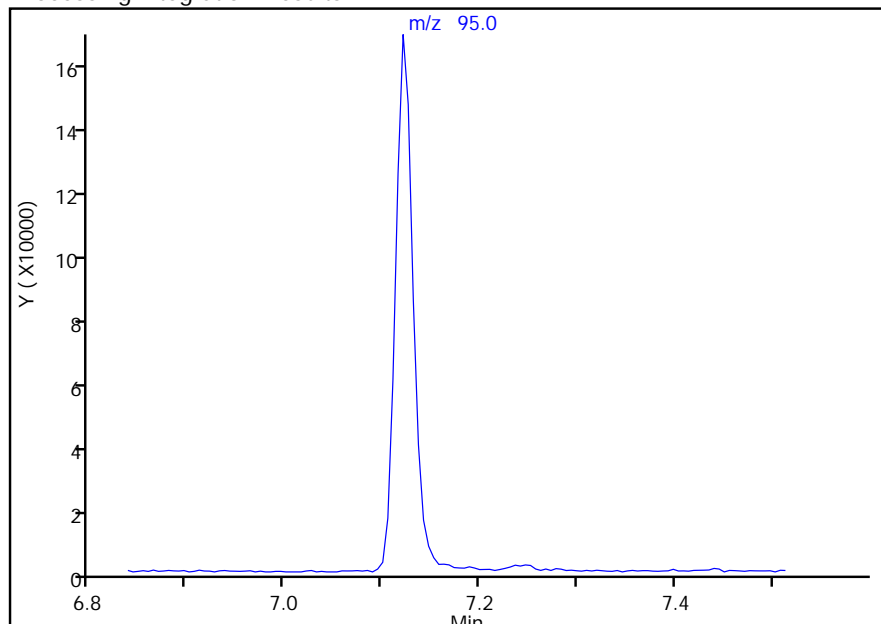
\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

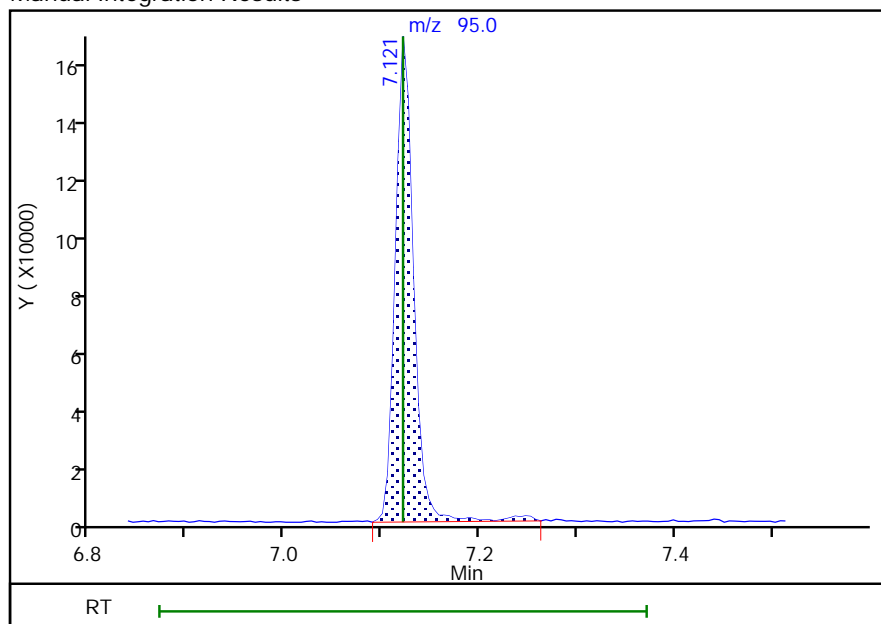
Not Detected

Expected RT: 7.12

Processing Integration Results



Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:32:55

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

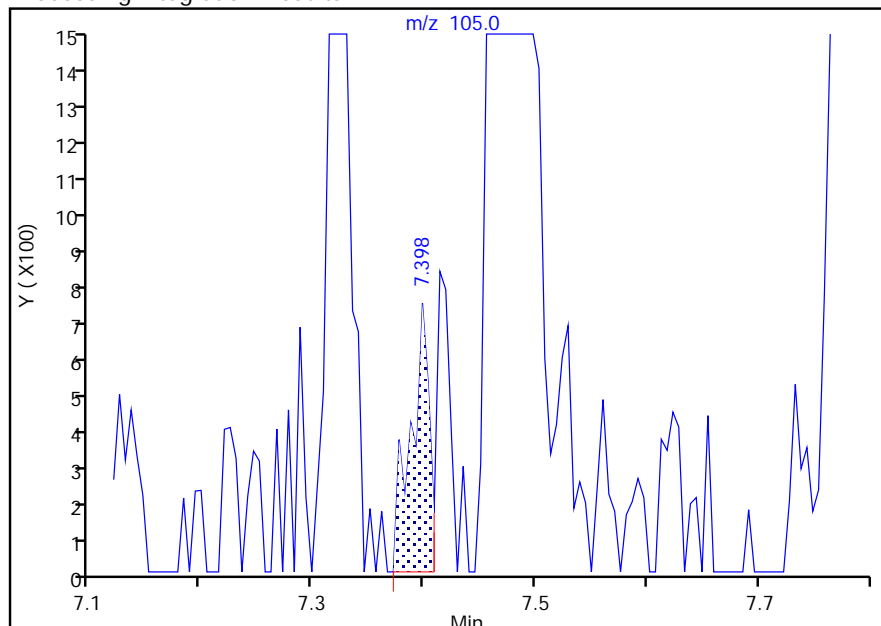
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D		
Injection Date:	08-Apr-2020 16:16:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

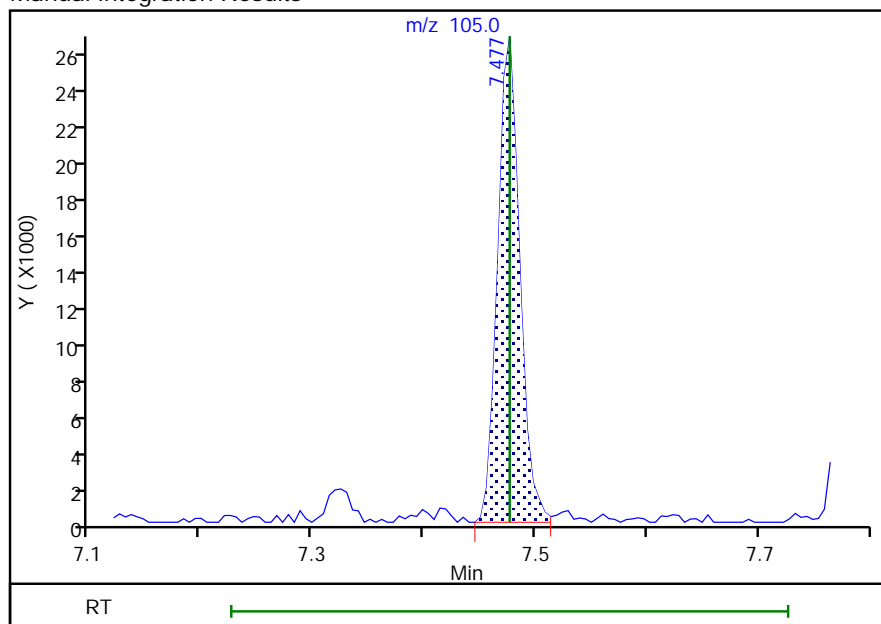
RT: 7.40
Area: 818
Amount: 0.014552
Amount Units: ug/l

Processing Integration Results



RT: 7.48
Area: 37118
Amount: 0.741888
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:26:17

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:34

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

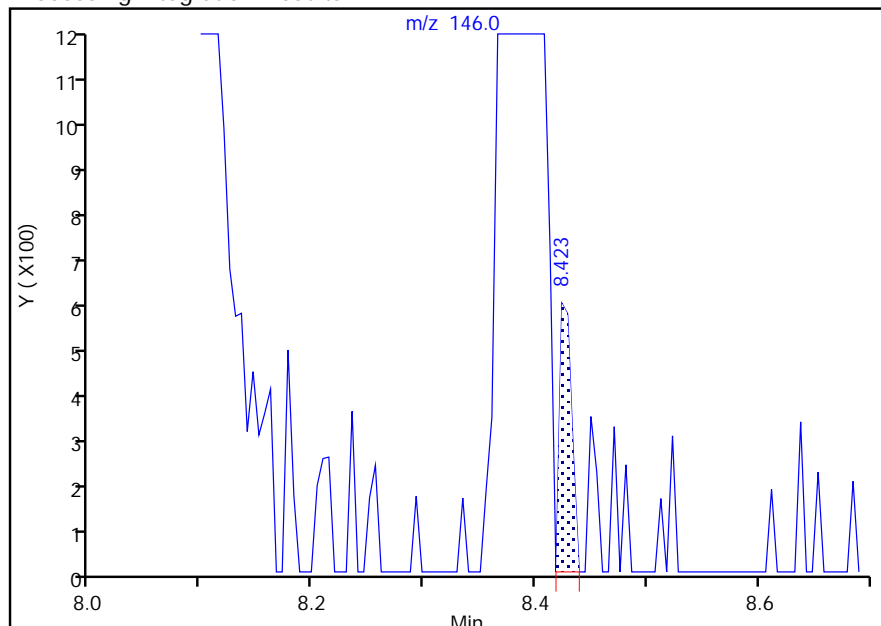
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0808.D		
Injection Date:	08-Apr-2020 16:16:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

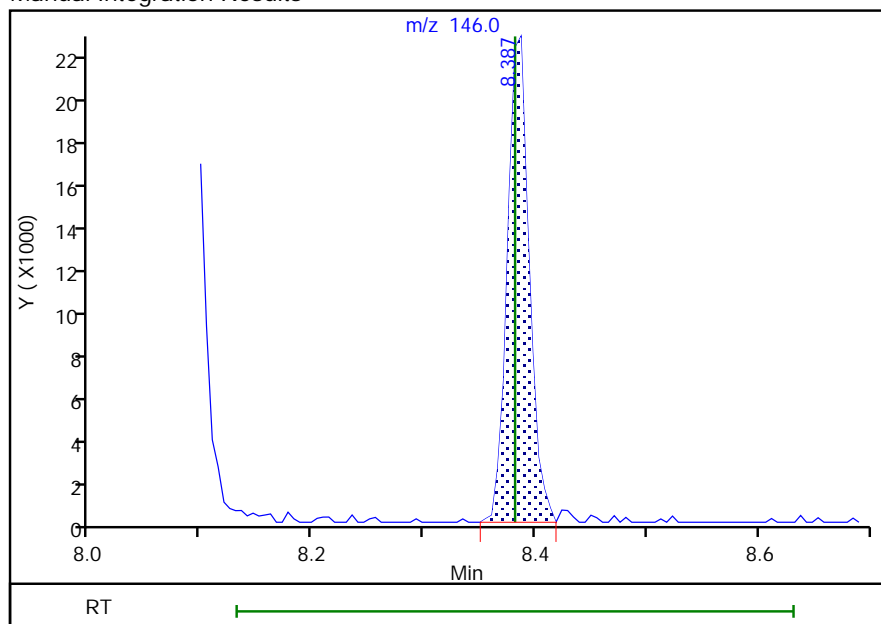
RT: 8.42
Area: 419
Amount: 0.014584
Amount Units: ug/l

Processing Integration Results



RT: 8.39
Area: 30066
Amount: 0.817576
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 11:36:50

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:41

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-Apr-2020 16:37:30 ALS Bottle#: 9 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-008
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:36:41 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 11:37:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1082435	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	448883	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	92	260190	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	91	223631	11.6	10.9	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	275574	11.6	11.1	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	20988	2.00	1.66	a
9 Vinyl chloride	62	1.232	1.232	0.000	97	22378	2.00	1.75	
8 Chloromethane	50	1.253	1.253	0.000	69	15029	2.00	0.8653	
10 Bromomethane	94	1.404	1.399	0.005	97	14072	2.00	1.50	
11 Chloroethane	64	1.452	1.451	0.001	96	9381	2.00	1.36	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	97	23214	2.00	1.76	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	92	23608	2.00	1.80	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	13452	2.00	1.50	
15 Acetone	58	1.901	1.901	0.000	85	13252	10.0	12.0	a
16 Methylene Chloride	84	2.194	2.194	0.000	88	20092	2.00	1.71	
17 2-Methyl-2-propanol	59	2.247	2.241	0.005	98	26473	20.0	20.2	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	71379	2.00	1.89	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	22289	2.00	1.73	
20 1,1-Dichloroethane	63	2.665	2.670	-0.005	99	37195	2.00	1.86	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	20832	10.0	11.3	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	96	32675	2.00	1.78	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	31931	2.00	1.73	
26 Chlorobromomethane	130	3.230	3.225	0.005	82	17543	2.00	1.83	
27 Chloroform	83	3.287	3.293	-0.006	98	42296	2.00	1.85	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	36424	2.00	1.80	
29 Carbon tetrachloride	117	3.517	3.517	0.000	95	33191	2.00	1.74	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	92	29751	2.00	1.77	
31 Benzene	78	3.664	3.664	0.000	95	95971	2.00	1.80	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	97	30726	2.00	1.82	
34 Trichloroethene	132	4.135	4.135	0.000	91	28968	2.00	1.80	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	90	23623	2.00	1.93	a

Report Date: 09-Apr-2020 12:36:41

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	87	17403	2.00	1.93	
37 Dichlorobromomethane	83	4.516	4.516	0.000	98	31375	2.00	1.80	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	37557	2.00	1.81	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	96	122451	10.0	9.90	a
40 Toluene	92	5.092	5.092	0.000	93	68104	2.00	1.85	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	34974	2.00	1.82	
42 1,1,2-Trichloroethane	83	5.426	5.421	0.005	94	20017	2.00	1.84	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	28180	2.00	1.83	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	89	41140	2.00	2.02	
45 2-Hexanone	43	5.594	5.594	0.000	94	83702	10.0	10.0	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	29863	2.00	1.89	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	28509	2.00	1.94	
48 Chlorobenzene	112	6.190	6.190	0.000	98	79190	2.00	1.83	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	92	28193	2.00	1.85	
50 Ethylbenzene	91	6.269	6.269	0.000	98	117072	2.00	1.79	
51 m-Xylene & p-Xylene	91	6.373	6.378	-0.005	99	95299	2.00	1.88	
52 o-Xylene	91	6.682	6.682	0.000	94	98255	2.00	1.85	
53 Styrene	104	6.703	6.703	0.000	98	79827	2.00	1.83	
54 Bromoform	173	6.844	6.844	0.000	97	25147	2.00	1.93	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	121833	2.00	1.83	
56 Bromobenzene	156	7.236	7.231	0.005	85	42066	2.00	1.91	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.241	-0.005	97	35210	2.00	2.05	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	96	11529	2.00	1.94	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	131991	2.00	1.75	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	84132	2.00	1.86	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	92	92333	2.00	1.81	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	96	93932	2.00	1.79	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	92715	2.00	1.86	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	87654	2.00	1.77	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	120607	2.00	1.74	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	72198	2.00	1.87	
67 4-Isopropyltoluene	119	8.047	8.042	0.005	98	104441	2.00	1.77	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	73403	2.00	1.84	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	97	71242	2.00	1.90	a
70 n-Butylbenzene	91	8.382	8.382	0.000	96	71759	2.00	1.71	
71 1,2-Dibromo-3-Chloropropan	157	9.046	9.035	0.011	89	10651	2.00	2.04	
72 1,2,4-Trichlorobenzene	180	9.721	9.715	0.006	92	35205	2.00	1.93	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	91	22502	2.00	1.83	
74 Naphthalene	128	9.935	9.935	0.000	99	99206	2.00	1.92	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	93	32626	2.00	1.83	
S 76 Xylenes, Total	1				0		4.00	3.73	
S 77 Trihalomethanes, Total	1				0			7.48	
S 78 1,3-Dichloropropene, Total	1				0		4.00	3.63	

QC Flag Legend

Review Flags

a - User Assigned ID

Report Date: 09-Apr-2020 12:36:41

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00166

Amount Added: 0.20

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:36:41

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

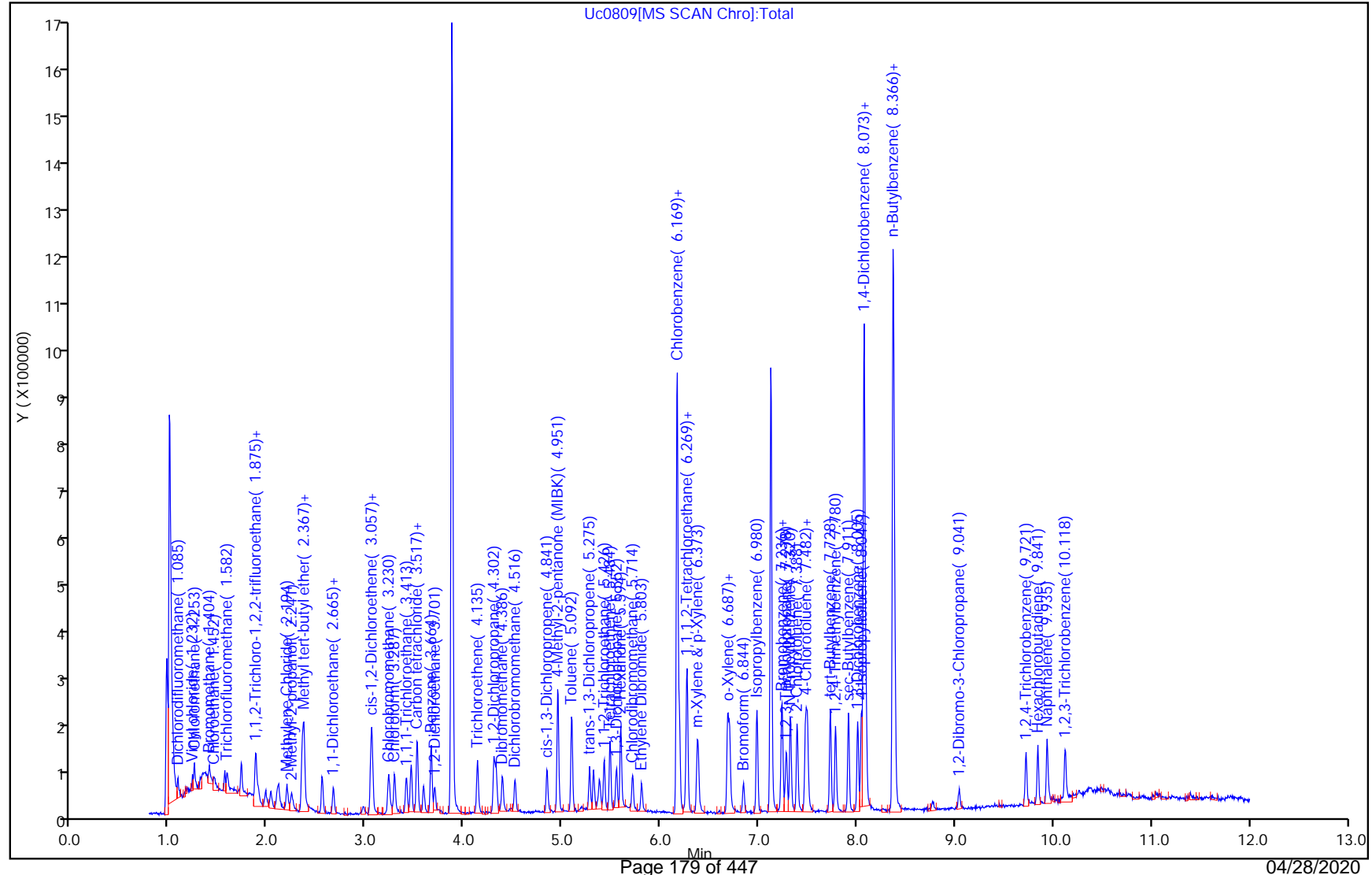
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:36:42

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#:

9

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

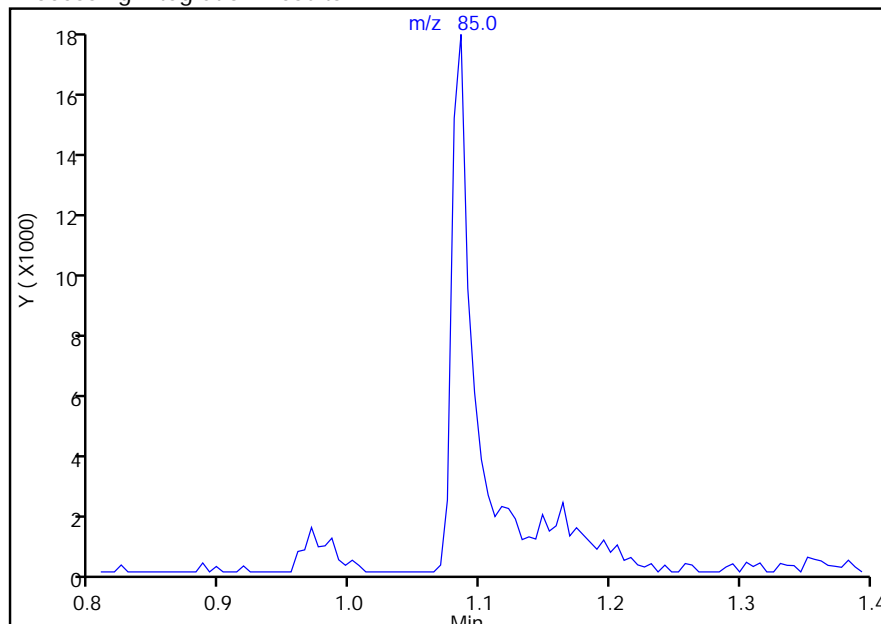
7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

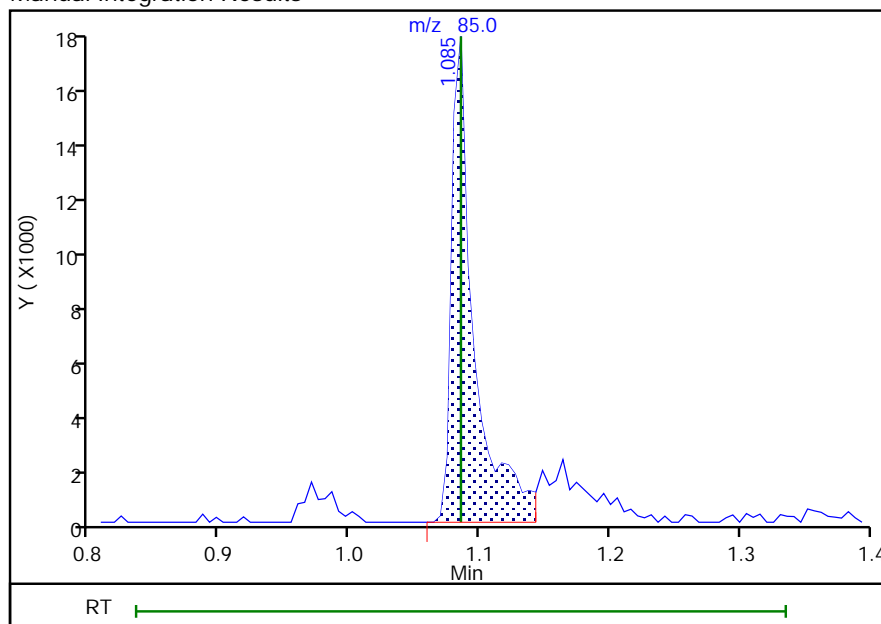
Not Detected

Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 20988
Amount: 1.659644
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:04

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

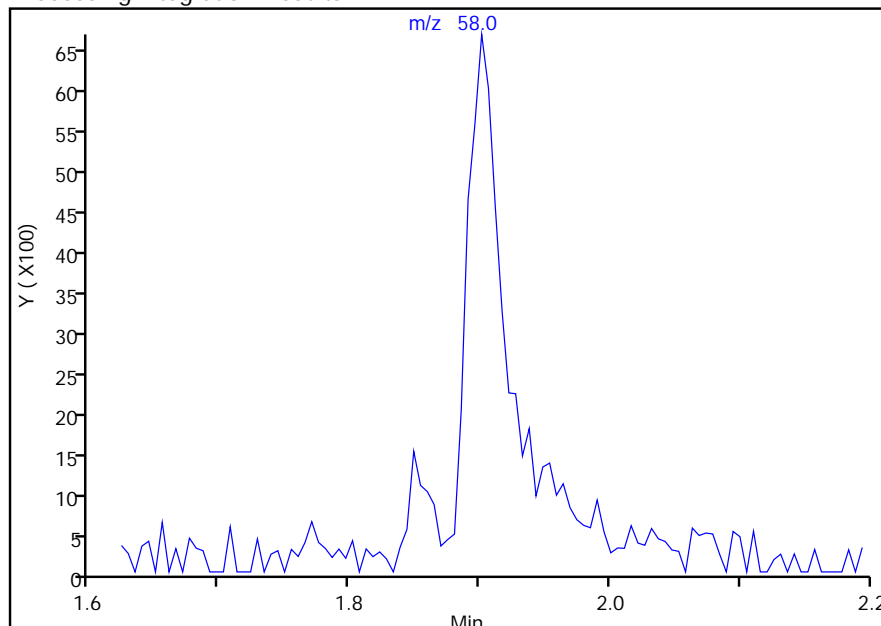
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D
 Injection Date: 08-Apr-2020 16:37:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 9 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

15 Acetone, CAS: 67-64-1

Signal: 1

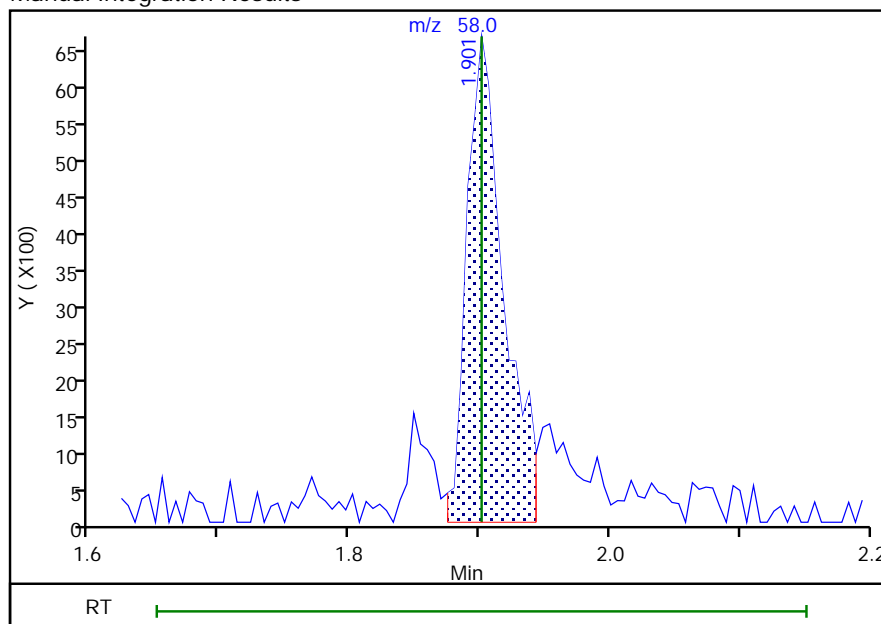
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
 Area: 13252
 Amount: 11.978250
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:23:06

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 9

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

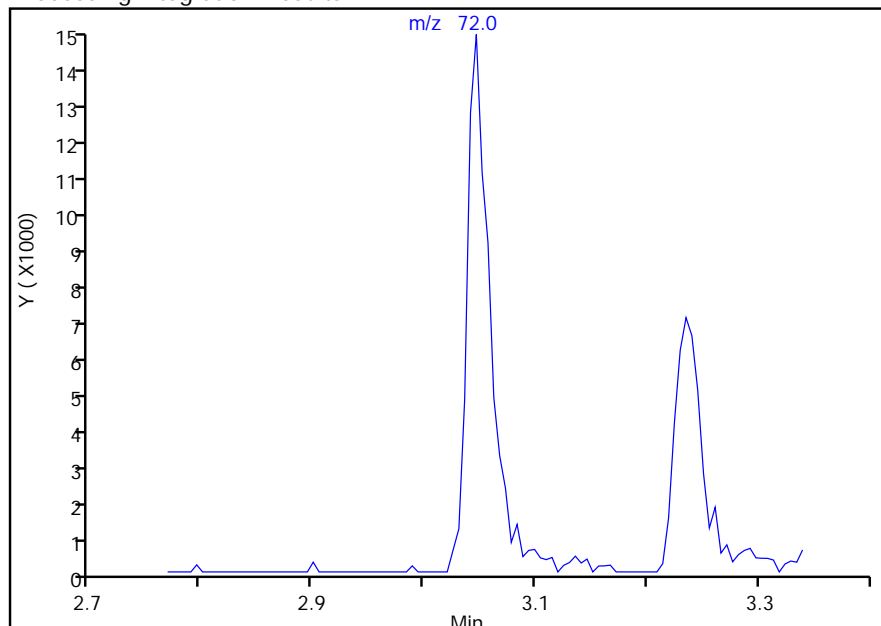
23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

Not Detected

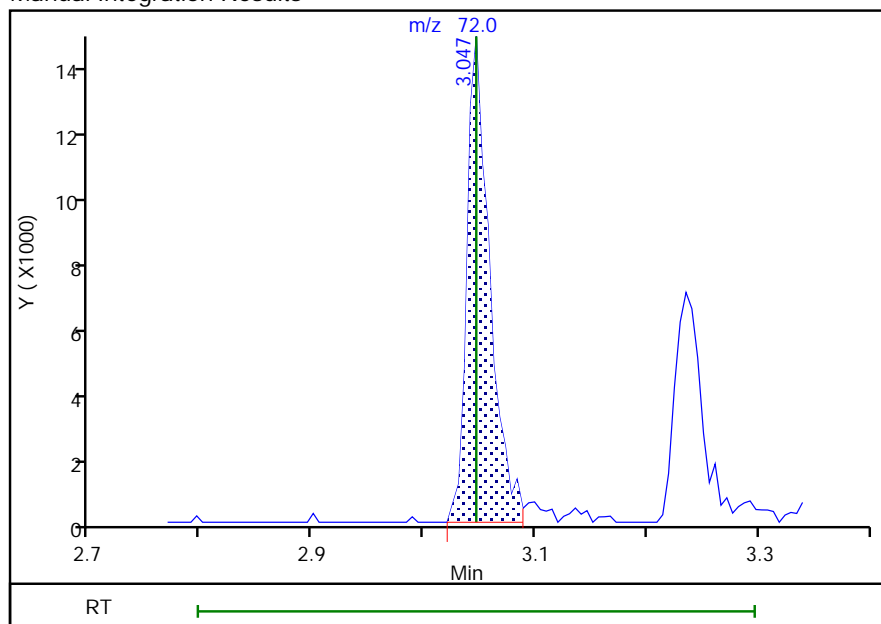
Expected RT: 3.05

Processing Integration Results



RT: 3.05
 Area: 20832
 Amount: 11.305733
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:11

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 9

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

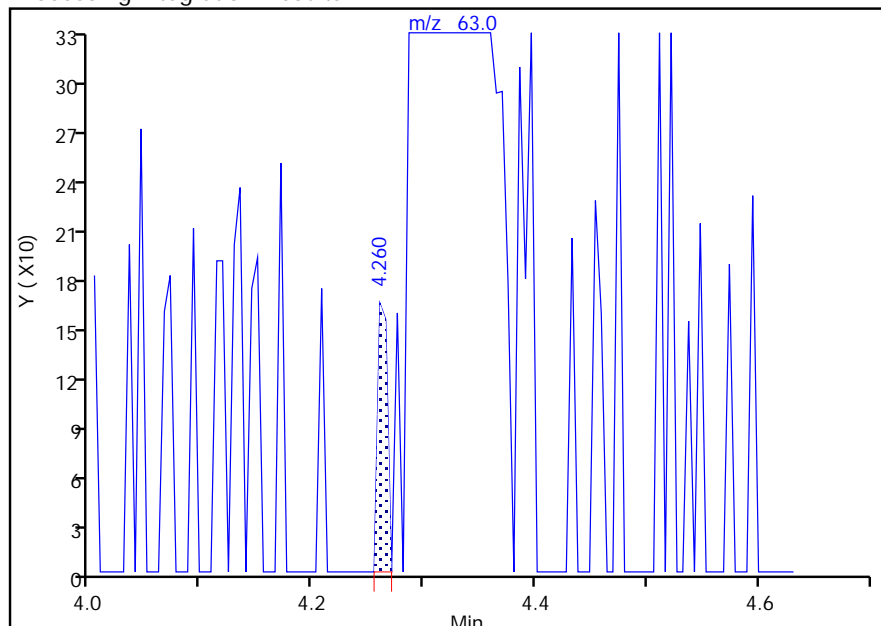
Detector: MS SCAN

35 1,2-Dichloropropane, CAS: 78-87-5

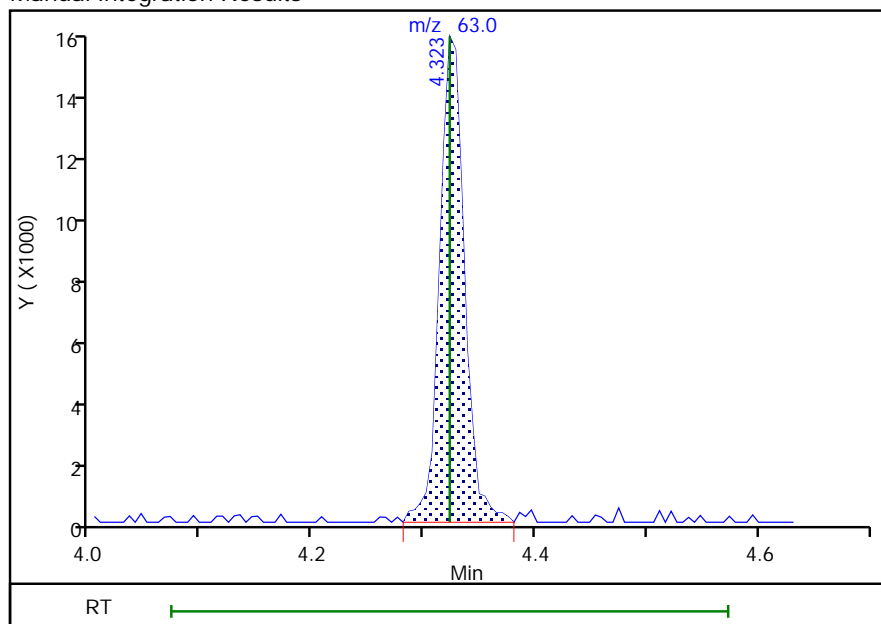
Signal: 1

RT: 4.26
Area: 100
Amount: 0.013367
Amount Units: ug/l

Processing Integration Results

RT: 4.32
Area: 23623
Amount: 1.932464
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:16

Audit Action: Assigned Compound ID

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 9

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

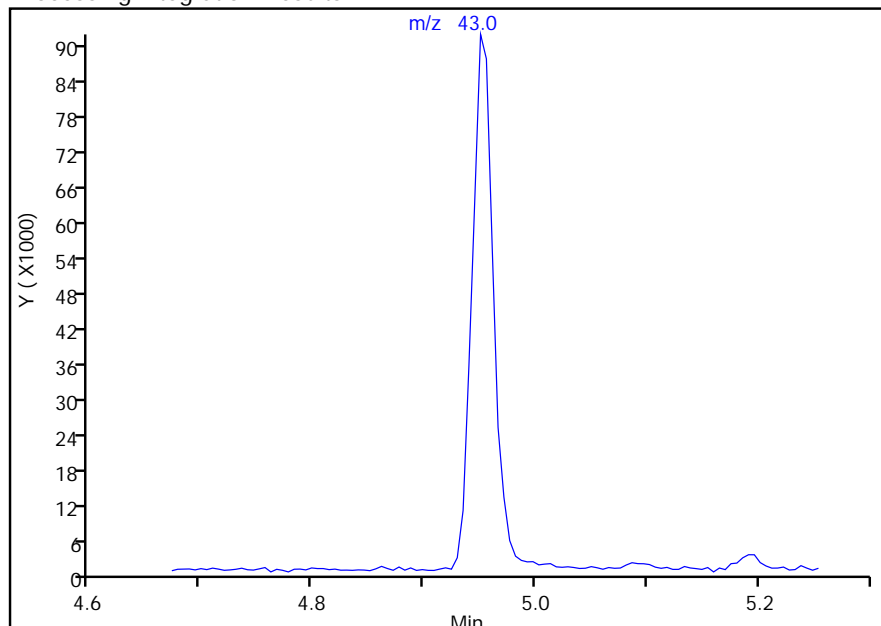
39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

Not Detected

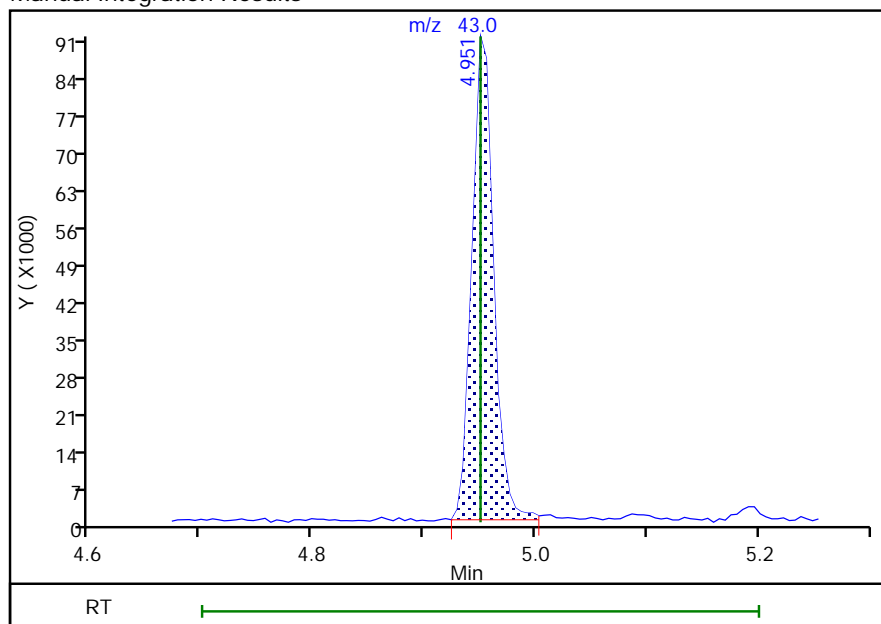
Expected RT: 4.95

Processing Integration Results



Manual Integration Results

RT: 4.95
 Area: 122451
 Amount: 9.904666
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:23:19

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

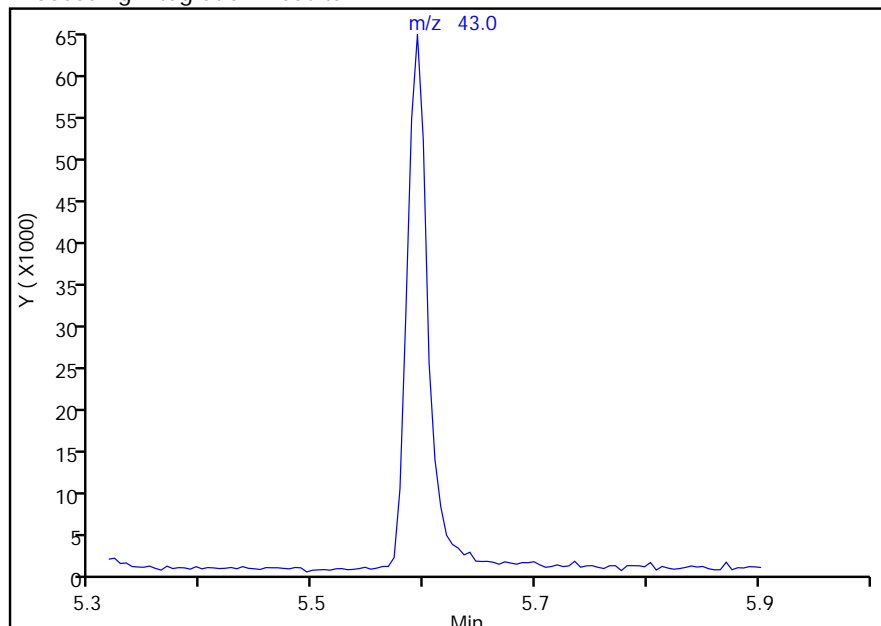
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D				
Injection Date:	08-Apr-2020 16:37:30	Instrument ID:	CMSU		
Lims ID:	ic				
Client ID:					
Operator ID:	rd	ALS Bottle#:	9	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	U524.2	Limit Group:	524.2		
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN		

[45 2-Hexanone, CAS: 591-78-6](#)

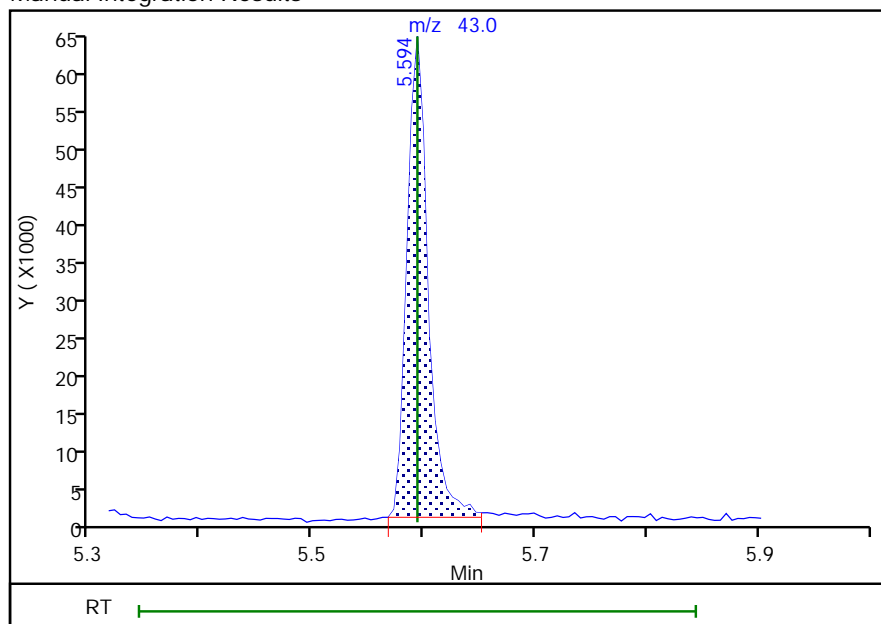
Signal: 1

Not Detected
Expected RT: 5.59

Processing Integration Results



Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:21

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 9

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

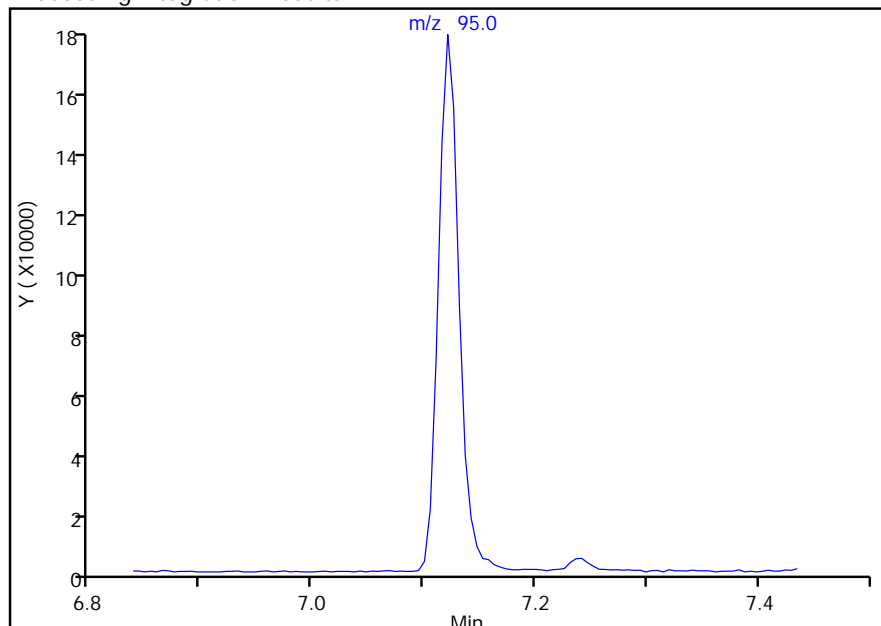
[\\$ 4 4-Bromofluorobenzene, CAS: 460-00-4](#)

Signal: 1

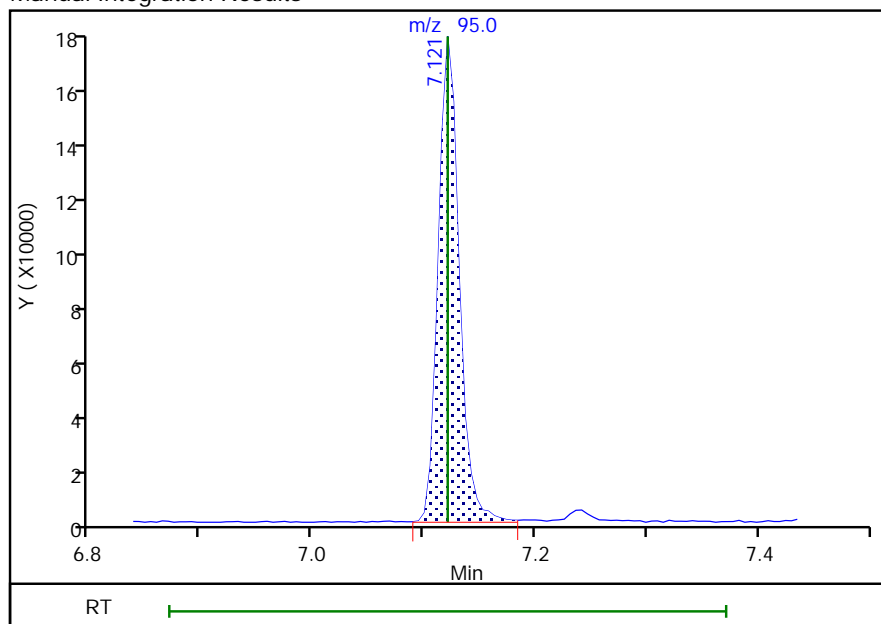
Not Detected

Expected RT: 7.12

Processing Integration Results

RT: 7.12
Area: 223631
Amount: 10.896465
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:02

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D

Injection Date: 08-Apr-2020 16:37:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 9

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

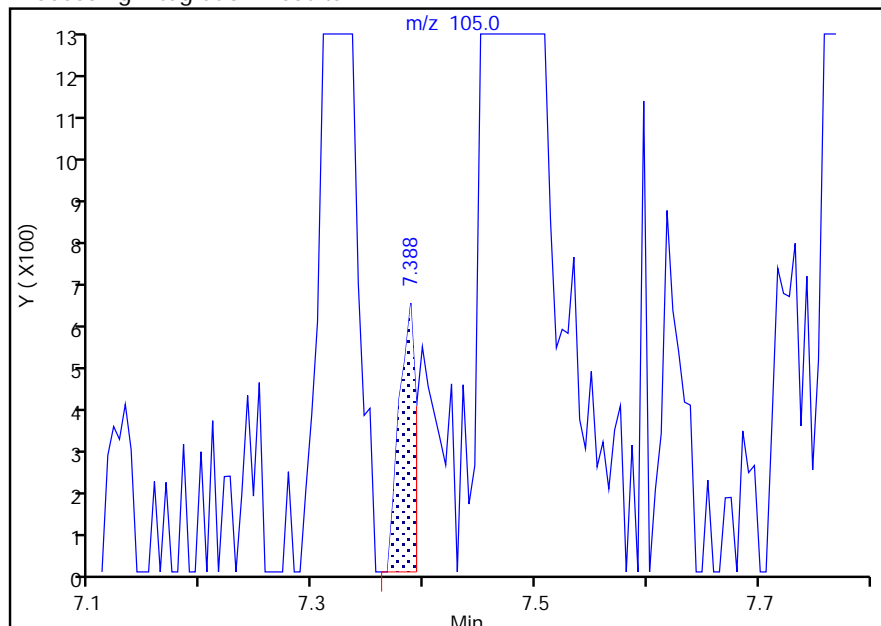
Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

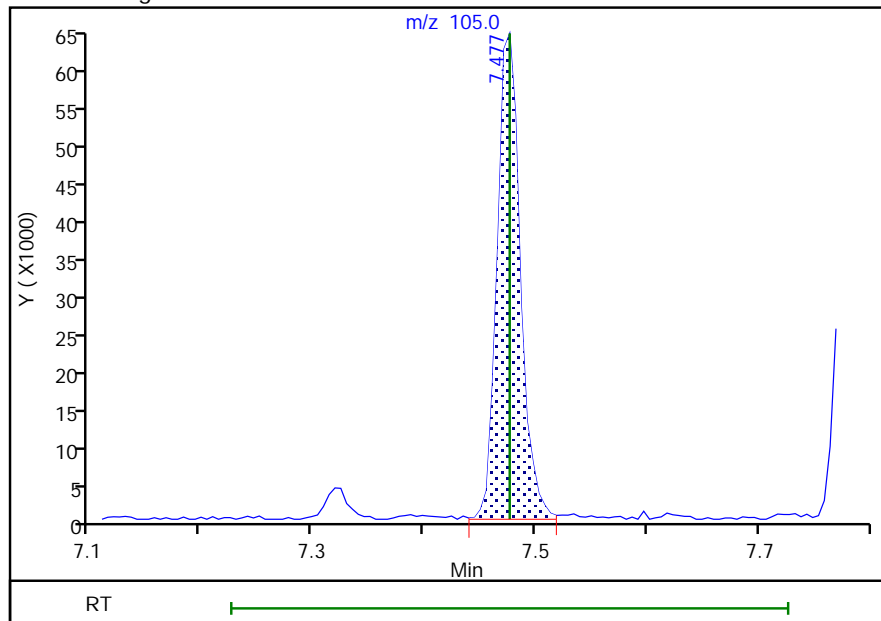
RT: 7.39
Area: 633
Amount: 0.018139
Amount Units: ug/l

Processing Integration Results



RT: 7.48
Area: 92333
Amount: 1.805668
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:26:12

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 09-Apr-2020 12:36:42

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

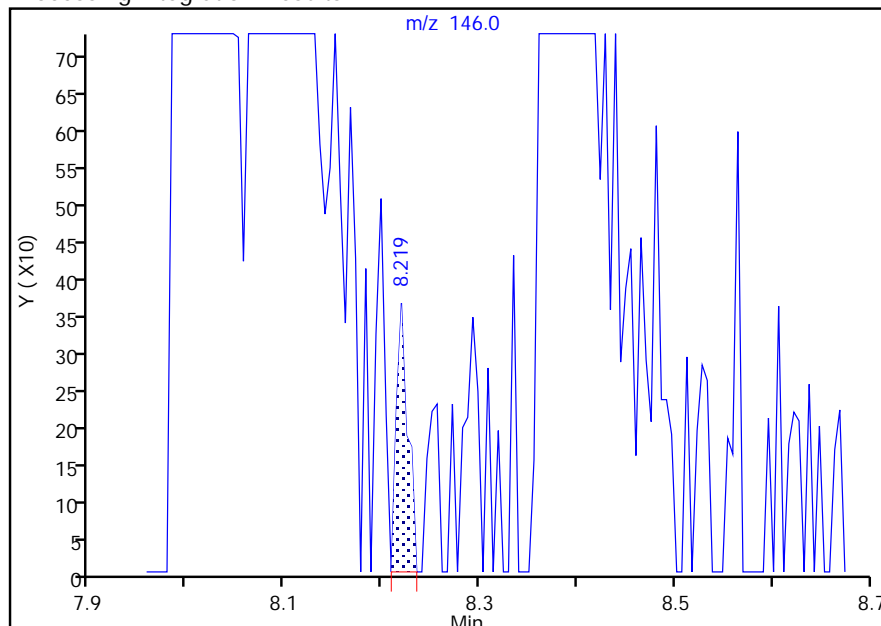
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0809.D		
Injection Date:	08-Apr-2020 16:37:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

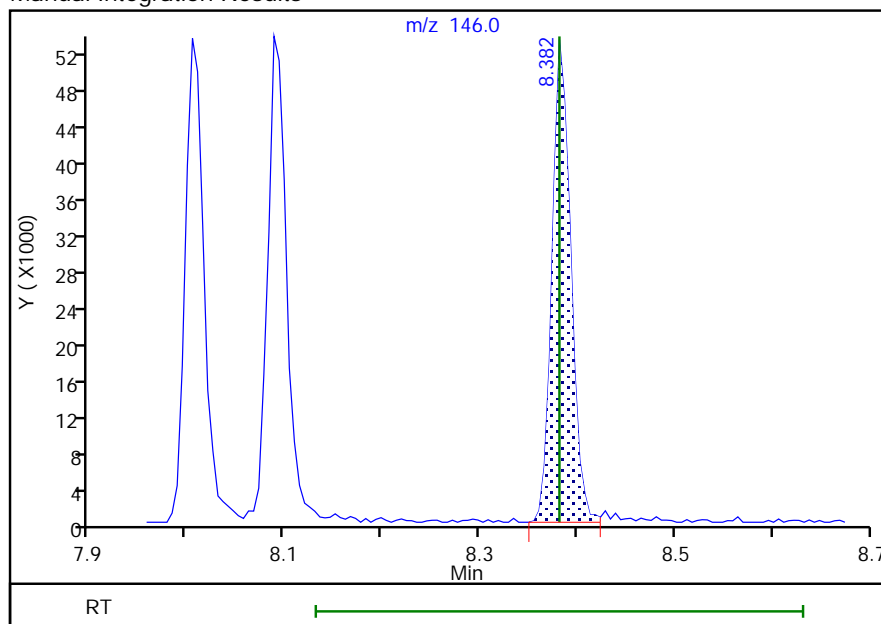
RT: 8.22
Area: 296
Amount: 0.008929
Amount Units: ug/l

Processing Integration Results



RT: 8.38
Area: 71242
Amount: 1.895465
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 11:36:58

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-Apr-2020 16:57:30 ALS Bottle#: 10 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-009
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:36:50 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 11:37:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1082818	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	446901	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	92	261167	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	89	270604	14.0	13.2	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	342153	14.0	13.8	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	97	74139	5.00	5.29	a
9 Vinyl chloride	62	1.232	1.232	0.000	97	68355	5.00	5.35	
8 Chloromethane	50	1.253	1.253	0.000	81	80636	5.00	5.02	
10 Bromomethane	94	1.405	1.399	0.006	96	48682	5.00	5.18	
11 Chloroethane	64	1.457	1.451	0.006	99	35238	5.00	4.22	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	98	62946	5.00	4.77	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	93	74683	5.00	5.69	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	95	61089	5.00	6.55	
15 Acetone	58	1.901	1.901	0.000	88	32434	25.0	29.3	a
16 Methylene Chloride	84	2.194	2.194	0.000	85	57482	5.00	4.89	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	61371	50.0	46.9	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	184081	5.00	4.86	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	65459	5.00	5.07	
20 1,1-Dichloroethane	63	2.665	2.670	-0.005	99	102983	5.00	5.14	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	45369	25.0	24.6	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	94664	5.00	5.16	
25 2,2-Dichloropropane	77	3.063	3.062	0.000	97	94549	5.00	5.13	
26 Chlorobromomethane	130	3.225	3.225	0.000	77	56339	5.00	5.87	
27 Chloroform	83	3.293	3.293	0.000	99	117102	5.00	5.13	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	97	102777	5.00	5.12	
29 Carbon tetrachloride	117	3.518	3.517	0.001	95	99116	5.00	5.22	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	94	85757	5.00	5.11	
31 Benzene	78	3.664	3.664	0.000	96	264674	5.00	4.98	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	97	85305	5.00	5.08	
34 Trichloroethene	132	4.135	4.135	0.000	95	83846	5.00	5.23	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	61643	5.00	5.07	

Report Date: 09-Apr-2020 12:36:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	88	45307	5.00	5.04	
37 Dichlorobromomethane	83	4.517	4.516	0.001	98	87102	5.00	5.03	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	102241	5.00	4.96	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	95	295596	25.0	24.0	a
40 Toluene	92	5.092	5.092	0.000	92	178775	5.00	4.87	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	93013	5.00	4.85	
42 1,1,2-Trichloroethane	83	5.427	5.421	0.006	95	54535	5.00	5.05	
43 Tetrachloroethene	164	5.484	5.484	0.000	94	78386	5.00	5.08	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	93	98853	5.00	4.87	
45 2-Hexanone	43	5.594	5.594	0.000	95	206396	25.0	24.7	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	79953	5.00	5.05	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	70833	5.00	4.84	
48 Chlorobenzene	112	6.190	6.190	0.000	97	212267	5.00	4.93	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	76603	5.00	5.00	
50 Ethylbenzene	91	6.269	6.269	0.000	98	339215	5.00	5.18	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	265896	5.00	5.22	
52 o-Xylene	91	6.682	6.682	0.000	94	271779	5.00	5.10	
53 Styrene	104	6.703	6.703	0.000	98	220478	5.00	5.02	
54 Bromoform	173	6.844	6.844	0.000	96	64599	5.00	4.94	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	348325	5.00	5.22	
56 Bromobenzene	156	7.231	7.231	0.000	84	109221	5.00	4.95	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.241	-0.005	95	85048	5.00	4.93	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	97	27639	5.00	4.64	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	381765	5.00	5.04	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	222929	5.00	4.91	
61 1,3,5-Trimethylbenzene	105	7.472	7.477	-0.005	94	259781	5.00	5.06	a
62 4-Chlorotoluene	91	7.493	7.492	0.001	98	262916	5.00	4.99	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	256367	5.00	5.12	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	248017	5.00	5.00	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	344855	5.00	4.96	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	198353	5.00	5.11	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	294219	5.00	4.97	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	97	197207	5.00	4.93	
70 n-Butylbenzene	91	8.382	8.382	0.000	96	210633	5.00	5.00	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	97	187987	5.00	4.98	
71 1,2-Dibromo-3-Chloropropan	157	9.041	9.035	0.006	90	25037	5.00	4.78	
72 1,2,4-Trichlorobenzene	180	9.721	9.715	0.006	93	97575	5.00	5.34	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	66160	5.00	5.36	
74 Naphthalene	128	9.935	9.935	0.000	99	252531	5.00	4.86	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	90958	5.00	5.09	
S 76 Xylenes, Total	1				0		10.0	10.3	
S 77 Trihalomethanes, Total	1				0			20.1	
S 78 1,3-Dichloropropene, Total	1				0		10.0	9.81	

QC Flag Legend

Review Flags

a - User Assigned ID

Report Date: 09-Apr-2020 12:36:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00166

Amount Added: 0.50

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:36:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D

Injection Date: 08-Apr-2020 16:57:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

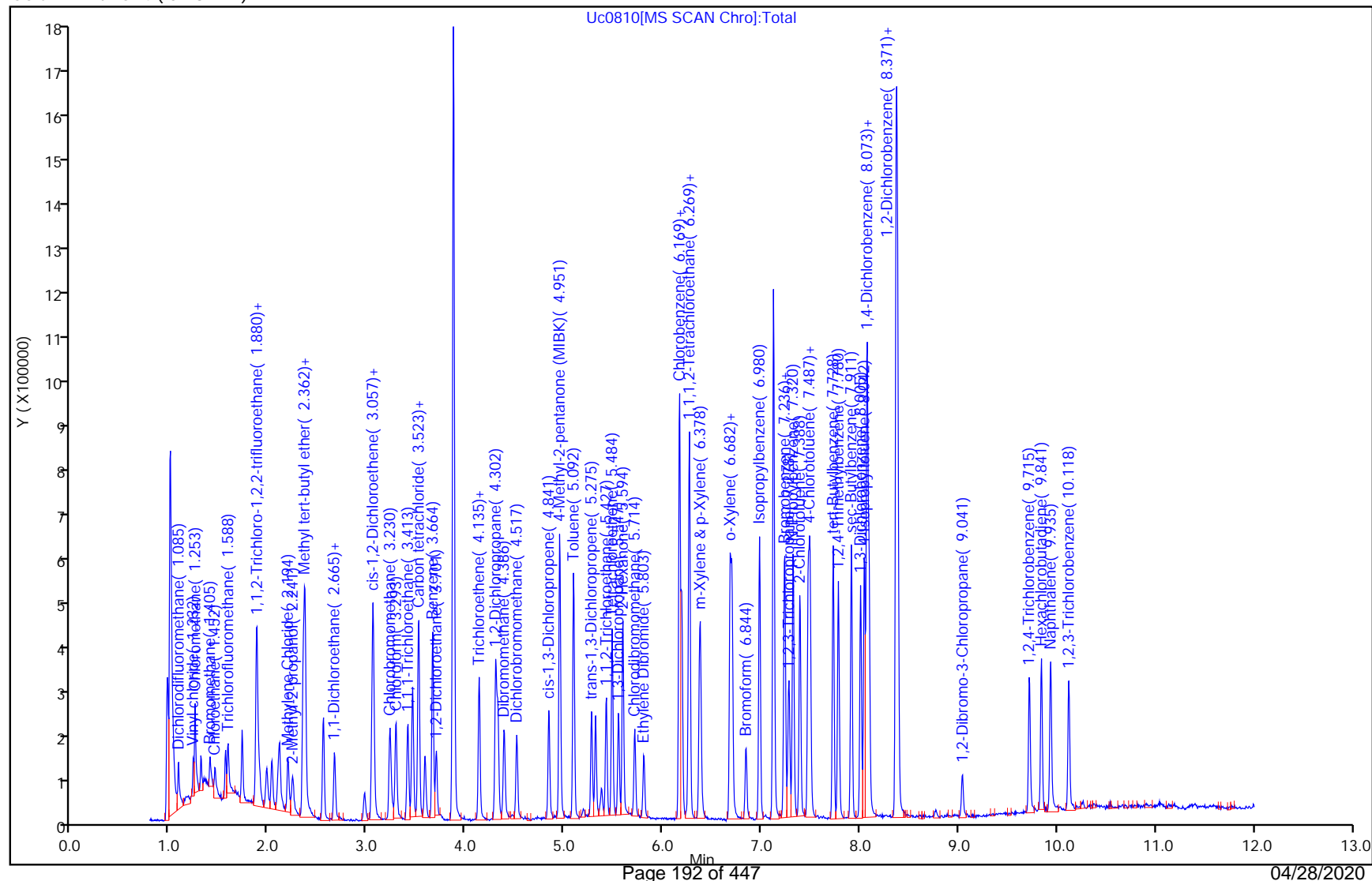
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:36:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D

Injection Date: 08-Apr-2020 16:57:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 10

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

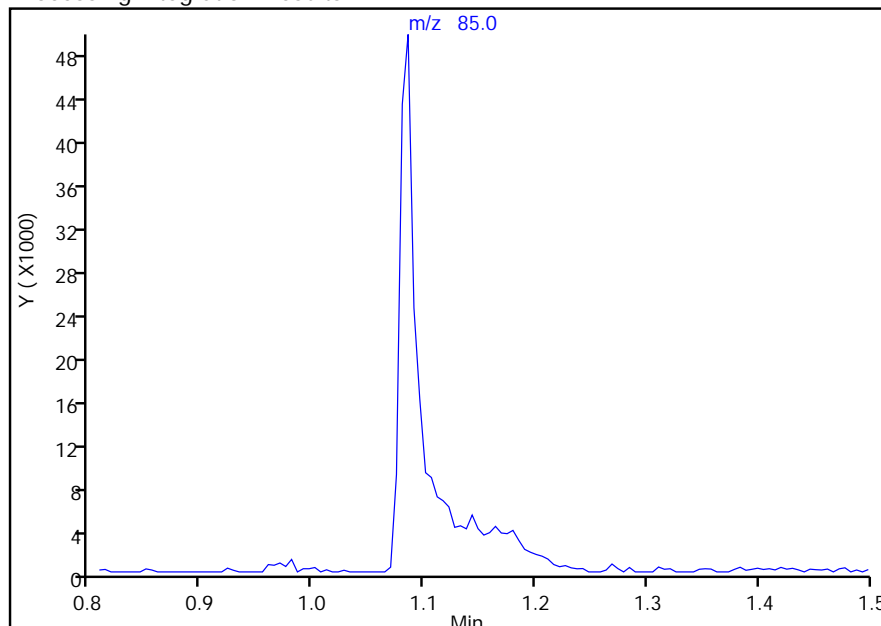
7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

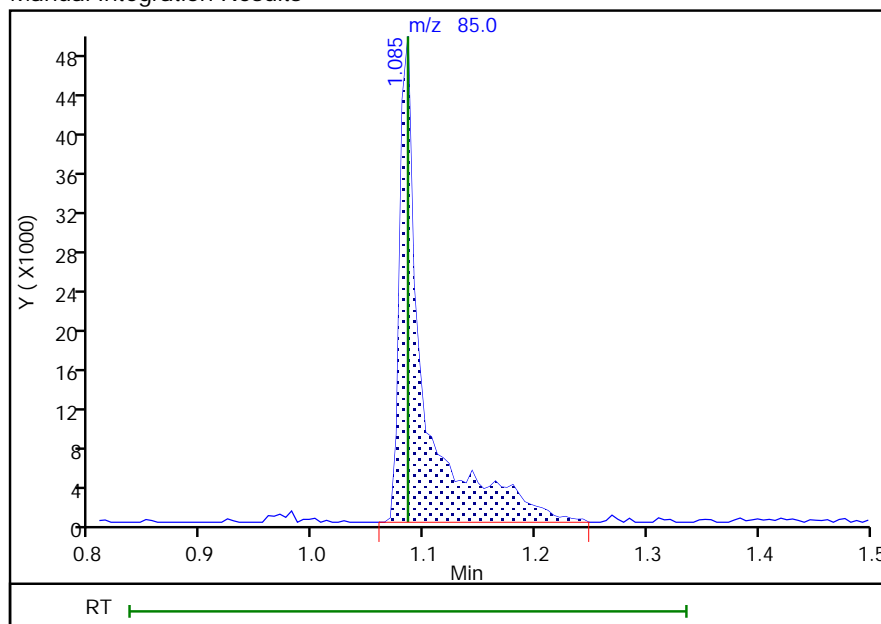
Not Detected

Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 74139
Amount: 5.293516
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:38

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

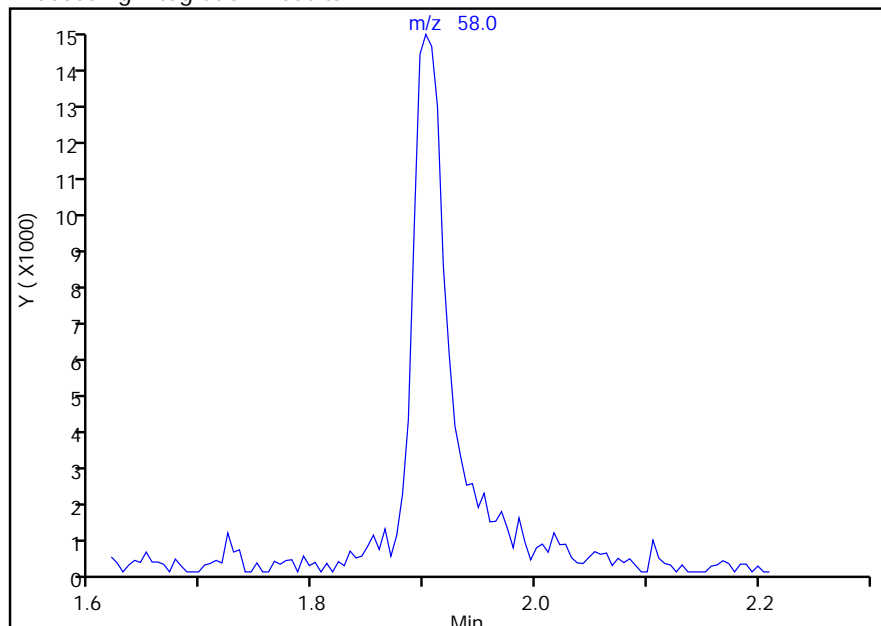
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D		
Injection Date:	08-Apr-2020 16:57:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

15 Acetone, CAS: 67-64-1

Signal: 1

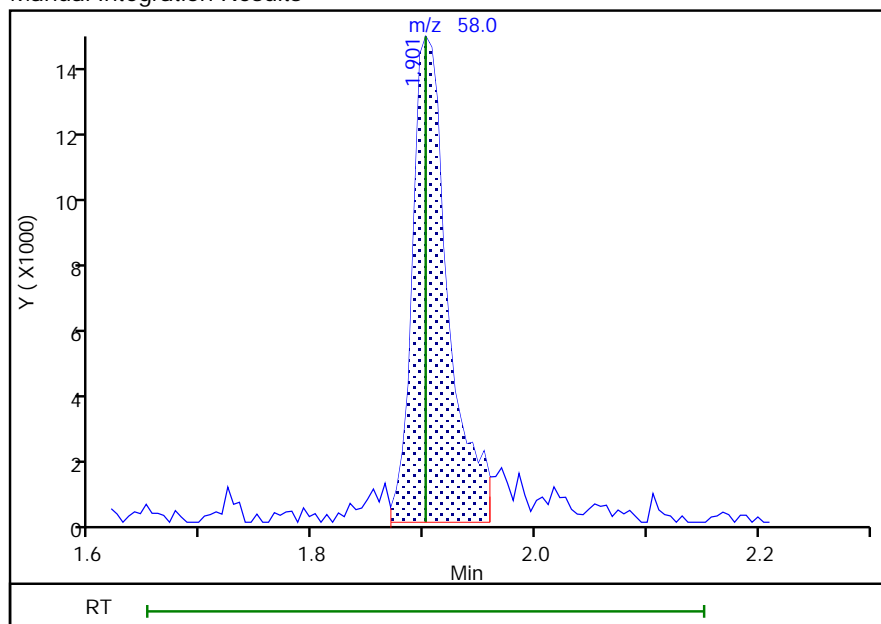
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 32434
Amount: 29.306154
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:23:40

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D

Injection Date: 08-Apr-2020 16:57:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 10

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

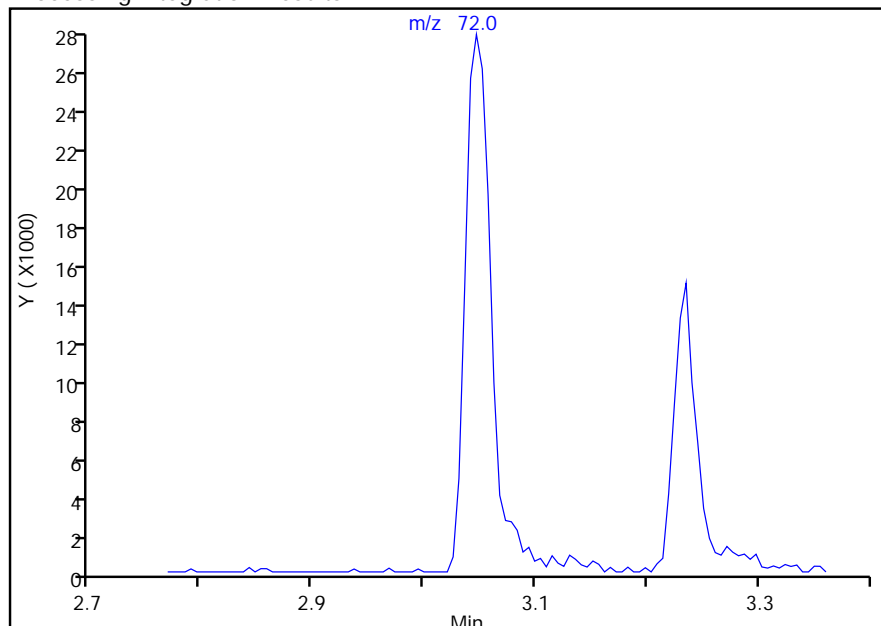
23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

Not Detected

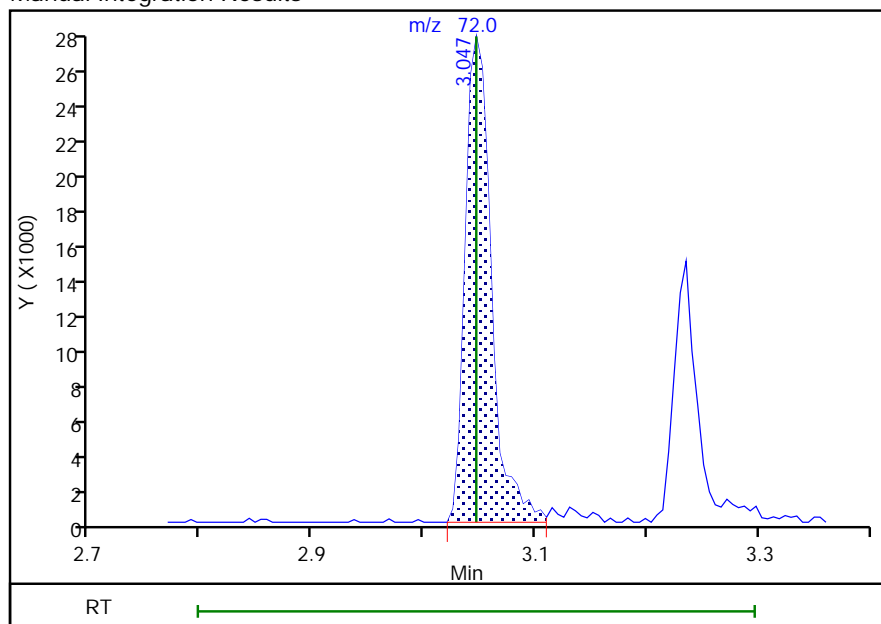
Expected RT: 3.05

Processing Integration Results



RT: 3.05
 Area: 45369
 Amount: 24.613497
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:43

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:50

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D

Injection Date: 08-Apr-2020 16:57:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 10

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

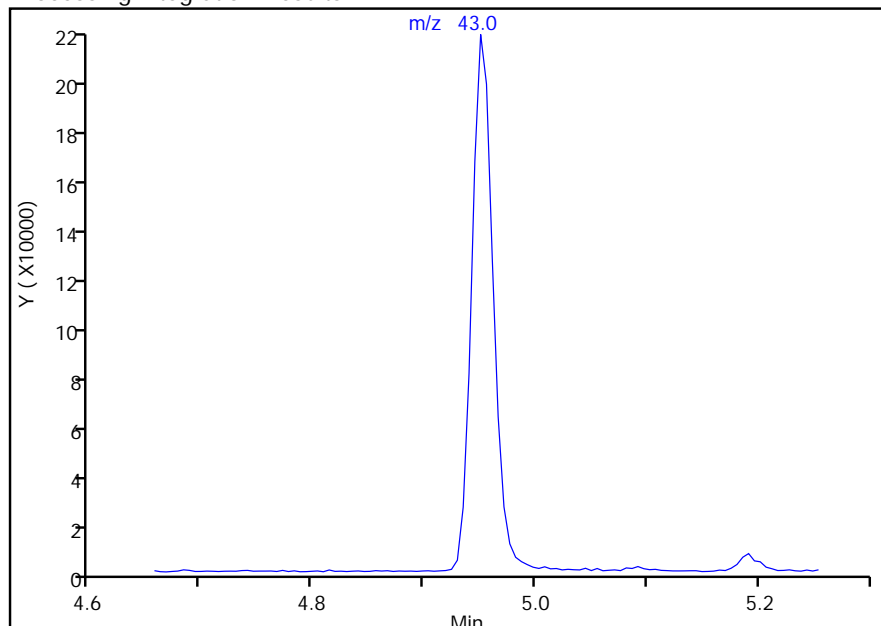
39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

Not Detected

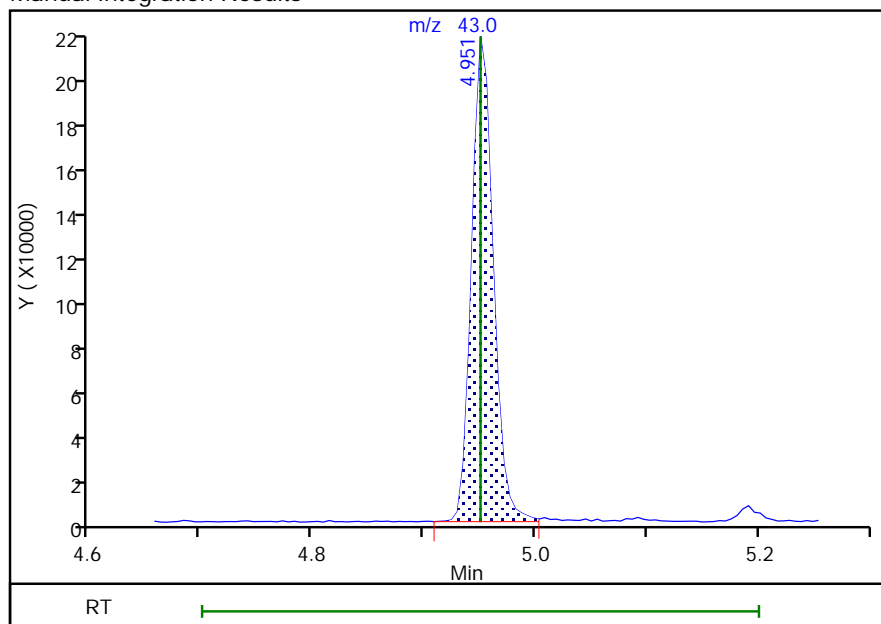
Expected RT: 4.95

Processing Integration Results



Manual Integration Results

RT: 4.95
 Area: 295596
 Amount: 24.015845
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:23:47

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

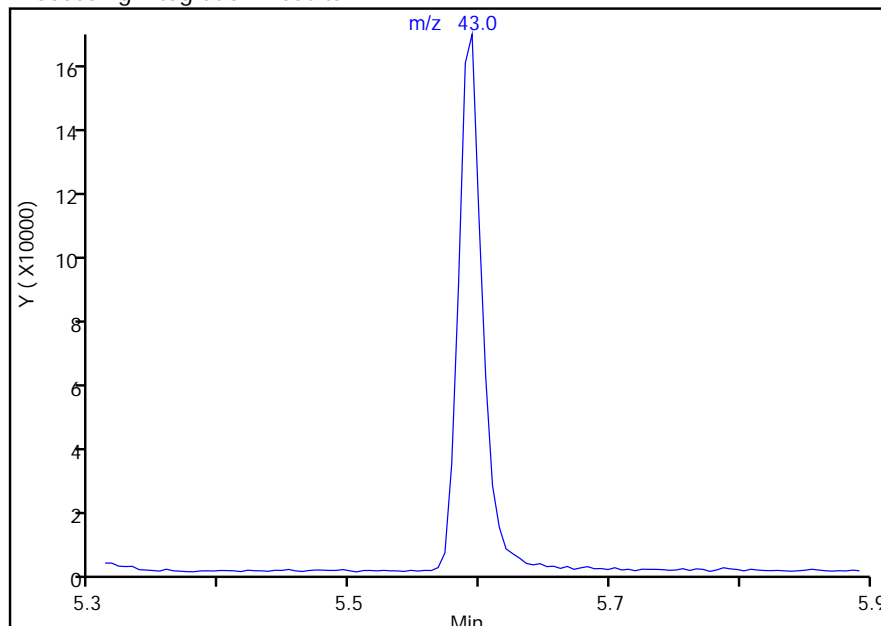
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D		
Injection Date:	08-Apr-2020 16:57:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

45 2-Hexanone, CAS: 591-78-6

Signal: 1

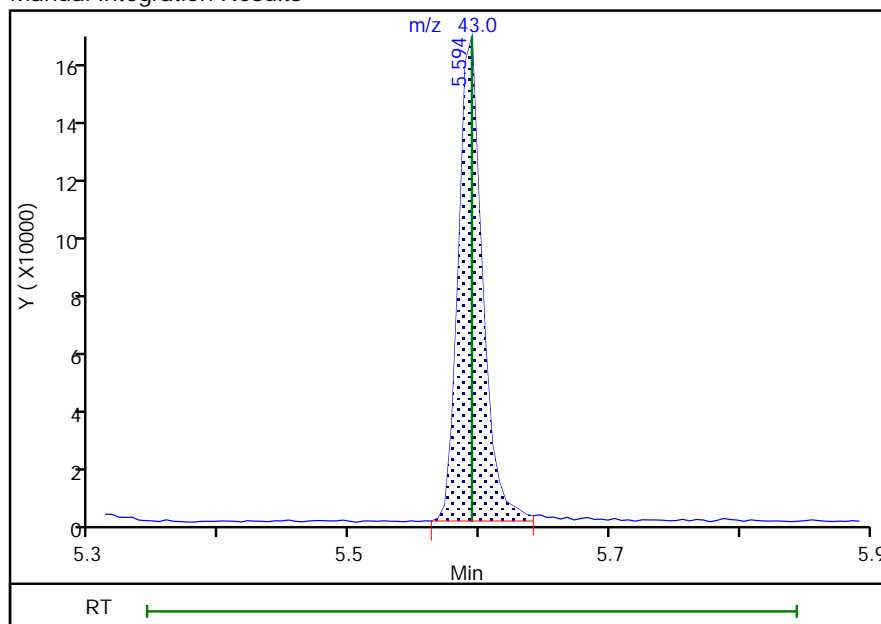
Not Detected
Expected RT: 5.59

Processing Integration Results



Manual Integration Results

RT: 5.59
Area: 206396
Amount: 24.683696
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:23:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:50

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D

Injection Date: 08-Apr-2020 16:57:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#:

10

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

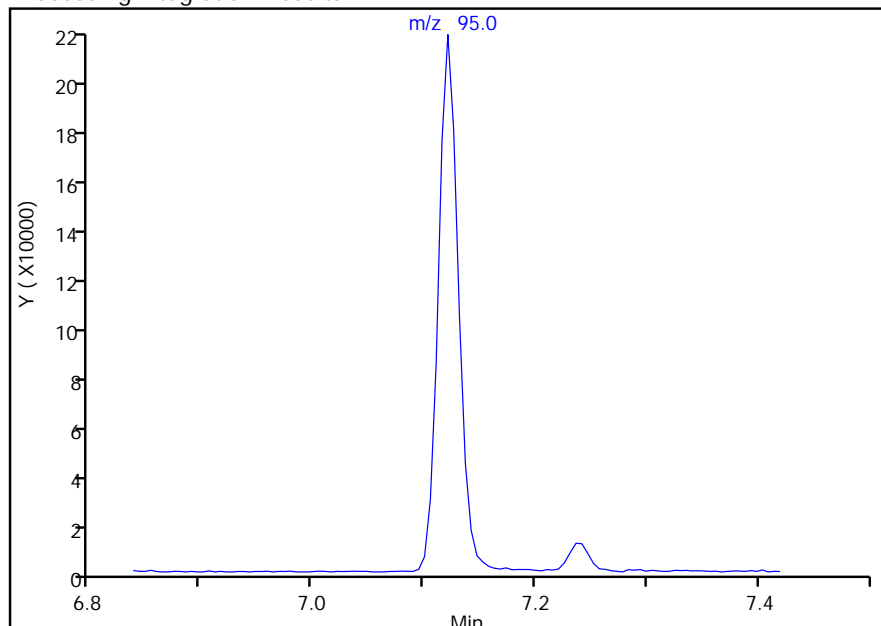
[\\$ 4 4-Bromofluorobenzene, CAS: 460-00-4](#)

Signal: 1

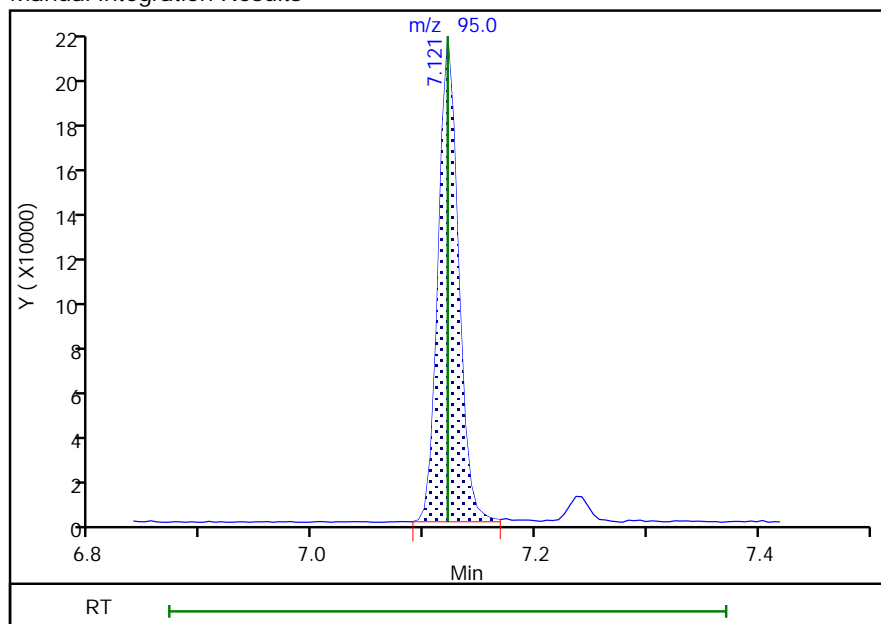
Not Detected

Expected RT: 7.12

Processing Integration Results

RT: 7.12
Area: 270604
Amount: 13.180570
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:23:35

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:36:50

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

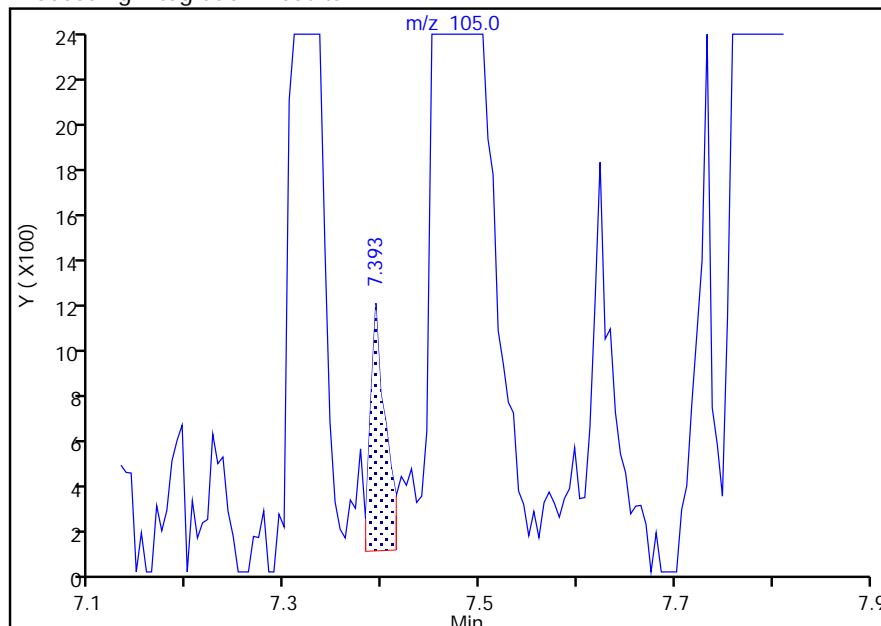
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0810.D
 Injection Date: 08-Apr-2020 16:57:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 10 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

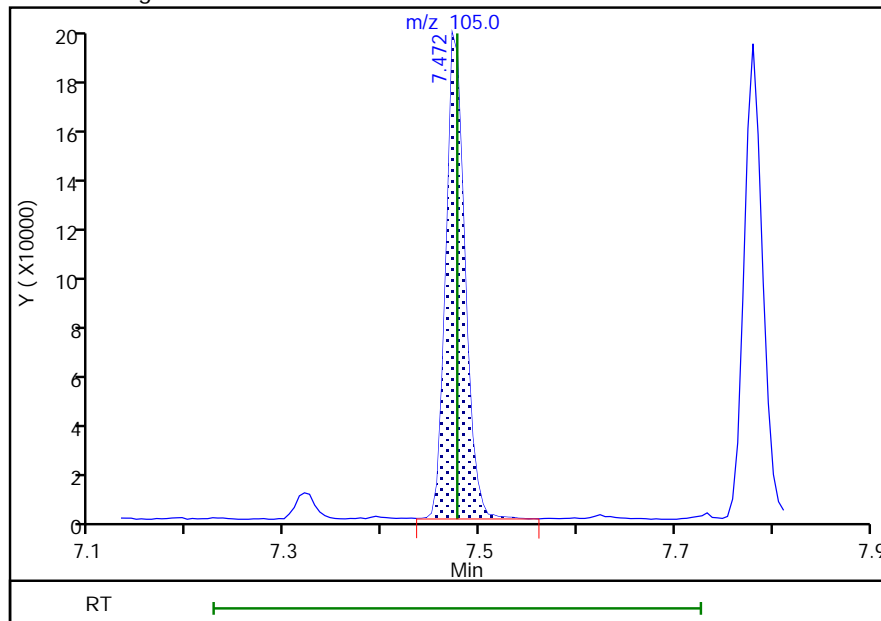
RT: 7.39
 Area: 1180
 Amount: 0.041312
 Amount Units: ug/l

Processing Integration Results



RT: 7.47
 Area: 259781
 Amount: 5.061283
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:26:05

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-Apr-2020 17:17:30 ALS Bottle#: 11 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-010
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:37:01 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 12:24:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1086597	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	445489	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	89	264783	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	90	373525	18.0	18.1	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	82	465902	18.0	18.5	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	159922	10.0	11.1	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	157443	10.0	12.3	
8 Chloromethane	50	1.253	1.253	0.000	76	168820	10.0	10.6	
10 Bromomethane	94	1.405	1.399	0.005	97	100801	10.0	10.7	
11 Chloroethane	64	1.457	1.451	0.006	99	96702	10.0	11.0	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	98	156725	10.0	11.8	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	93	159701	10.0	12.1	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	93	108303	10.0	11.5	
15 Acetone	58	1.901	1.901	0.000	89	62227	50.0	56.0	a
16 Methylene Chloride	84	2.194	2.194	0.000	83	116668	10.0	9.89	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	139055	100.0	105.9	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	416967	10.0	11.0	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	146317	10.0	11.3	
20 1,1-Dichloroethane	63	2.665	2.670	-0.005	99	223019	10.0	11.1	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	95580	50.0	51.7	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	200627	10.0	10.9	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	95	208489	10.0	11.3	
26 Chlorobromomethane	130	3.225	3.225	0.000	74	102358	10.0	10.6	
27 Chloroform	83	3.287	3.293	-0.006	99	256989	10.0	11.2	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	97	229986	10.0	11.5	
29 Carbon tetrachloride	117	3.518	3.517	0.001	96	214713	10.0	11.4	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	185530	10.0	11.1	
31 Benzene	78	3.664	3.664	0.000	95	581464	10.0	11.0	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	98	187225	10.0	11.2	
34 Trichloroethene	132	4.135	4.135	0.000	93	187110	10.0	11.7	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	90	133296	10.0	11.0	a

Report Date: 09-Apr-2020 12:37:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	88	98634	10.0	11.0	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	193142	10.0	11.2	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	93	233264	10.0	11.4	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	96	678389	50.0	55.3	a
40 Toluene	92	5.092	5.092	0.000	93	399886	10.0	10.9	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	216196	10.0	11.3	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	94	117128	10.0	10.9	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	177106	10.0	11.3	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	221277	10.0	10.9	
45 2-Hexanone	43	5.589	5.594	-0.005	95	482908	50.0	57.0	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	183299	10.0	11.4	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	163082	10.0	11.2	
48 Chlorobenzene	112	6.190	6.190	0.000	98	470693	10.0	11.0	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	181057	10.0	11.7	
50 Ethylbenzene	91	6.269	6.269	0.000	98	750570	10.0	11.3	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	98	583035	10.0	11.3	
52 o-Xylene	91	6.682	6.682	0.000	94	603595	10.0	11.2	
53 Styrene	104	6.698	6.703	-0.005	97	510675	10.0	11.5	
54 Bromoform	173	6.844	6.844	0.000	97	151100	10.0	11.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	772841	10.0	11.4	
56 Bromobenzene	156	7.231	7.231	0.000	86	249554	10.0	11.2	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.241	-0.005	96	196966	10.0	11.3	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	64312	10.0	10.6	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	870700	10.0	11.3	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	517131	10.0	11.2	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	586842	10.0	11.3	a
62 4-Chlorotoluene	91	7.493	7.492	0.000	97	605581	10.0	11.3	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	574746	10.0	11.3	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	558651	10.0	11.1	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	792220	10.0	11.2	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	437576	10.0	11.1	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	664728	10.0	11.1	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	444896	10.0	11.0	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	430612	10.0	11.3	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	481765	10.0	11.3	
71 1,2-Dibromo-3-Chloropropan	157	9.041	9.035	0.006	90	58103	10.0	10.9	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	210449	10.0	11.4	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	88	148694	10.0	11.9	
74 Naphthalene	128	9.935	9.935	0.000	99	564549	10.0	10.7	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	199145	10.0	11.0	
S 76 Xylenes, Total	1				0		20.0	22.5	
S 77 Trihalomethanes, Total	1				0			45.2	
S 78 1,3-Dichloropropene, Total	1				0		20.0	22.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Report Date: 09-Apr-2020 12:37:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00166

Amount Added: 1.00

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:37:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D

Injection Date: 08-Apr-2020 17:17:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

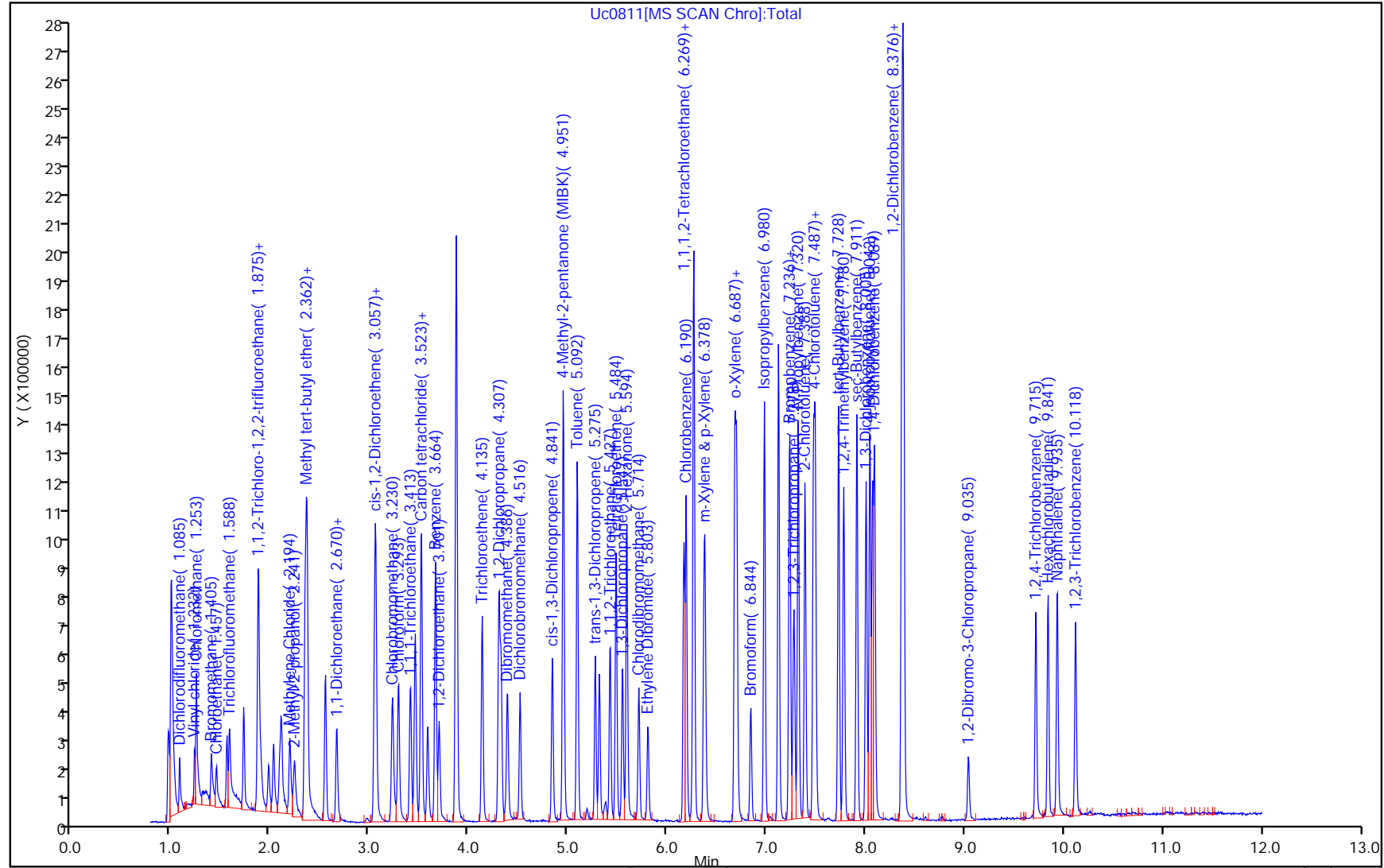
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:37:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

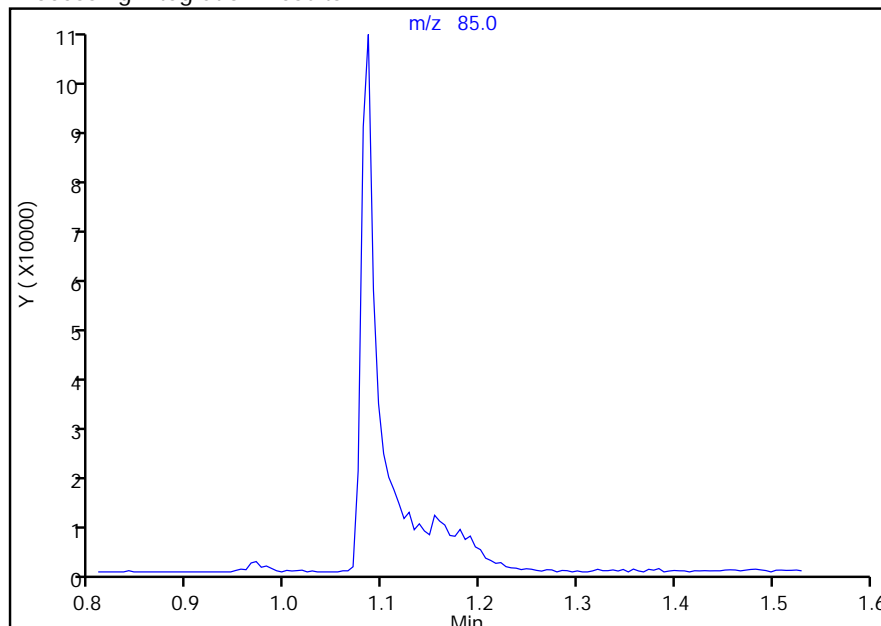
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D
Injection Date: 08-Apr-2020 17:17:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

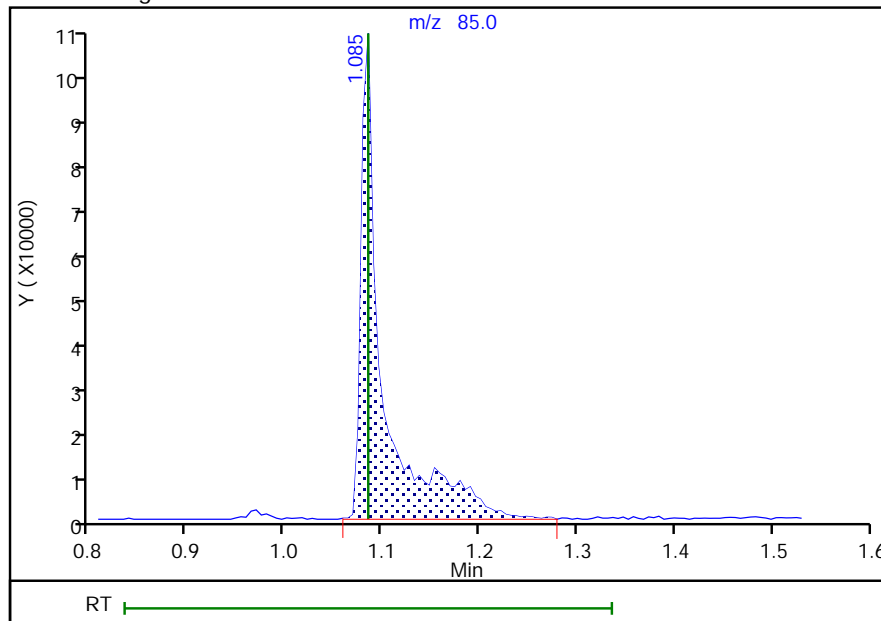
Signal: 1

Not Detected
Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 159922
Amount: 11.121187
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:06

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:02

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

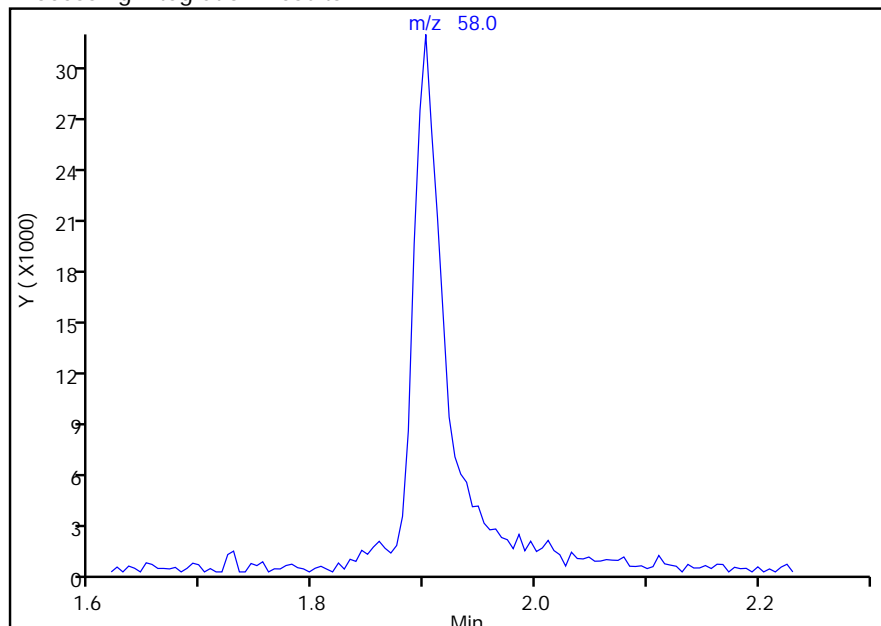
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D		
Injection Date:	08-Apr-2020 17:17:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

15 Acetone, CAS: 67-64-1

Signal: 1

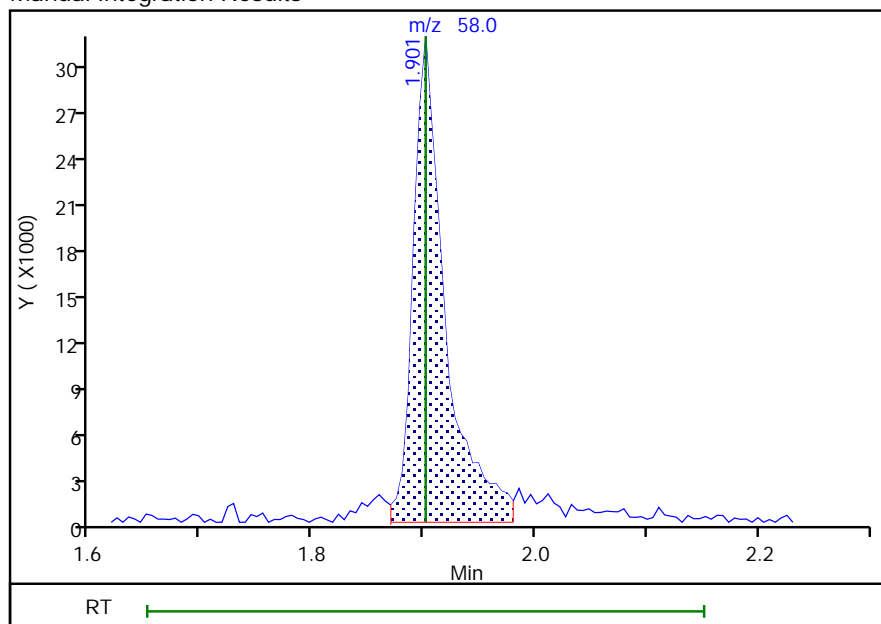
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 62227
Amount: 56.030454
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:24:08

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

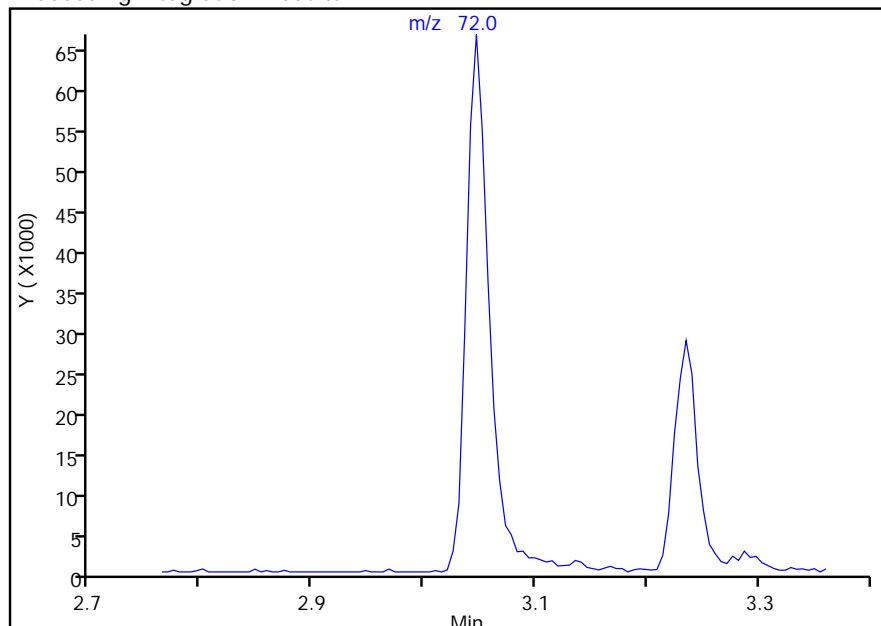
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D		
Injection Date:	08-Apr-2020 17:17:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

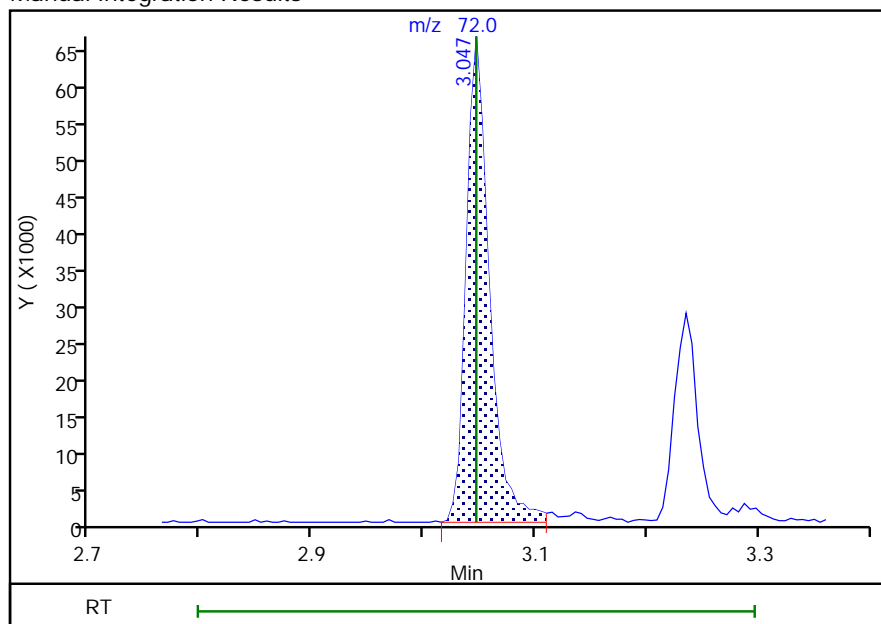
Not Detected
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.05
Area: 95580
Amount: 51.673528
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:24:10

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

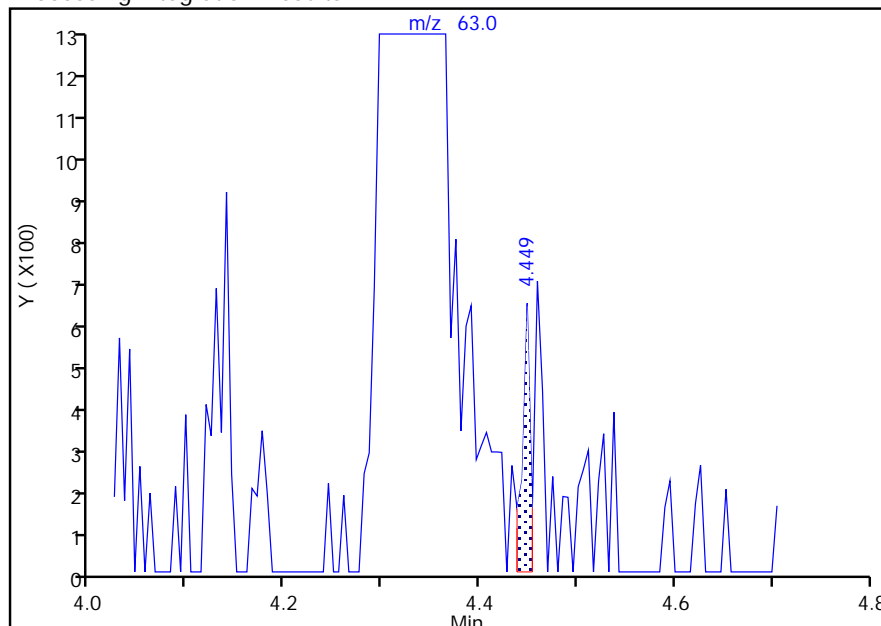
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D		
Injection Date:	08-Apr-2020 17:17:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

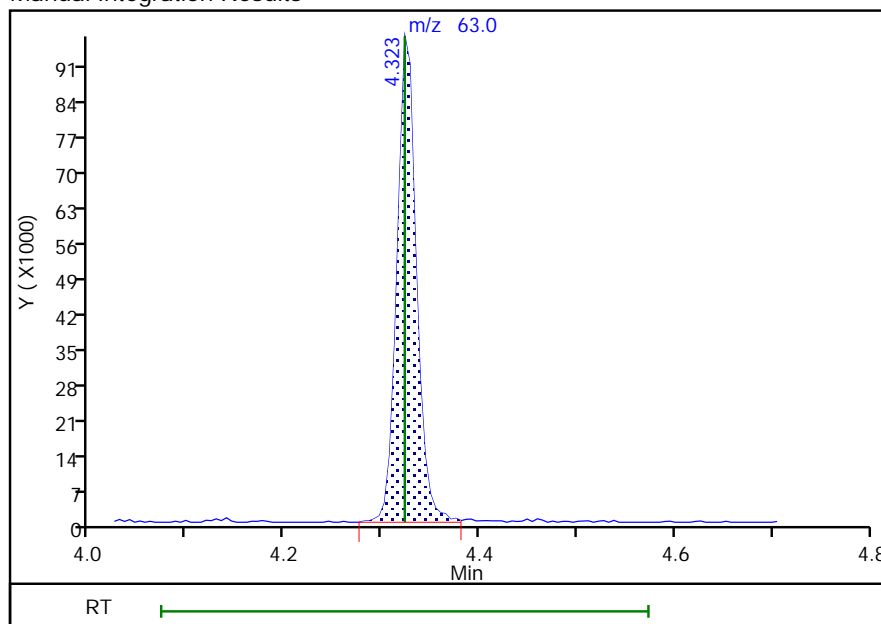
RT: 4.45
Area: 362
Amount: 0.040750
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 133296
Amount: 10.987267
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:28:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

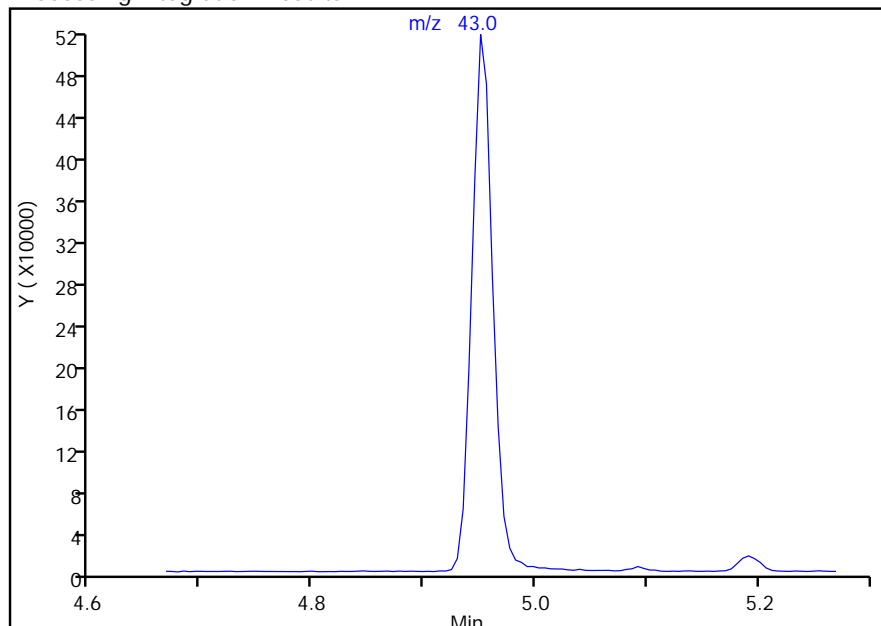
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D
Injection Date: 08-Apr-2020 17:17:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

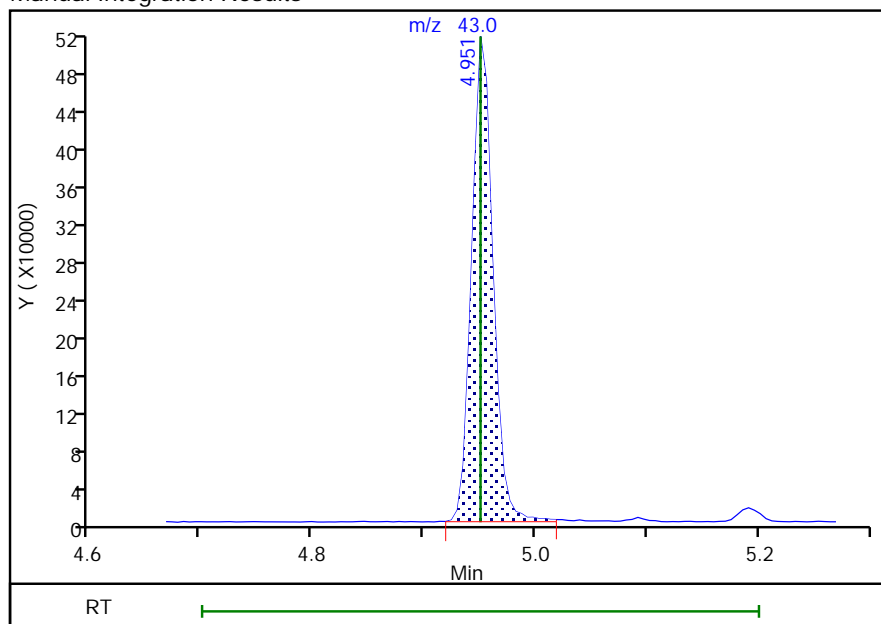
Signal: 1

Not Detected
Expected RT: 4.95

Processing Integration Results

RT: 4.95
Area: 678389
Amount: 55.290747
Amount Units: ug/l

Manual Integration Results

Reviewer: proctors, 09-Apr-2020 12:24:15
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

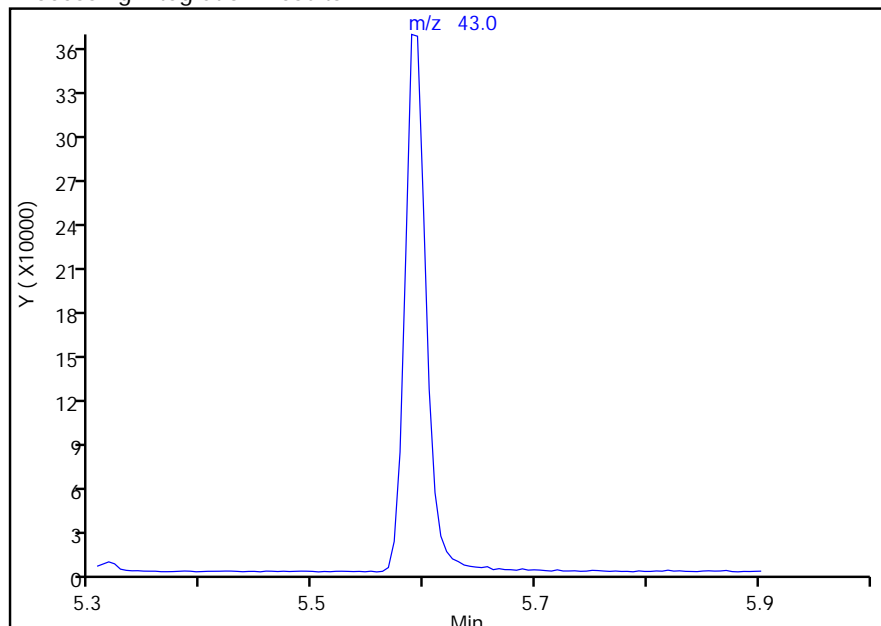
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D				
Injection Date:	08-Apr-2020 17:17:30	Instrument ID:	CMSU		
Lims ID:	ic				
Client ID:					
Operator ID:	rd	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	U524.2	Limit Group:	524.2		
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN		

45 2-Hexanone, CAS: 591-78-6

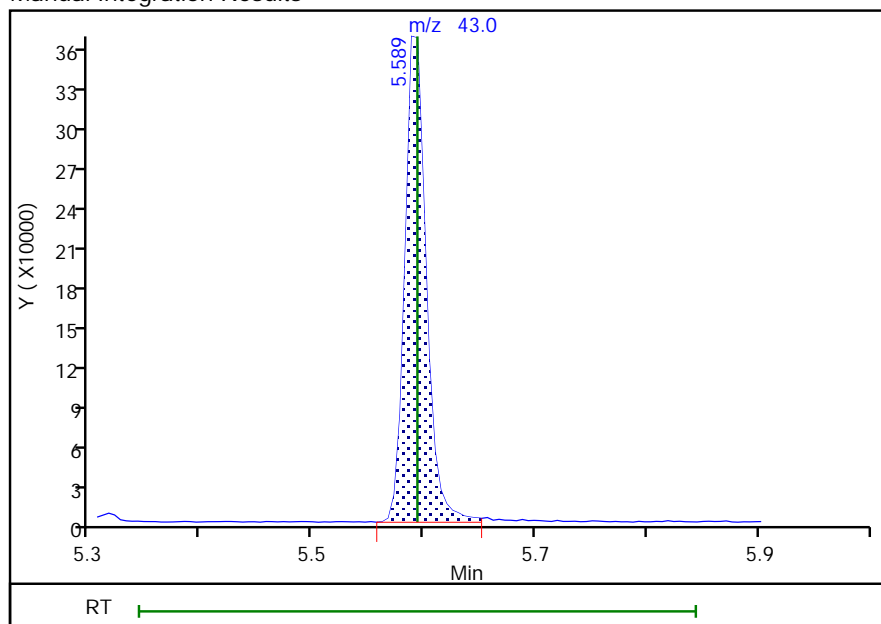
Signal: 1

Not Detected
Expected RT: 5.59

Processing Integration Results

RT: 5.59
Area: 482908
Amount: 56.964135
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:17

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

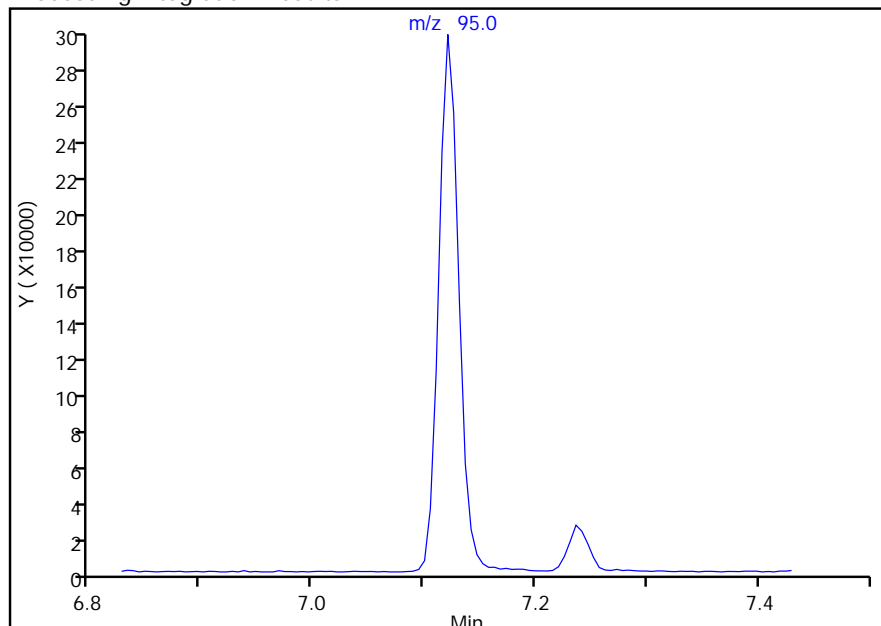
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D		
Injection Date:	08-Apr-2020 17:17:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

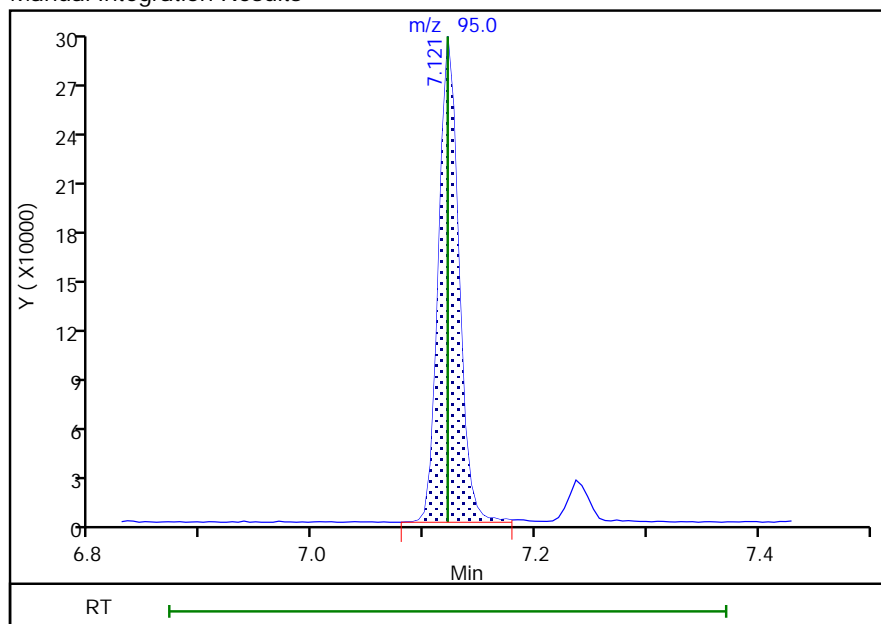
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	373525
Amount:	18.130368
Amount Units:	ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:04

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

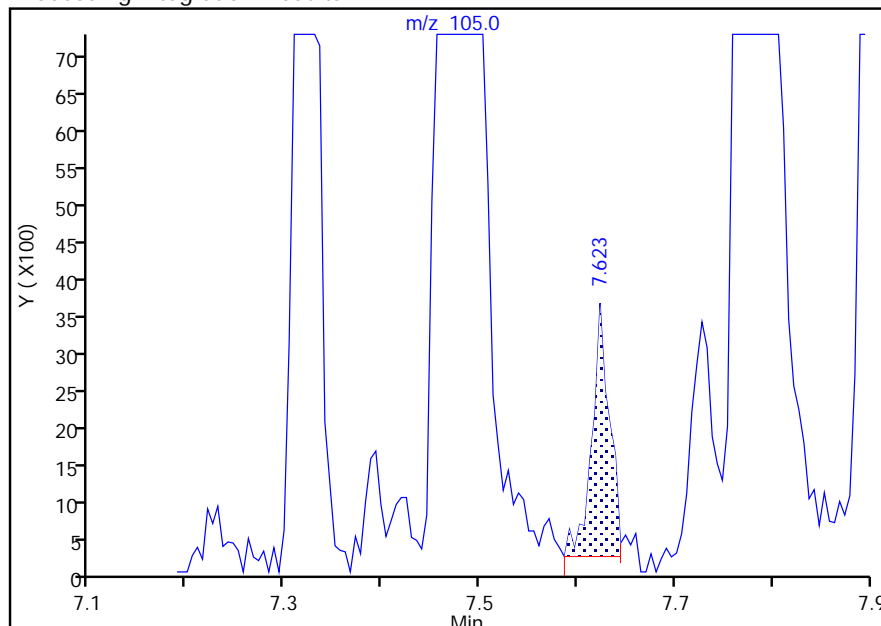
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0811.D		
Injection Date:	08-Apr-2020 17:17:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

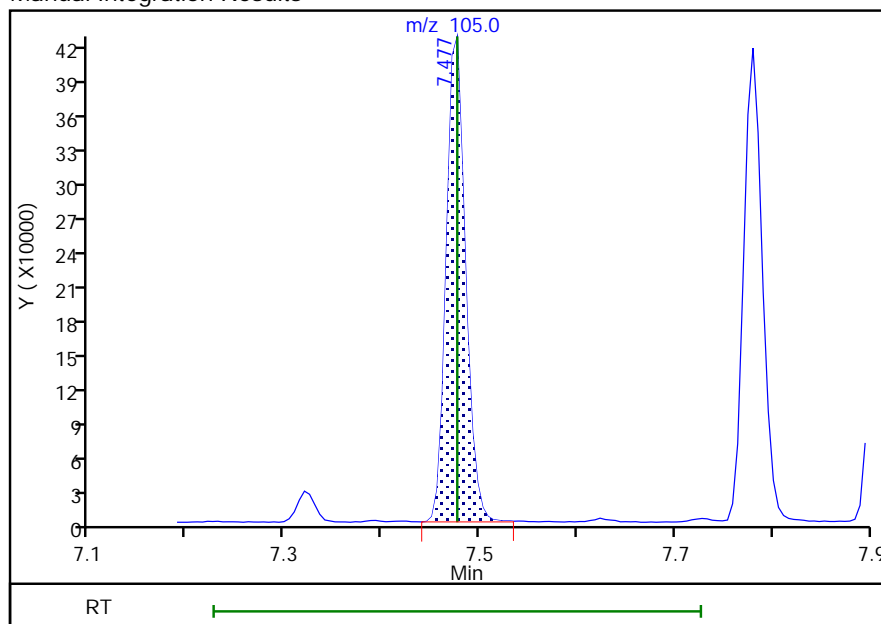
RT: 7.62
Area: 4248
Amount: 0.195977
Amount Units: ug/l

Processing Integration Results



RT: 7.48
Area: 586842
Amount: 11.277234
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:59

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:06

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Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 08-Apr-2020 17:37:30 ALS Bottle#: 12 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-011
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:37:05 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 09:23:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1117781	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	471729	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	88	287006	10.0	10.0	a
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	90	578270	26.0	27.3	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	85	726411	26.0	26.6	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	98	311471	20.0	20.9	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	299291	20.0	22.7	
8 Chloromethane	50	1.253	1.253	0.000	75	349808	20.0	21.3	
10 Bromomethane	94	1.405	1.405	0.000	99	218393	20.0	22.5	
11 Chloroethane	64	1.452	1.452	0.000	99	193868	20.0	21.1	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	97	309474	20.0	22.7	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	94	280343	20.0	20.7	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	94	190983	20.0	19.7	
15 Acetone	58	1.901	1.901	0.000	87	96660	100.0	84.6	a
16 Methylene Chloride	84	2.194	2.194	0.000	85	241169	20.0	19.9	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	258898	200.0	191.6	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	95	799181	20.0	20.4	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	285606	20.0	21.4	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	442389	20.0	21.4	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	178076	100.0	93.6	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	402978	20.0	21.3	
25 2,2-Dichloropropane	77	3.063	3.063	0.000	95	390544	20.0	20.5	
26 Chlorobromomethane	130	3.230	3.230	0.000	77	214176	20.0	21.6	
27 Chloroform	83	3.287	3.287	0.000	99	498940	20.0	21.2	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	98	446262	20.0	21.0	
29 Carbon tetrachloride	117	3.518	3.518	0.000	97	419549	20.0	20.9	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	94	375964	20.0	21.2	
31 Benzene	78	3.664	3.664	0.000	95	1143614	20.0	20.4	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	97	356421	20.0	20.1	
34 Trichloroethene	132	4.135	4.135	0.000	94	355397	20.0	21.0	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	269032	20.0	20.9	a

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Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	87	191023	20.0	20.1	
37 Dichlorobromomethane	83	4.517	4.517	0.000	99	382593	20.0	20.9	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	93	447077	20.0	20.6	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	96	1360277	100.0	104.7	a
40 Toluene	92	5.092	5.092	0.000	93	801839	20.0	20.7	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	426624	20.0	21.1	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	94	231997	20.0	20.3	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	356893	20.0	21.0	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	91	444918	20.0	20.8	
45 2-Hexanone	43	5.594	5.594	0.000	95	952584	100.0	103.7	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	375004	20.0	21.6	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	328348	20.0	21.3	
48 Chlorobenzene	112	6.190	6.190	0.000	98	963397	20.0	21.2	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	363877	20.0	21.6	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1536072	20.0	21.3	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	1200267	20.0	21.4	
52 o-Xylene	91	6.682	6.682	0.000	95	1236996	20.0	21.1	
53 Styrene	104	6.698	6.698	0.000	98	1047231	20.0	21.7	
54 Bromoform	173	6.844	6.844	0.000	98	307725	20.0	21.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1594773	20.0	21.7	
56 Bromobenzene	156	7.231	7.231	0.000	85	509168	20.0	21.0	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.241	0.000	97	396470	20.0	20.9	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	129484	20.0	19.8	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1786862	20.0	21.4	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1054795	20.0	21.1	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	1206157	20.0	21.4	a
62 4-Chlorotoluene	91	7.493	7.493	0.000	96	1226795	20.0	21.2	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	1176827	20.0	21.4	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	1141158	20.0	20.9	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1631066	20.0	21.4	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	907882	20.0	21.3	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1390035	20.0	21.4	
68 1,4-Dichlorobenzene	146	8.094	8.094	0.000	97	921636	20.0	21.0	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	984653	20.0	21.3	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	877325	20.0	21.2	
71 1,2-Dibromo-3-Chloropropan	157	9.041	9.041	0.000	90	120510	20.0	20.9	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	429159	20.0	21.4	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	96	289366	20.0	21.3	
74 Naphthalene	128	9.935	9.935	0.000	99	1112906	20.0	19.5	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	405904	20.0	20.7	
S 76 Xylenes, Total	1				0		40.0	42.6	
S 78 1,3-Dichloropropene, Total	1				0		40.0	41.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00166

Amount Added: 2.00

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:37:06

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D

Injection Date: 08-Apr-2020 17:37:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ics

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

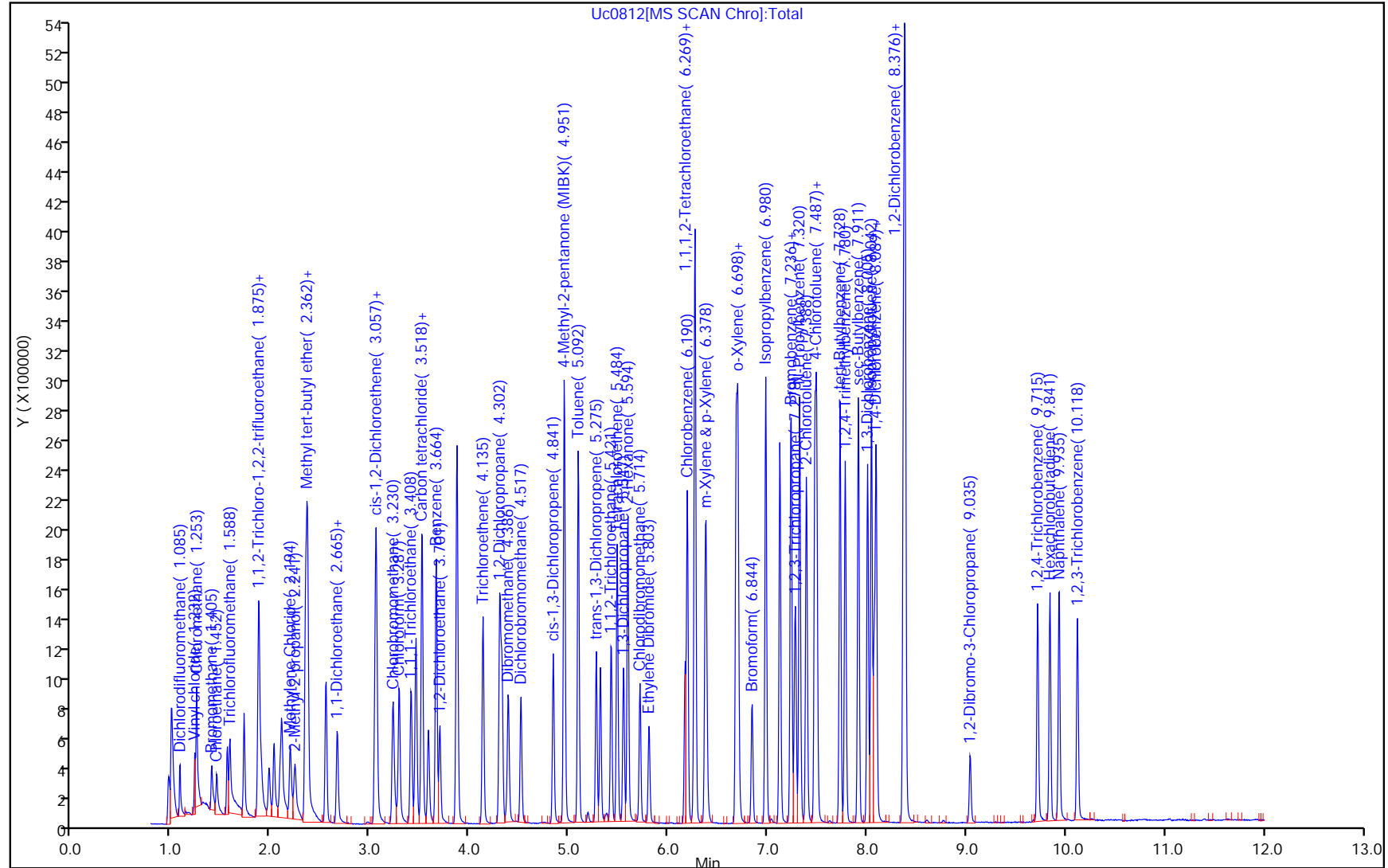
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:37:06

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

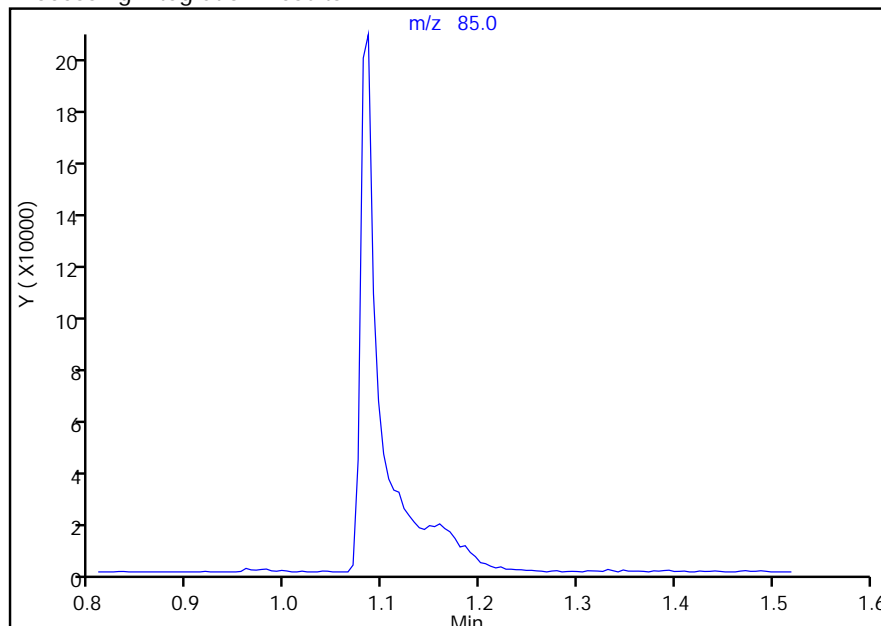
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D		
Injection Date:	08-Apr-2020 17:37:30	Instrument ID:	CMSU
Lims ID:	icis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	11

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

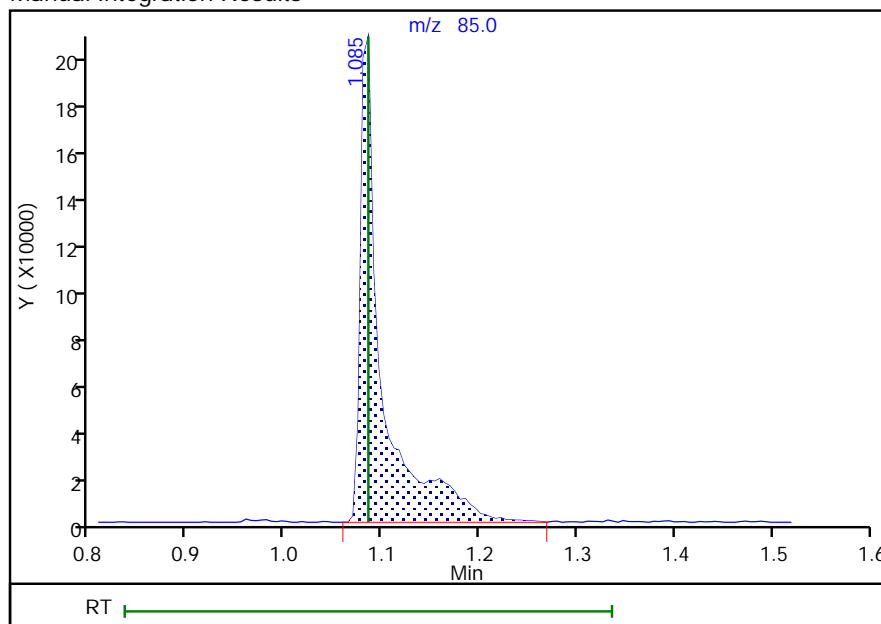
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 311471
Amount: 20.855718
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:23:18

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:06

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D

Injection Date: 08-Apr-2020 17:37:30

Instrument ID: CMSU

Lims ID: icis

Client ID:

Operator ID: rd

ALS Bottle#:

12

Worklist Smp#:

11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

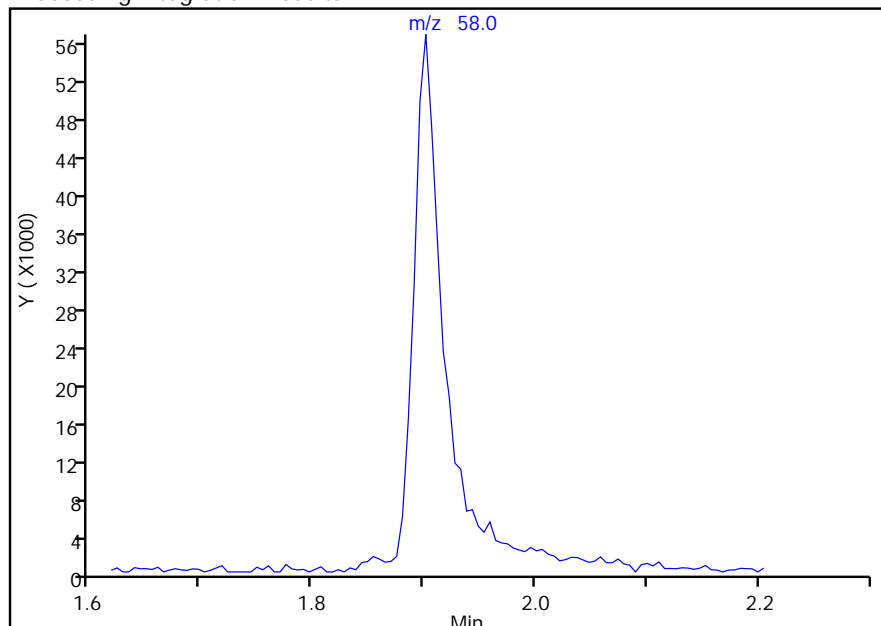
15 Acetone, CAS: 67-64-1

Signal: 1

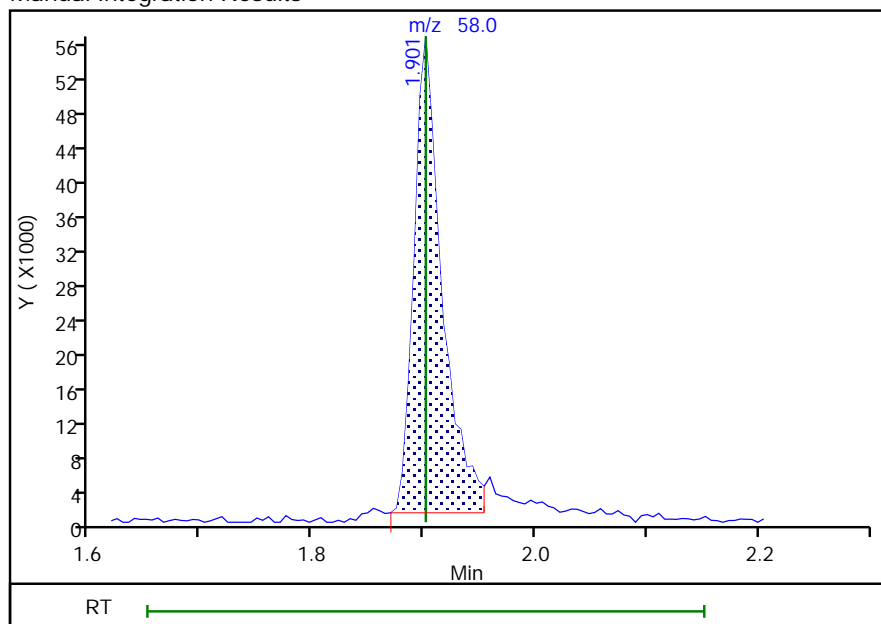
Not Detected

Expected RT: 1.90

Processing Integration Results

RT: 1.90
Area: 96660
Amount: 84.606522
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:29

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:06

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D

Injection Date: 08-Apr-2020 17:37:30

Instrument ID: CMSU

Lims ID: icis

Client ID:

Operator ID: rd

ALS Bottle#:

12

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

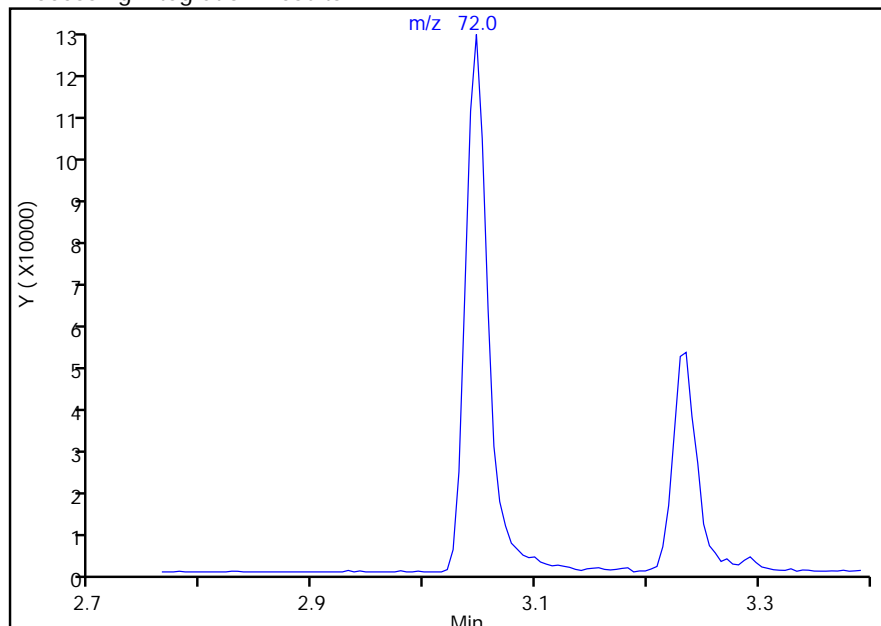
23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

Not Detected

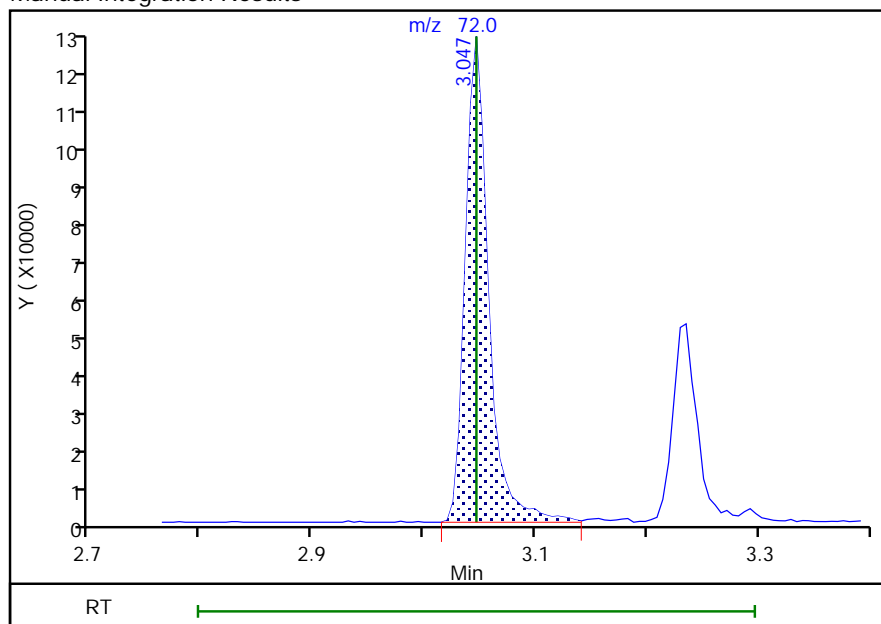
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.05
 Area: 178076
 Amount: 93.587588
 Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:24:31

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

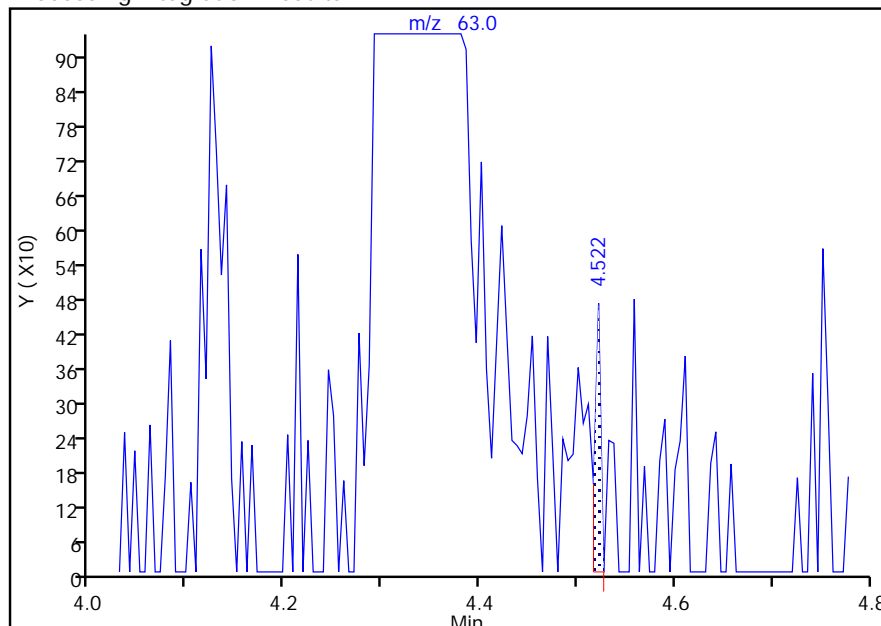
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D		
Injection Date:	08-Apr-2020 17:37:30	Instrument ID:	CMSU
Lims ID:	icis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	11

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

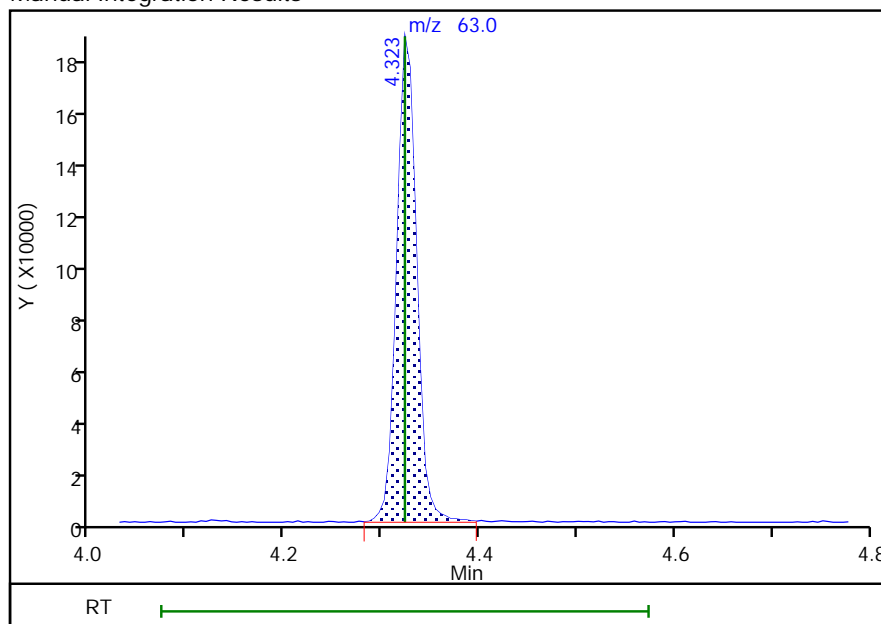
RT: 4.52
Area: 195
Amount: 0.017463
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 269032
Amount: 20.942132
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:28:57

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

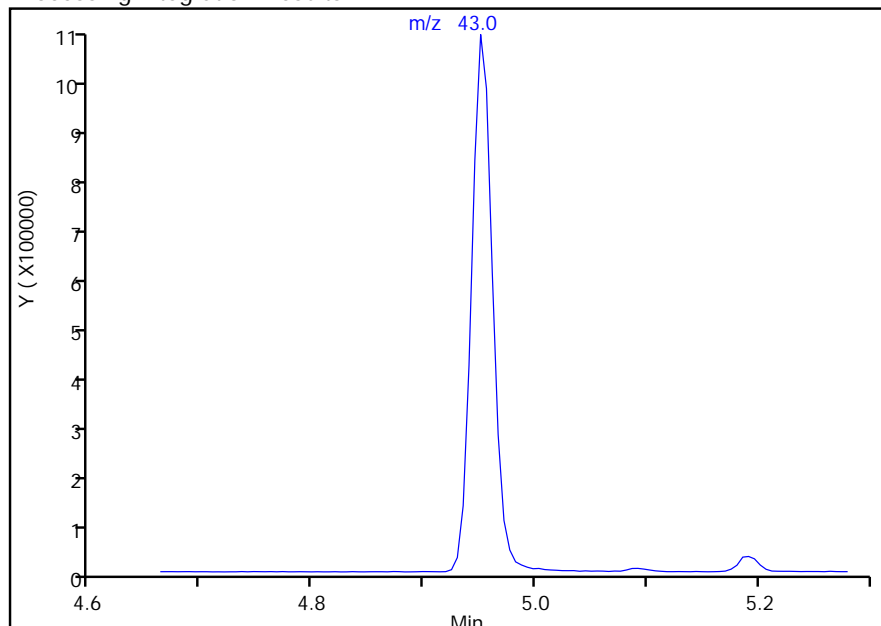
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D		
Injection Date:	08-Apr-2020 17:37:30	Instrument ID:	CMSU
Lims ID:	icis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	11

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

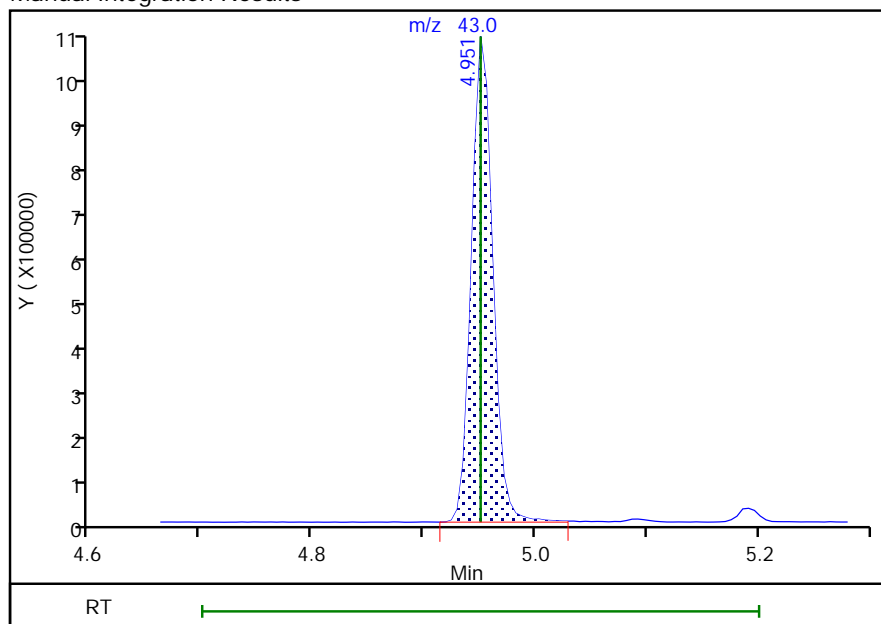
Not Detected
Expected RT: 4.95

Processing Integration Results



RT: 4.95
Area: 1360277
Amount: 104.6997
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:35

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

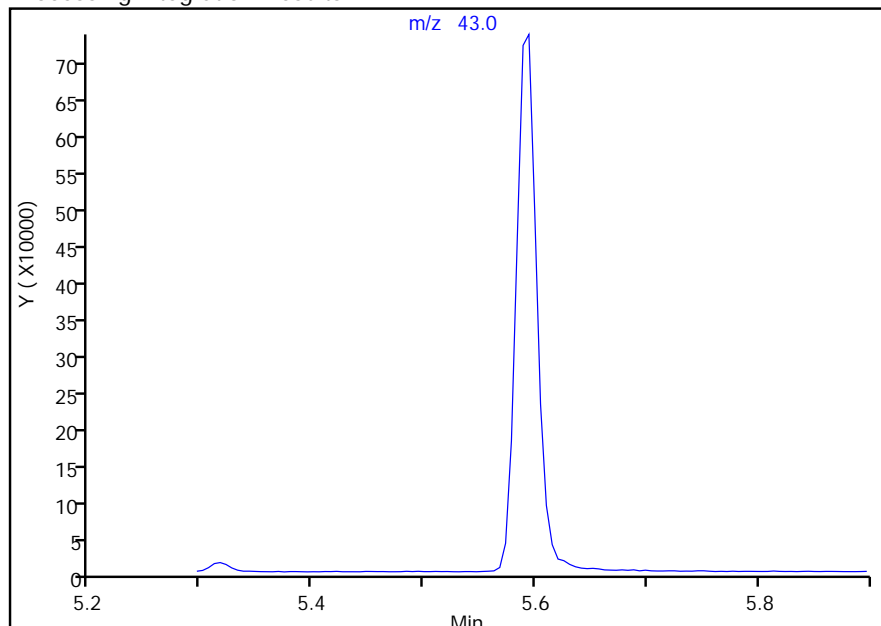
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D
Injection Date: 08-Apr-2020 17:37:30 Instrument ID: CMSU
Lims ID: icis
Client ID:
Operator ID: rd ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

45 2-Hexanone, CAS: 591-78-6

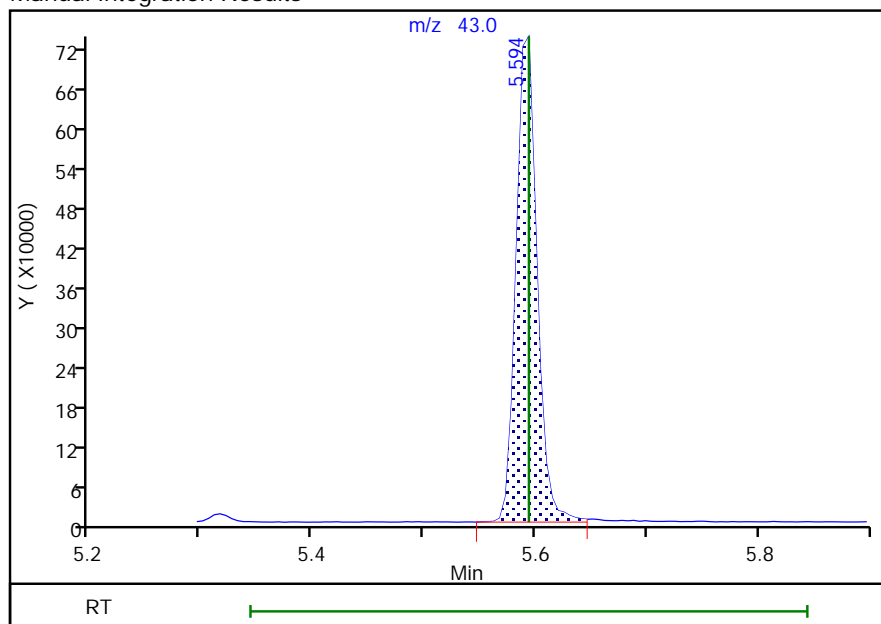
Signal: 1

Not Detected
Expected RT: 5.59

Processing Integration Results

RT: 5.59
Area: 952584
Amount: 103.6668
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:37

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D

Injection Date: 08-Apr-2020 17:37:30

Instrument ID: CMSU

Lims ID: icis

Client ID:

Operator ID: rd

ALS Bottle#:

12

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

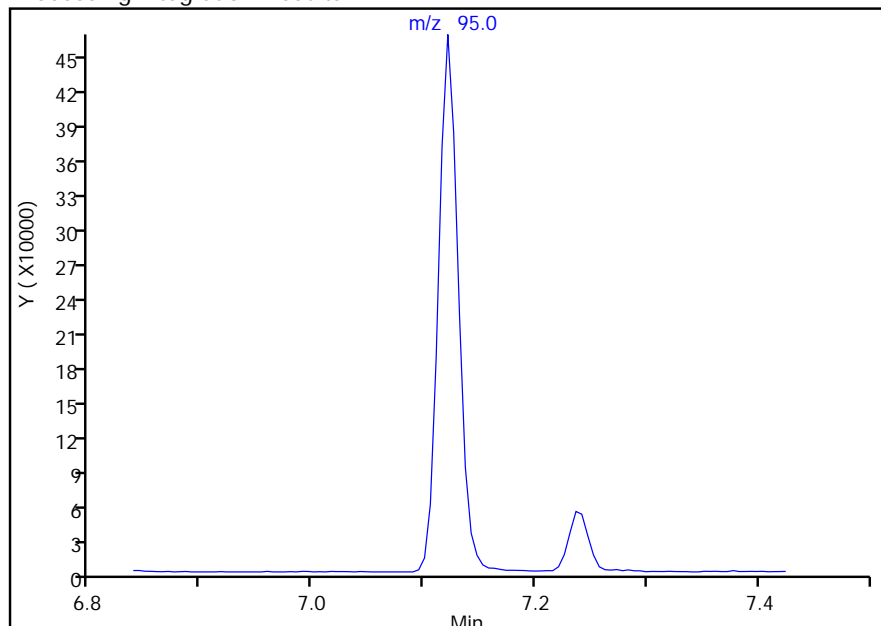
\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

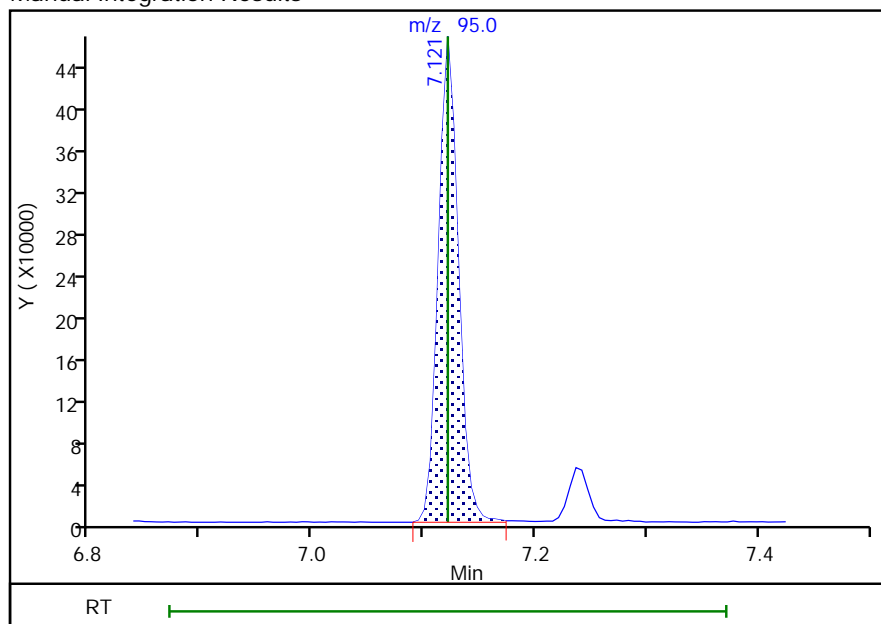
Not Detected

Expected RT: 7.12

Processing Integration Results

RT: 7.12
Area: 578270
Amount: 27.285342
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:23:15

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

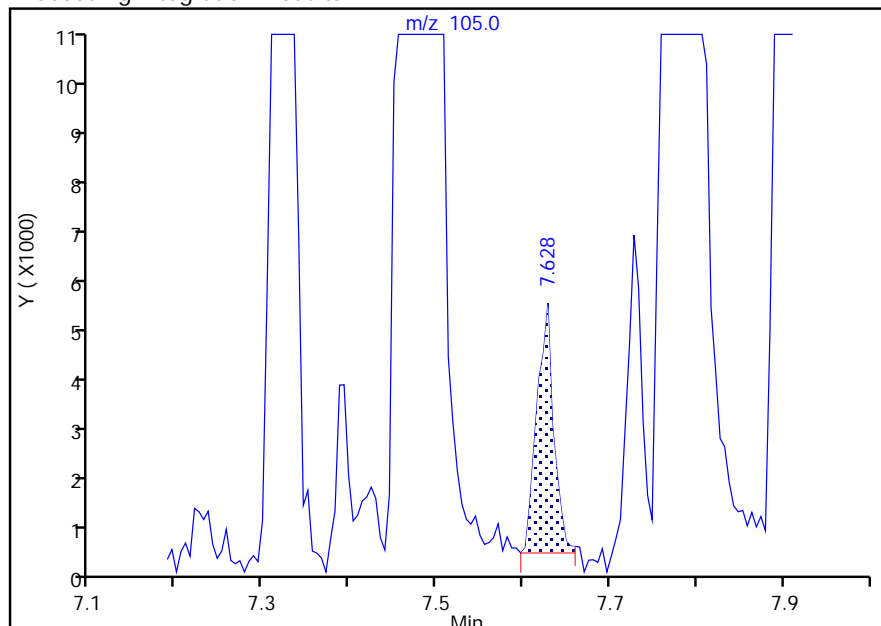
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D
 Injection Date: 08-Apr-2020 17:37:30 Instrument ID: CMSU
 Lims ID: icis
 Client ID:
 Operator ID: rd ALS Bottle#: 12 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

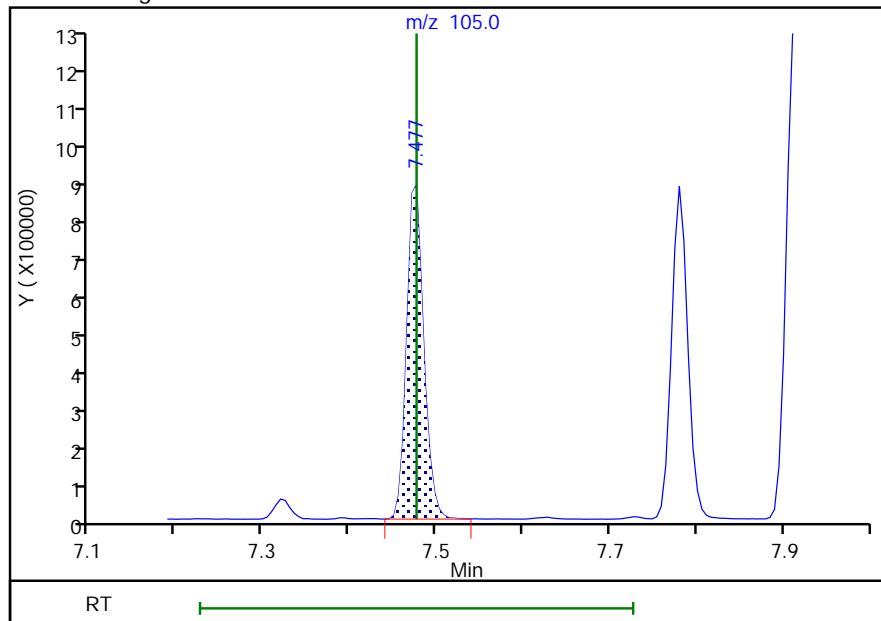
RT: 7.63
 Area: 6799
 Amount: 0.424957
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 1206157
 Amount: 21.383775
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:06

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0812.D

Injection Date: 08-Apr-2020 17:37:30

Instrument ID: CMSU

Lims ID: icis

Client ID:

Operator ID: rd

ALS Bottle#: 12

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

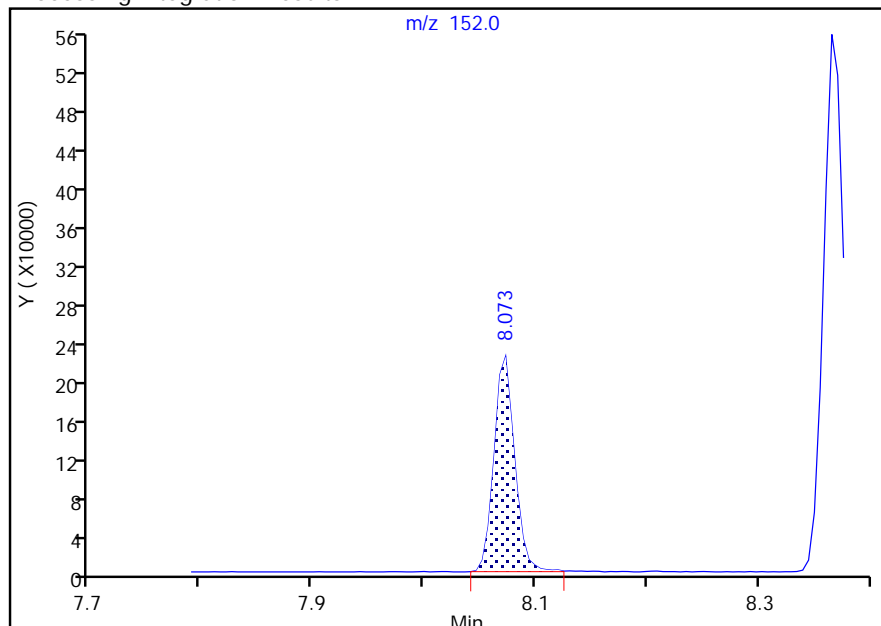
Detector: MS SCAN

* 3,1,4-Dichlorobenzene-d4, CAS: 3855-82-1

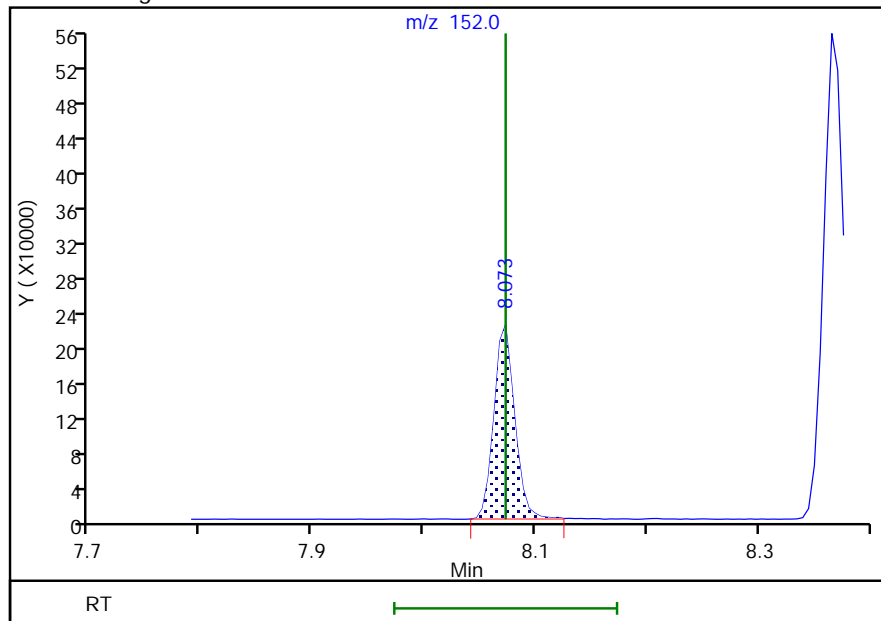
Signal: 1

RT: 8.07
Area: 287006
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results

RT: 8.07
Area: 287006
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:23:33

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-Apr-2020 17:58:30 ALS Bottle#: 13 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-012
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:37:08 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 09:23:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1139174	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	485419	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	87	314425	10.0	10.0	a
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	91	1185689	50.0	54.9	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	82	1517394	50.0	50.8	
7 Dichlorodifluoromethane	85	1.086	1.085	0.001	99	762742	50.0	49.8	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	744099	50.0	55.4	
8 Chloromethane	50	1.253	1.253	0.000	80	844885	50.0	50.7	
10 Bromomethane	94	1.405	1.405	0.001	98	565523	50.0	57.2	
11 Chloroethane	64	1.452	1.452	0.000	99	477099	50.0	50.6	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	98	660402	50.0	47.6	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	93	731326	50.0	53.0	
13 1,1-Dichloroethene	96	1.881	1.880	0.000	95	446860	50.0	45.1	
15 Acetone	58	1.901	1.901	0.000	87	225061	250.0	193.3	a
16 Methylene Chloride	84	2.194	2.194	0.000	85	512522	50.0	41.4	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	674037	500.0	489.5	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	95	2059448	50.0	51.7	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	90	745016	50.0	54.9	
20 1,1-Dichloroethane	63	2.670	2.665	0.005	99	1134820	50.0	53.9	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	441044	250.0	227.4	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	1041121	50.0	53.9	
25 2,2-Dichloropropane	77	3.063	3.063	0.001	94	1029175	50.0	53.1	
26 Chlorobromomethane	130	3.225	3.230	-0.005	77	471910	50.0	46.7	
27 Chloroform	83	3.293	3.287	0.006	99	1273154	50.0	53.0	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	1171911	50.0	53.7	
29 Carbon tetrachloride	117	3.518	3.518	0.000	96	1110100	50.0	53.9	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	976786	50.0	53.6	
31 Benzene	78	3.664	3.664	0.000	94	2990294	50.0	51.8	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	948844	50.0	52.0	
34 Trichloroethene	132	4.135	4.135	0.000	94	905016	50.0	52.0	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	671607	50.0	50.8	a

Report Date: 09-Apr-2020 12:37:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	87	490101	50.0	50.2	
37 Dichlorobromomethane	83	4.517	4.517	0.001	99	997944	50.0	53.0	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	93	1160342	50.0	51.8	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	96	3540732	250.0	264.8	a
40 Toluene	92	5.092	5.092	0.000	92	2075924	50.0	52.0	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	1122602	50.0	53.9	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	585000	50.0	49.8	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	902883	50.0	48.6	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	1130402	50.0	51.3	
45 2-Hexanone	43	5.589	5.594	-0.005	95	2524228	250.0	250.7	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	988209	50.0	51.9	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	834631	50.0	52.5	
48 Chlorobenzene	112	6.190	6.190	0.000	98	2516851	50.0	53.8	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	943384	50.0	51.2	
50 Ethylbenzene	91	6.269	6.269	0.000	99	4141812	50.0	52.5	
51 m-Xylene & p-Xylene	91	6.379	6.378	0.000	99	3198516	50.0	52.2	
52 o-Xylene	91	6.682	6.682	0.000	94	3351161	50.0	52.3	
53 Styrene	104	6.698	6.698	0.000	98	2818030	50.0	53.3	
54 Bromoform	173	6.844	6.844	0.000	98	828406	50.0	52.6	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	4419204	50.0	55.0	
56 Bromobenzene	156	7.231	7.231	0.000	86	1334166	50.0	50.2	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.241	-0.005	97	1041724	50.0	50.1	
58 1,2,3-Trichloropropane	110	7.278	7.283	-0.005	97	335438	50.0	46.8	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	5031983	50.0	55.1	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	2906016	50.0	53.2	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	3314707	50.0	53.6	a
62 4-Chlorotoluene	91	7.493	7.493	0.001	96	3438808	50.0	54.3	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	3268624	50.0	54.3	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	3172296	50.0	53.1	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	4639995	50.0	55.5	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	2458495	50.0	52.6	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	3910350	50.0	54.9	
68 1,4-Dichlorobenzene	146	8.089	8.094	-0.005	97	2495388	50.0	51.8	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	97	2403776	50.0	52.9	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	2839396	50.0	56.0	
71 1,2-Dibromo-3-Chloropropan	157	9.035	9.041	-0.006	90	322370	50.0	51.1	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	1099440	50.0	50.0	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	96	763474	50.0	51.3	
74 Naphthalene	128	9.935	9.935	0.000	99	2834554	50.0	45.3	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	1028264	50.0	47.8	
S 76 Xylenes, Total	1				0		100.0	104.4	
S 77 Trihalomethanes, Total	1				0			210.5	
S 78 1,3-Dichloropropene, Total	1				0		100.0	105.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Report Date: 09-Apr-2020 12:37:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00166

Amount Added: 5.00

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:37:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D

Injection Date: 08-Apr-2020 17:58:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

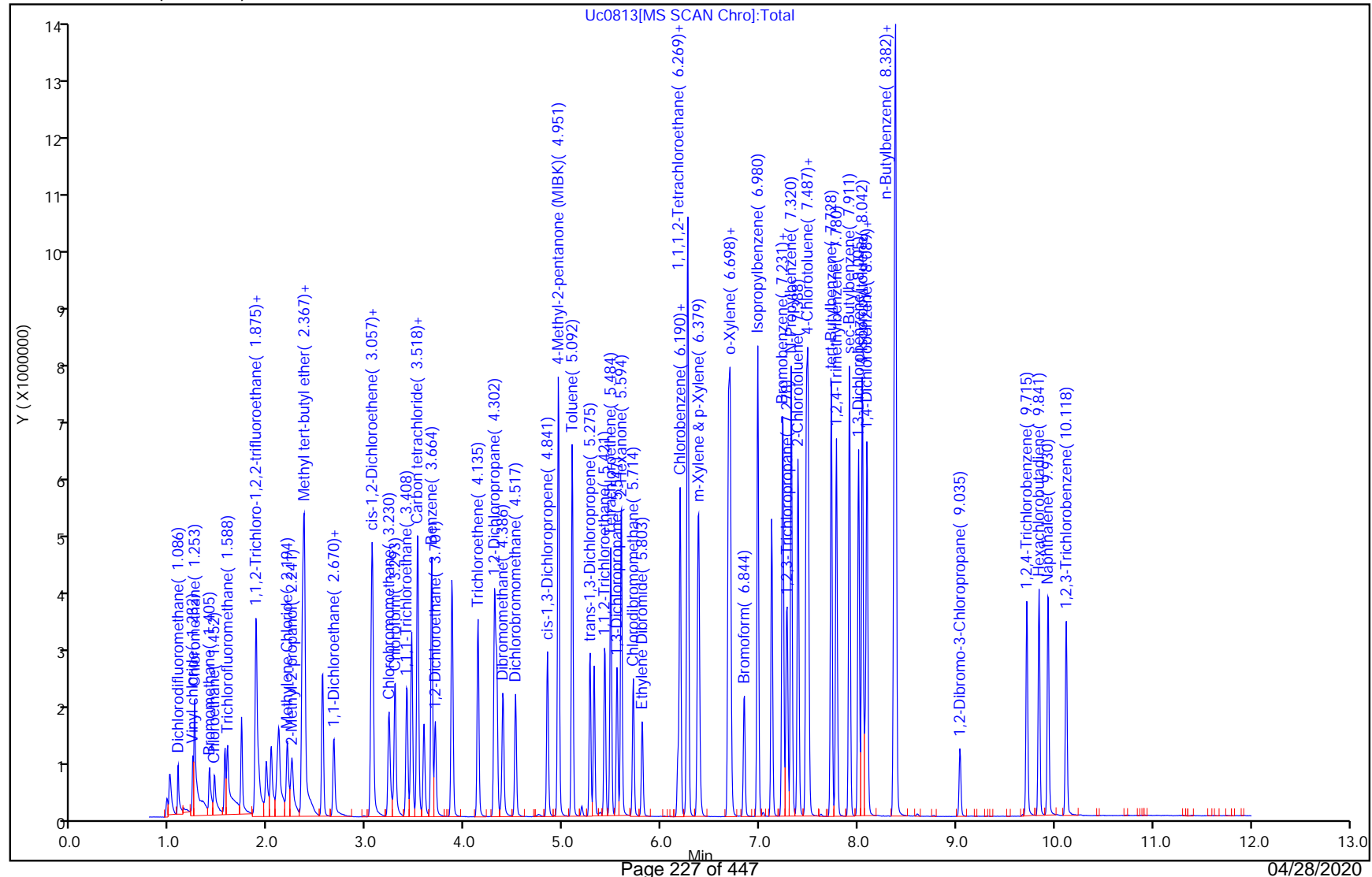
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:37:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

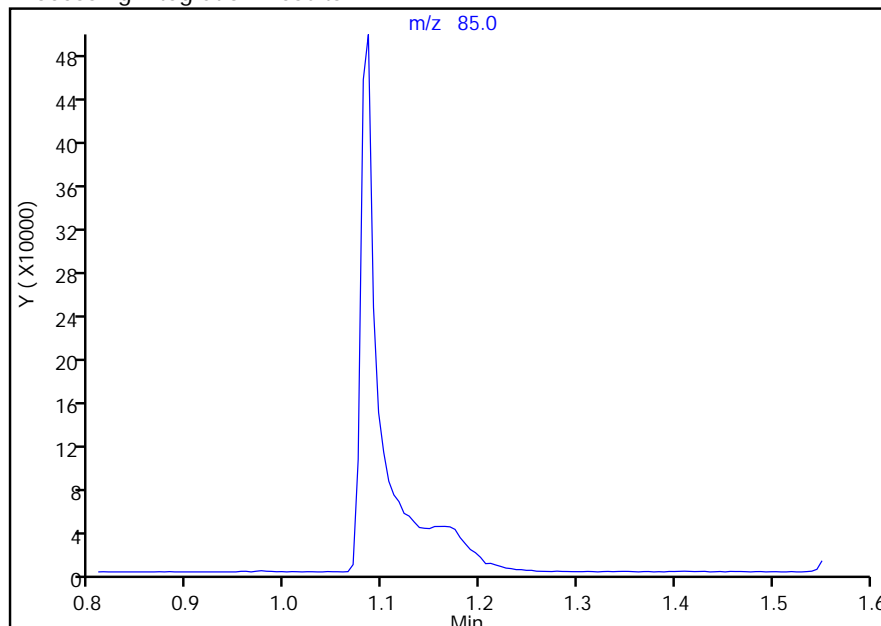
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D		
Injection Date:	08-Apr-2020 17:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	12

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

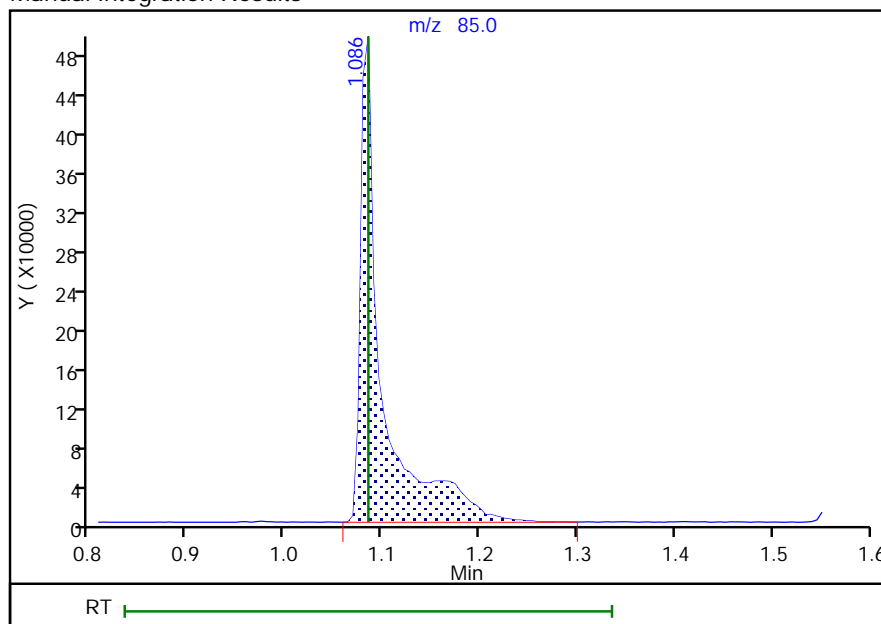
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 762742
Amount: 49.798914
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:22:36

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:10

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D

Injection Date: 08-Apr-2020 17:58:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#:

13

Worklist Smp#:

12

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

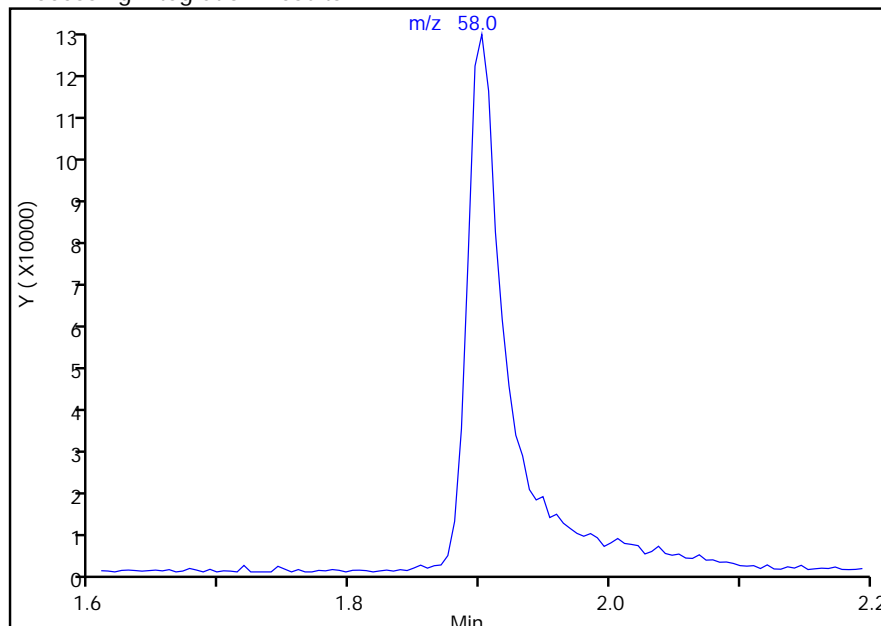
15 Acetone, CAS: 67-64-1

Signal: 1

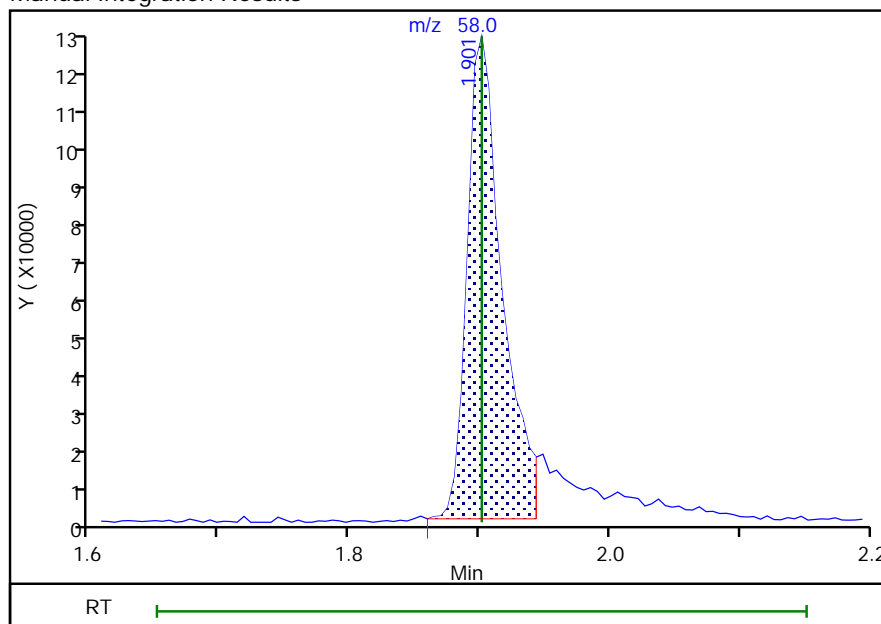
Not Detected

Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 225061
Amount: 193.2965
Amount Units: ug/l

Reviewer: proctors, 09-Apr-2020 12:25:11

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

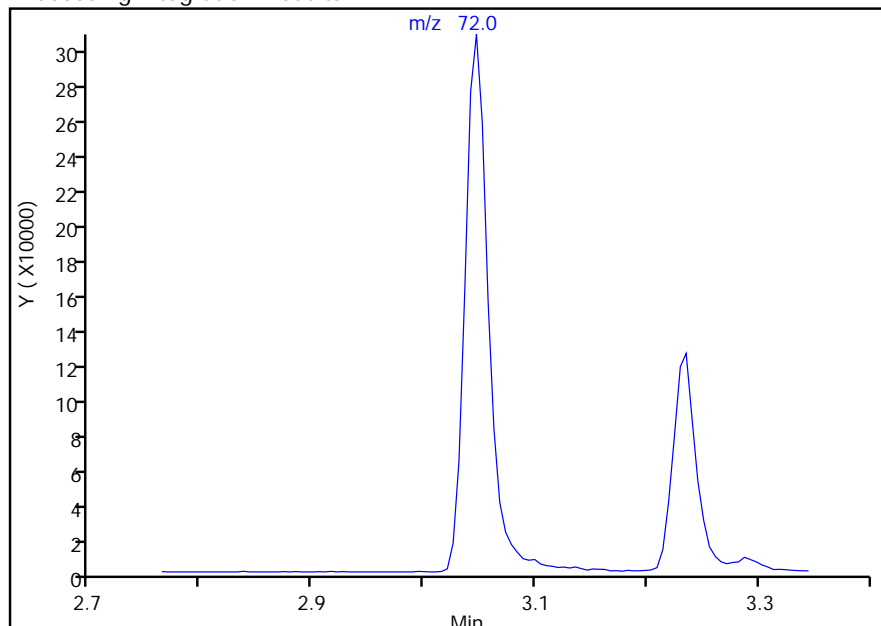
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D
Injection Date: 08-Apr-2020 17:58:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

23 2-Butanone (MEK), CAS: 78-93-3

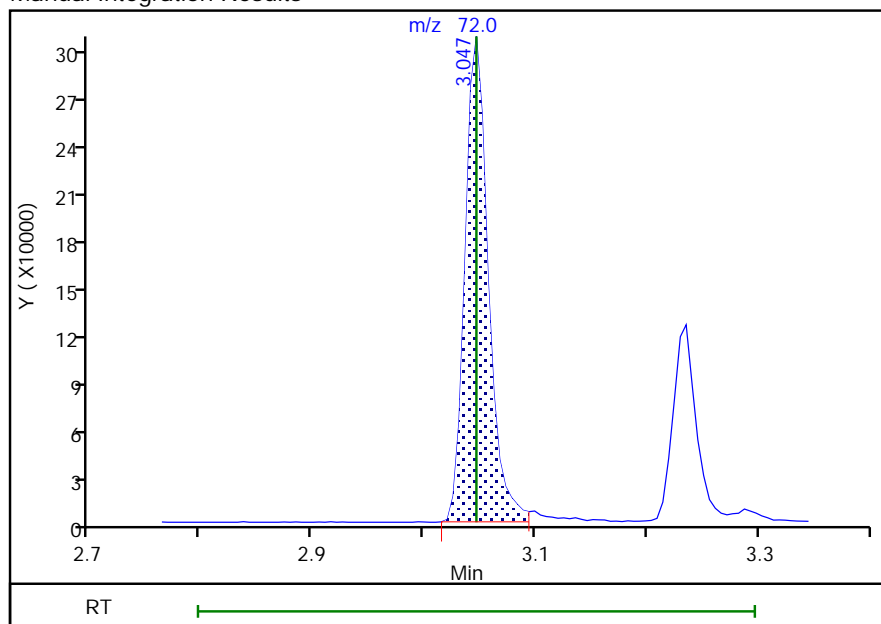
Signal: 1

Not Detected
Expected RT: 3.05

Processing Integration Results



Manual Integration Results



RT: 3.05
Area: 441044
Amount: 227.4372
Amount Units: ug/l

Reviewer: proctors, 09-Apr-2020 12:25:05

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

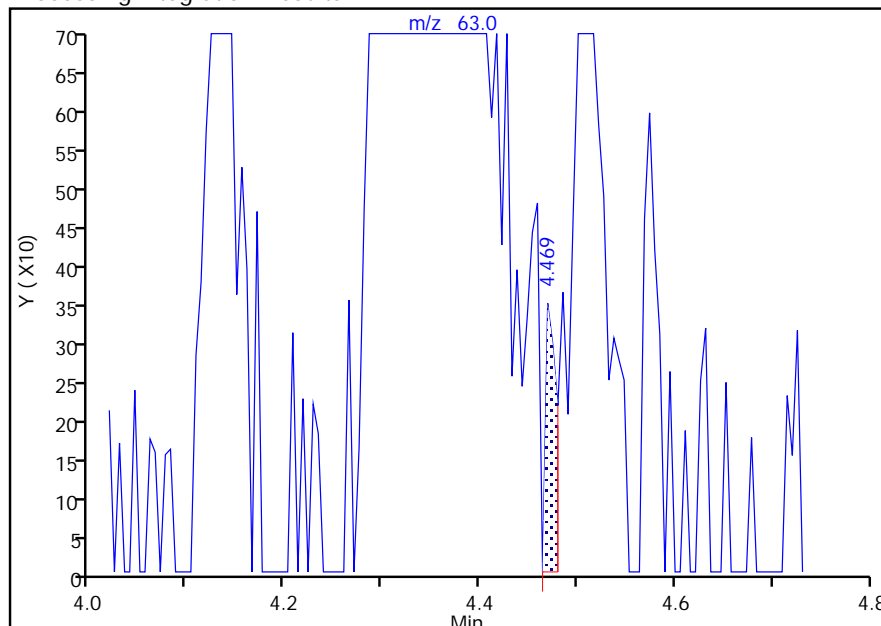
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D
 Injection Date: 08-Apr-2020 17:58:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 13 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

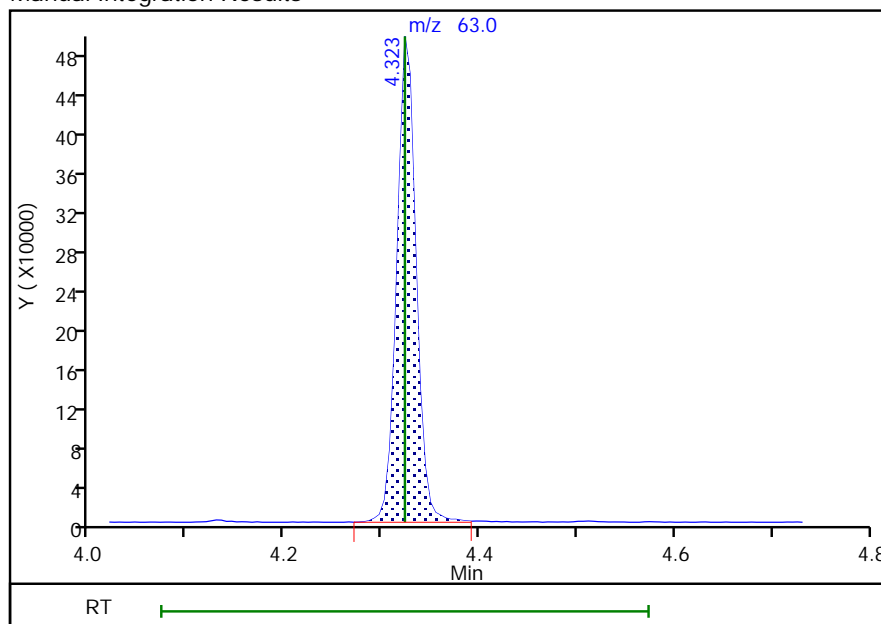
RT: 4.47
 Area: 268
 Amount: 0.041800
 Amount Units: ug/l

Processing Integration Results



RT: 4.32
 Area: 671607
 Amount: 50.805177
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:22:53

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:10

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

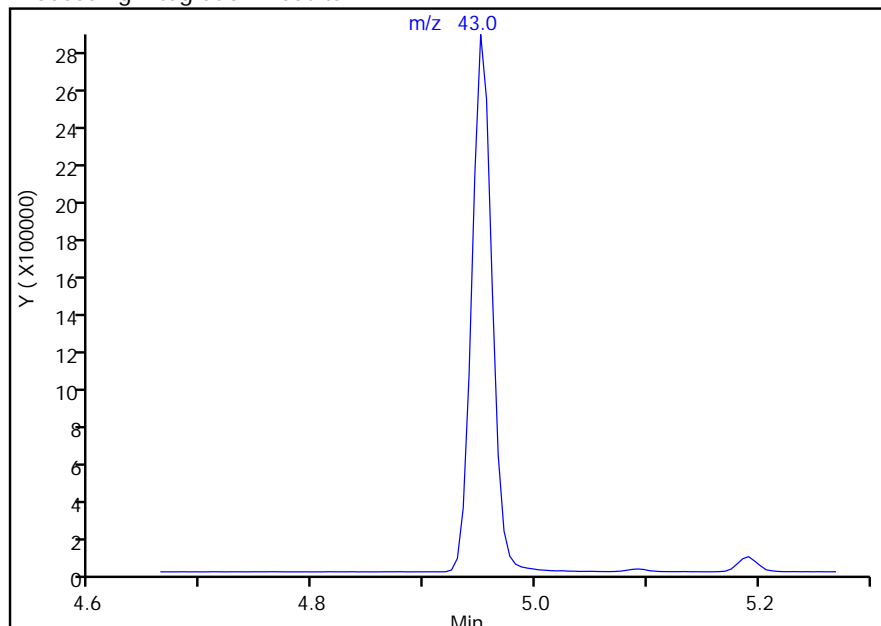
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D
Injection Date: 08-Apr-2020 17:58:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

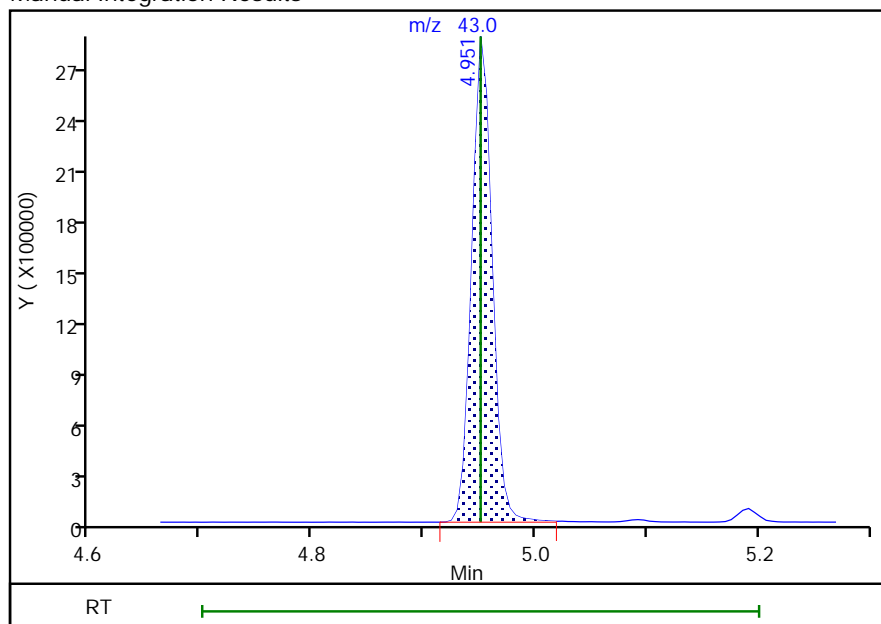
Signal: 1

Not Detected
Expected RT: 4.95

Processing Integration Results

RT: 4.95
Area: 3540732
Amount: 264.8420
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:01

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah

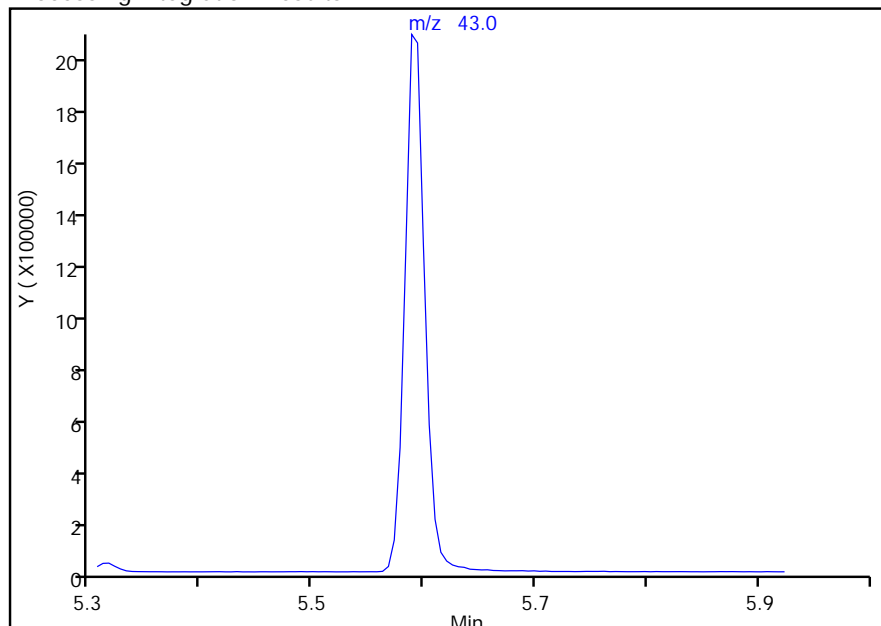
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D
Injection Date: 08-Apr-2020 17:58:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

45 2-Hexanone, CAS: 591-78-6

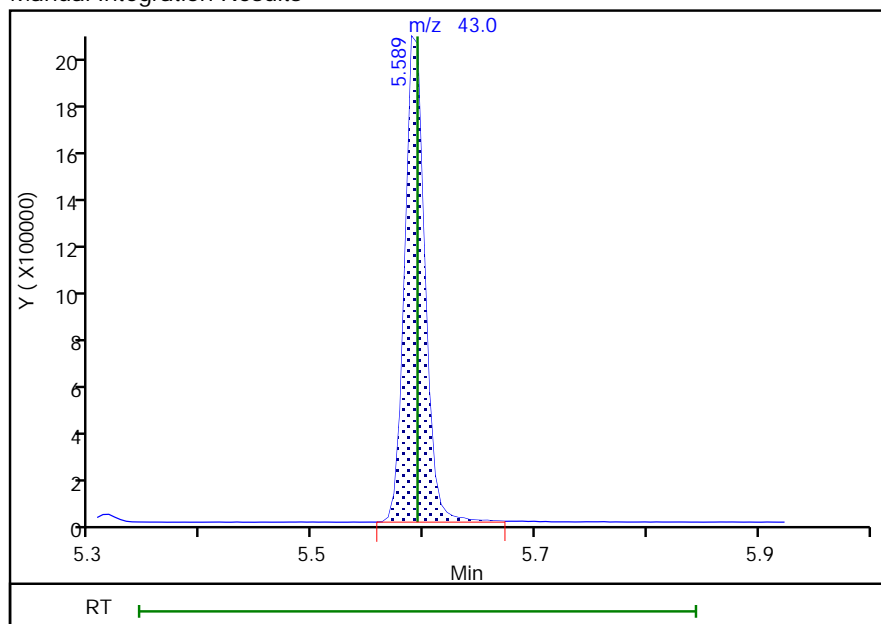
Signal: 1

Not Detected
Expected RT: 5.59

Processing Integration Results

RT: 5.59
Area: 2524228
Amount: 250.7487
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:24:59

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

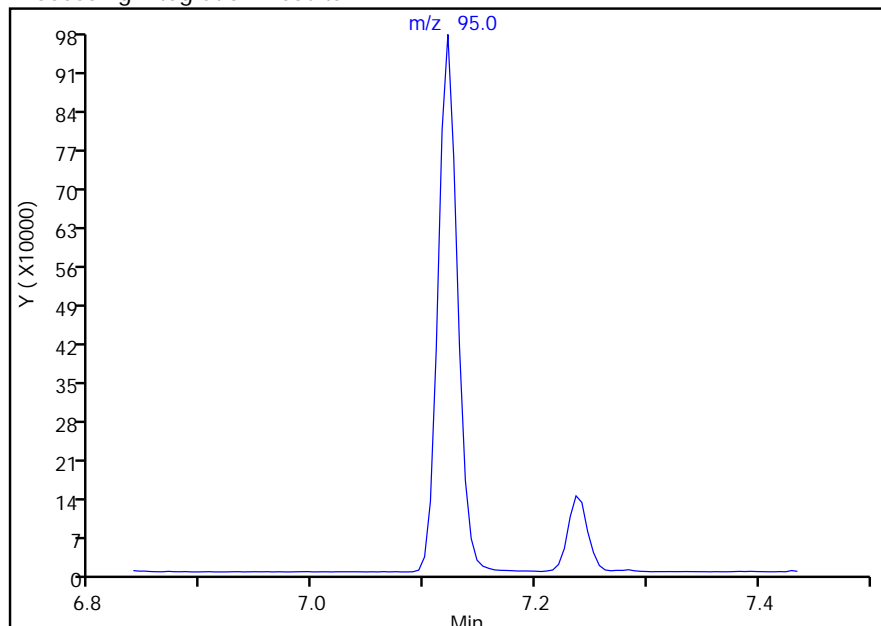
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D		
Injection Date:	08-Apr-2020 17:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	12

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

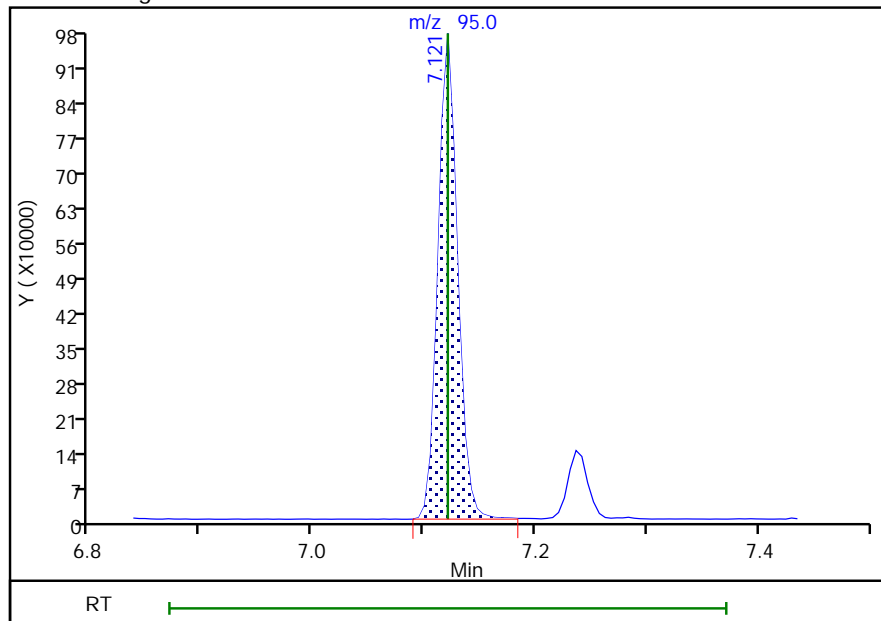
Not Detected
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT:	7.12
Area:	1185689
Amount:	54.895429
Amount Units:	ug/l



Reviewer: proctors, 09-Apr-2020 09:22:34

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

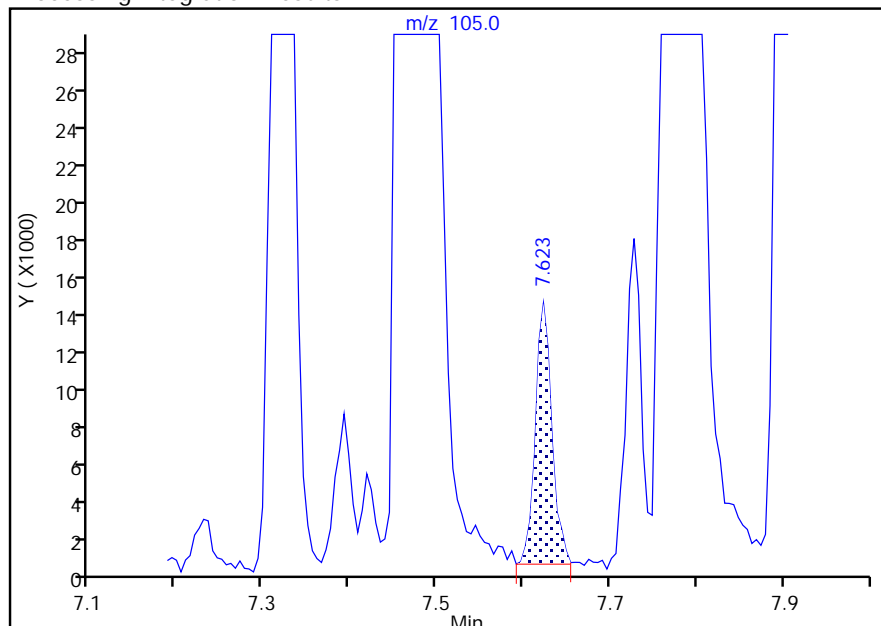
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D
 Injection Date: 08-Apr-2020 17:58:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 13 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

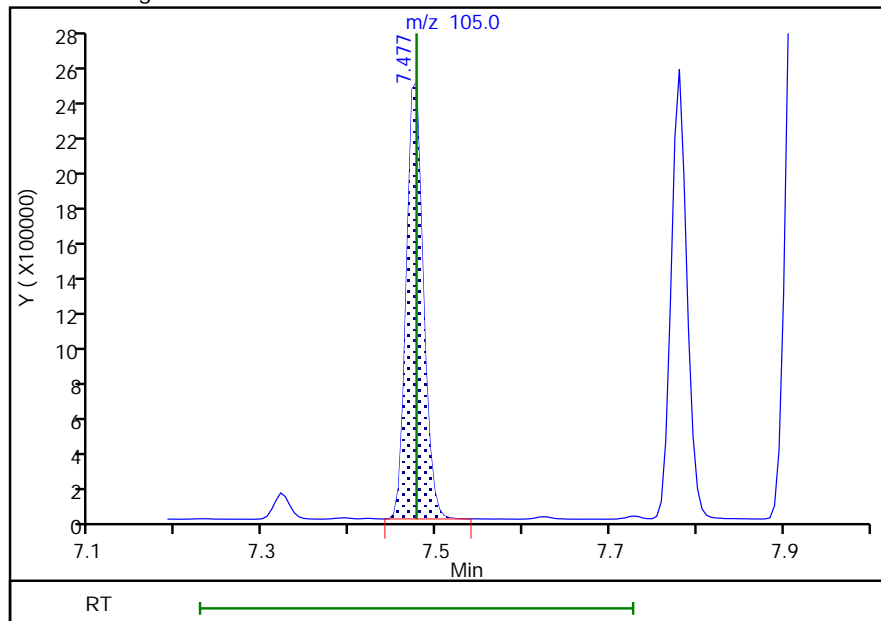
RT: 7.62
 Area: 18489
 Amount: 1.990800
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 3314707
 Amount: 53.641337
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:46

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

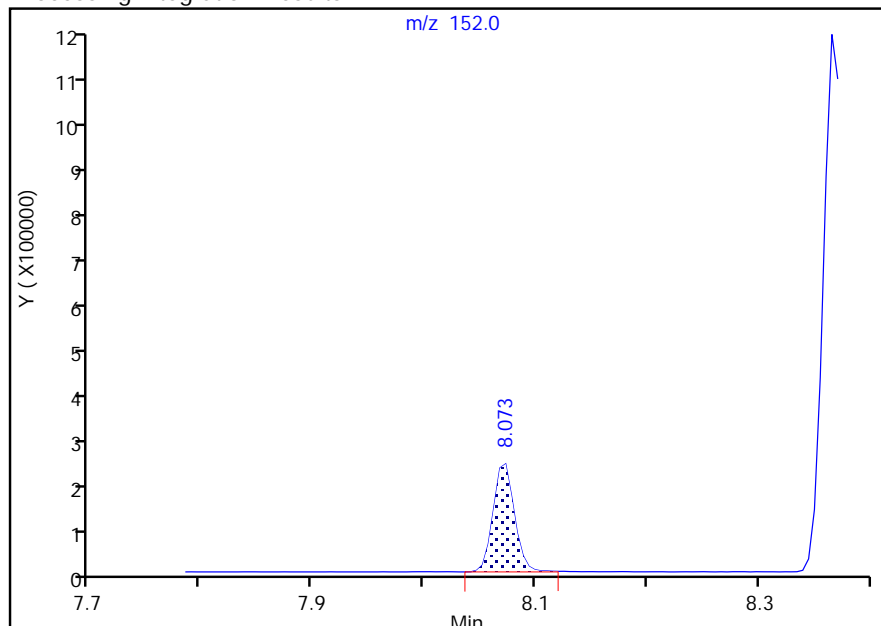
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0813.D		
Injection Date:	08-Apr-2020 17:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	12

* 3,1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

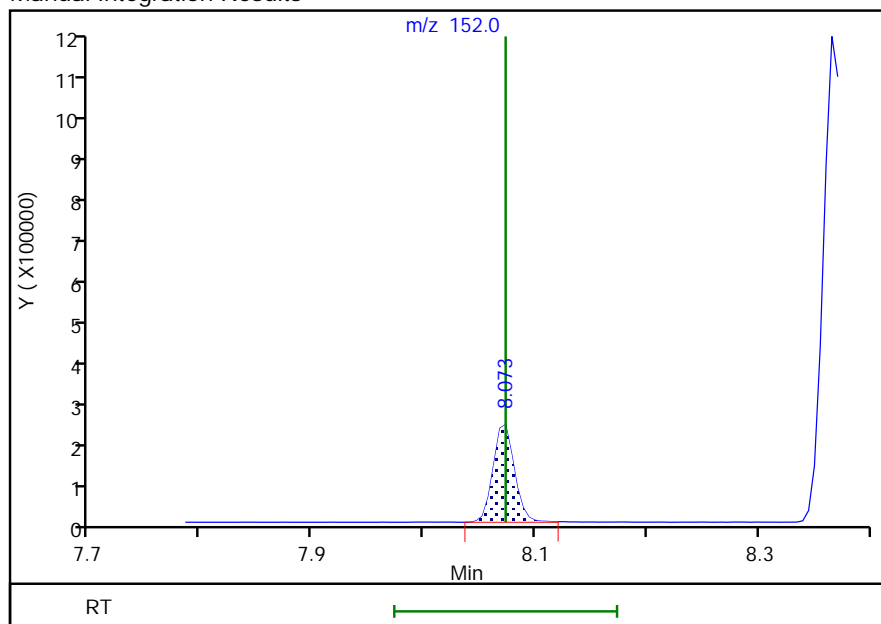
RT: 8.07
Area: 314425
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 8.07
Area: 314425
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 11:34:38

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-Apr-2020 18:18:30 ALS Bottle#: 14 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-013
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub11
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:37:12 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: proctors

Date: 09-Apr-2020 09:20:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1258841	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	526170	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	88	348202	10.0	10.0	a
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	90	2380711	90.0	99.7	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	82	3045717	90.0	92.0	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	1668266	100.0	98.3	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	1586410	100.0	106.9	
8 Chloromethane	50	1.253	1.253	0.000	78	1827385	100.0	99.3	
10 Bromomethane	94	1.399	1.399	0.000	99	1261741	100.0	115.5	
11 Chloroethane	64	1.451	1.451	0.000	99	1030508	100.0	98.6	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	98	1915627	100.0	124.9	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	94	1642942	100.0	107.6	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	95	1124770	100.0	102.7	
15 Acetone	58	1.901	1.901	0.000	87	572599	500.0	445.0	a
16 Methylene Chloride	84	2.194	2.194	0.000	86	1612553	100.0	117.9	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	1510119	1000.0	992.4	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	95	4793301	100.0	108.9	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	1689375	100.0	112.6	
20 1,1-Dichloroethane	63	2.670	2.670	0.000	99	2553276	100.0	109.7	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	1014089	500.0	473.2	a
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	2321117	100.0	108.8	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	2356152	100.0	110.0	
26 Chlorobromomethane	130	3.225	3.225	0.000	77	1280351	100.0	114.7	
27 Chloroform	83	3.293	3.293	0.000	99	2875227	100.0	108.3	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	2669381	100.0	112.9	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	2584017	100.0	115.7	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	2186415	100.0	110.7	
31 Benzene	78	3.664	3.664	0.000	94	6882808	100.0	110.1	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	98	2113512	100.0	106.8	
34 Trichloroethene	132	4.135	4.135	0.000	94	2063481	100.0	109.4	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	90	1510026	100.0	105.4	a

Report Date: 09-Apr-2020 12:37:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	90	1096882	100.0	103.7	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	2266322	100.0	111.1	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	2665445	100.0	109.9	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	96	8048503	500.0	555.4	a
40 Toluene	92	5.092	5.092	0.000	92	4750648	100.0	109.8	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	2583846	100.0	114.5	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	1308736	100.0	102.9	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	2021733	100.0	98.2	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	2553163	100.0	106.8	
45 2-Hexanone	43	5.594	5.594	0.000	95	5650574	500.0	506.9	a
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	2237083	100.0	106.1	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	1849279	100.0	107.3	
48 Chlorobenzene	112	6.190	6.190	0.000	98	5603140	100.0	110.6	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	2111924	100.0	103.5	
50 Ethylbenzene	91	6.269	6.269	0.000	97	9338516	100.0	106.9	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	7205647	100.0	106.1	
52 o-Xylene	91	6.682	6.682	0.000	94	7563495	100.0	106.5	
53 Styrene	104	6.703	6.703	0.000	98	6484221	100.0	110.8	
54 Bromoform	173	6.844	6.844	0.000	98	1874404	100.0	107.5	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	10006474	100.0	112.4	
56 Bromobenzene	156	7.231	7.231	0.000	85	2994528	100.0	101.8	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.241	0.000	98	2271070	100.0	98.7	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	725085	100.0	91.3	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	11137210	100.0	110.2	e
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	6526728	100.0	107.8	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	7793393	100.0	113.9	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	7714115	100.0	109.9	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	7462406	100.0	111.9	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	7530354	100.0	113.9	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	10631683	100.0	114.8	e
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	5572360	100.0	107.7	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	99	9191606	100.0	116.5	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	98	5658160	100.0	106.0	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	6754917	100.0	120.4	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	95	5385092	100.0	107.1	
71 1,2-Dibromo-3-Chloropropan	157	9.035	9.035	0.000	89	715032	100.0	102.3	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	2541160	100.0	104.3	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	96	1655423	100.0	100.5	
74 Naphthalene	128	9.935	9.935	0.000	99	6270319	100.0	90.5	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	2320945	100.0	97.5	
S 76 Xylenes, Total	1				0		200.0	212.6	
S 78 1,3-Dichloropropene, Total	1				0		200.0	224.3	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

a - User Assigned ID

Report Date: 09-Apr-2020 12:37:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00166

Amount Added: 10.00

Units: uL

524 ISSU/2016_00085

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 09-Apr-2020 12:37:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D

Injection Date: 08-Apr-2020 18:18:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

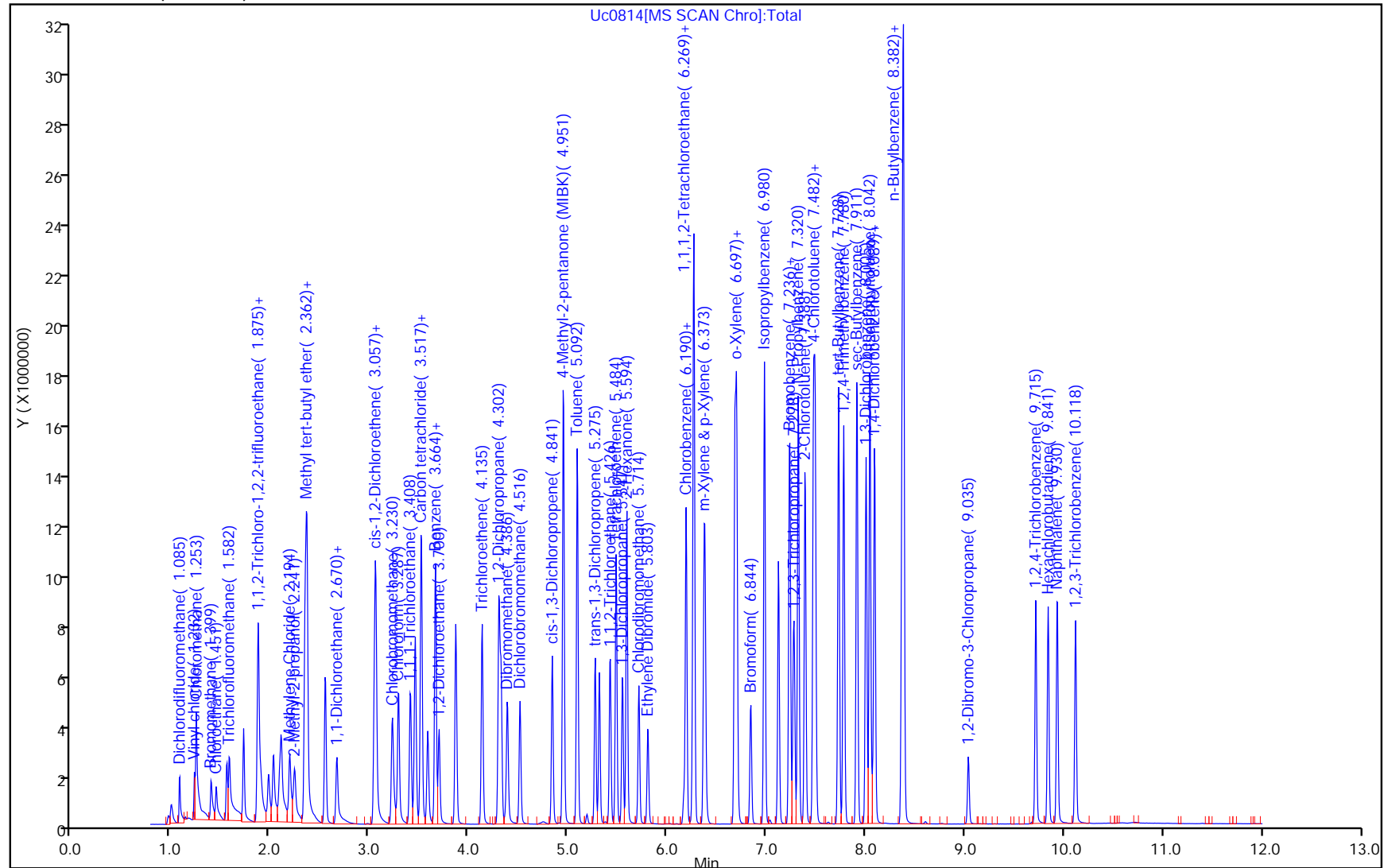
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 09-Apr-2020 12:37:13

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

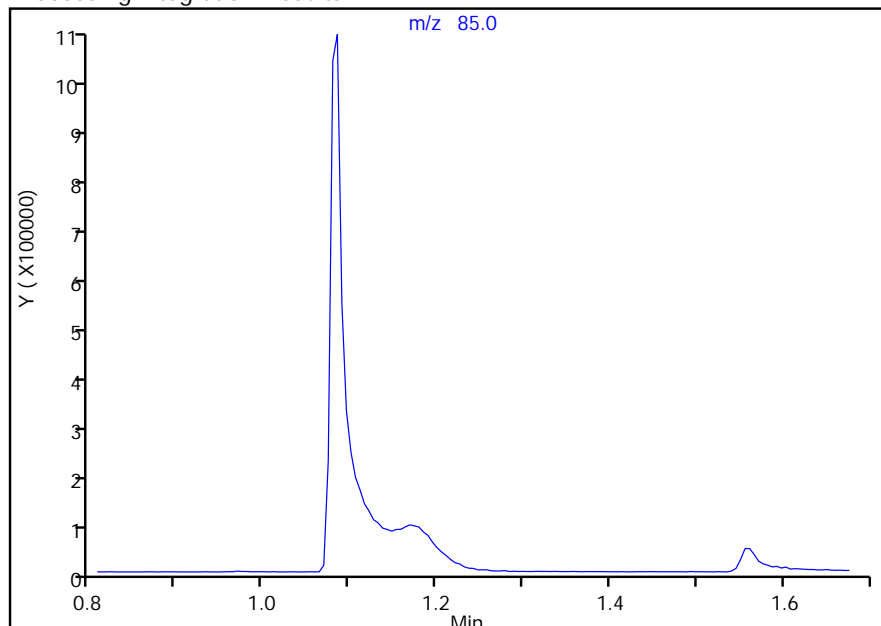
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D		
Injection Date:	08-Apr-2020 18:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

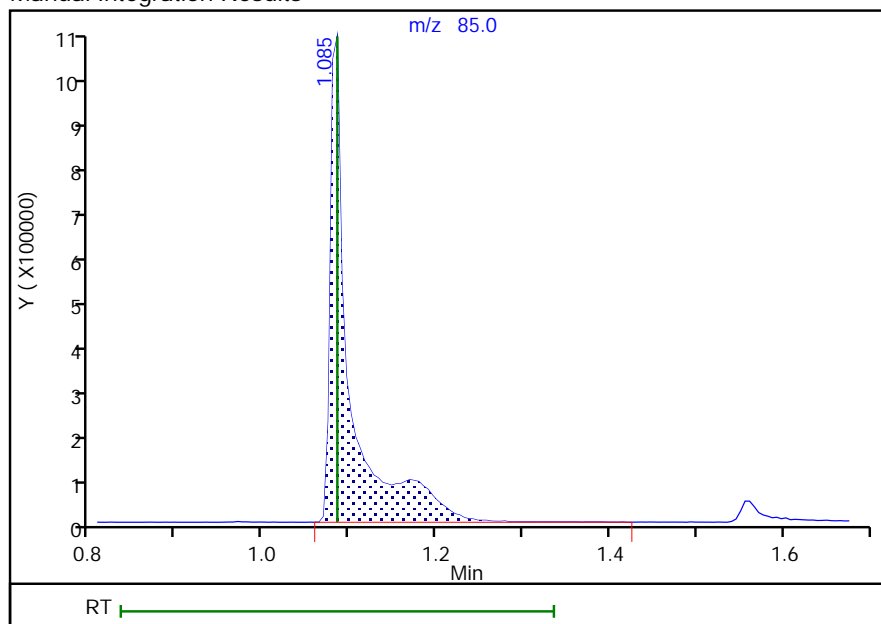
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 1668266
Amount: 98.346531
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:20:24

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:13

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

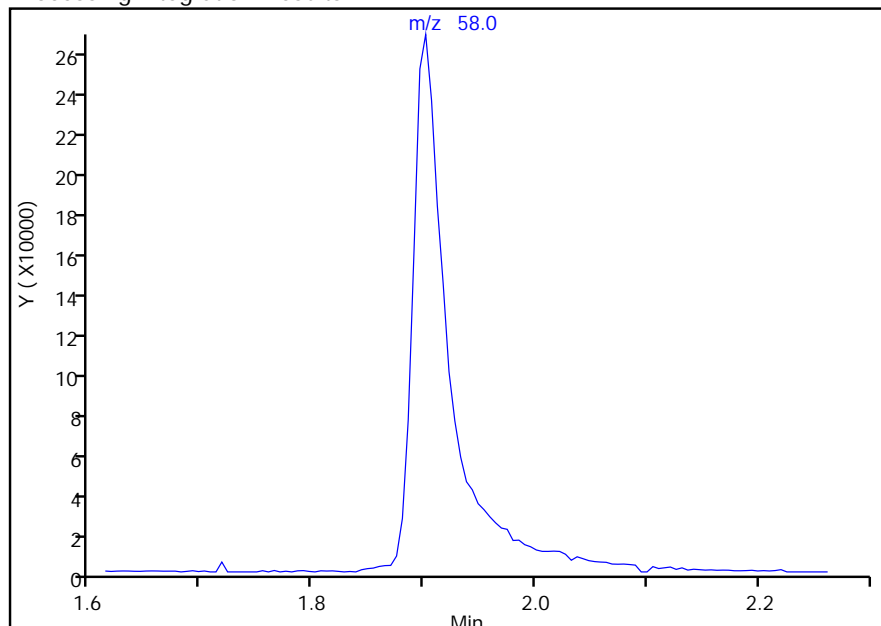
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D		
Injection Date:	08-Apr-2020 18:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

15 Acetone, CAS: 67-64-1

Signal: 1

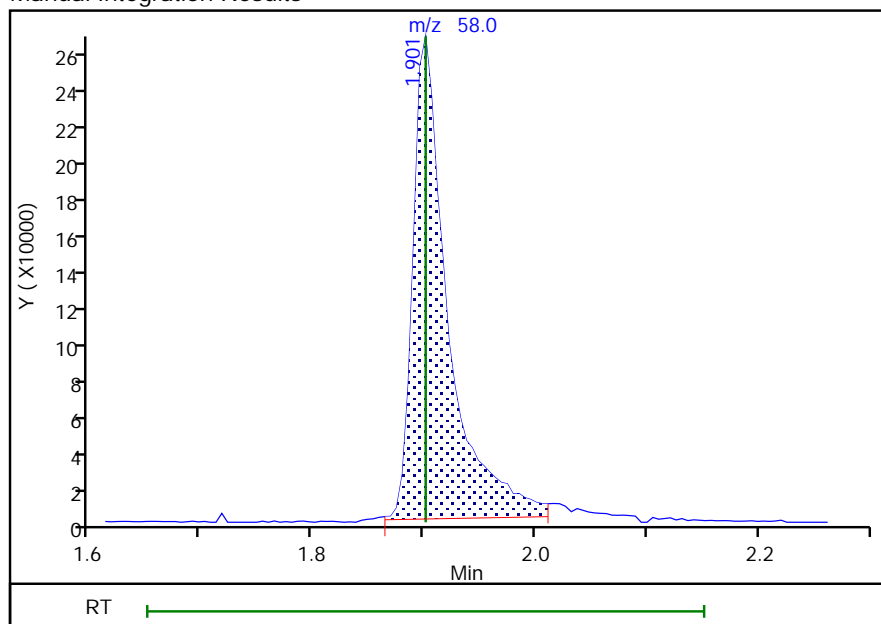
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 572599
Amount: 445.0343
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:25:21

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:13

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

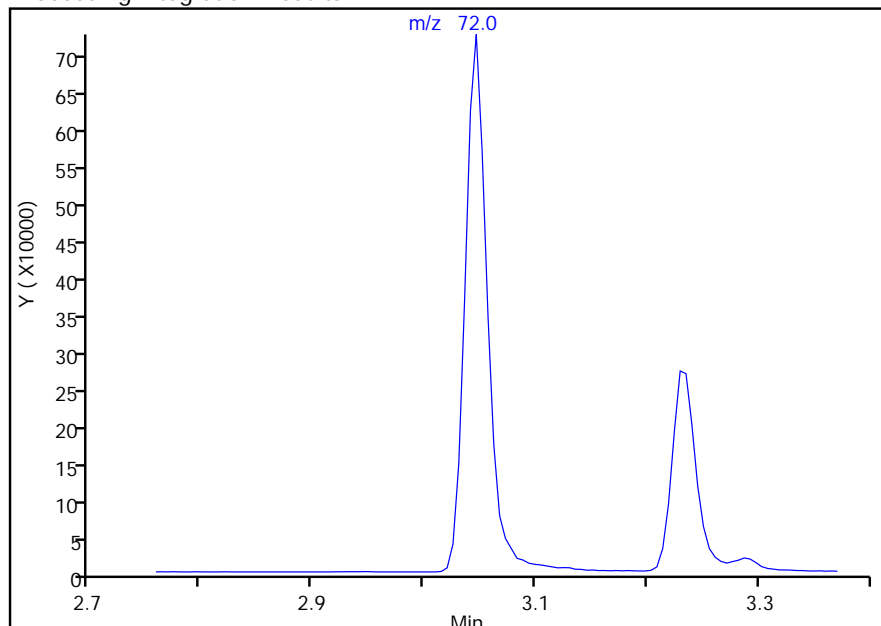
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D		
Injection Date:	08-Apr-2020 18:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

23 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

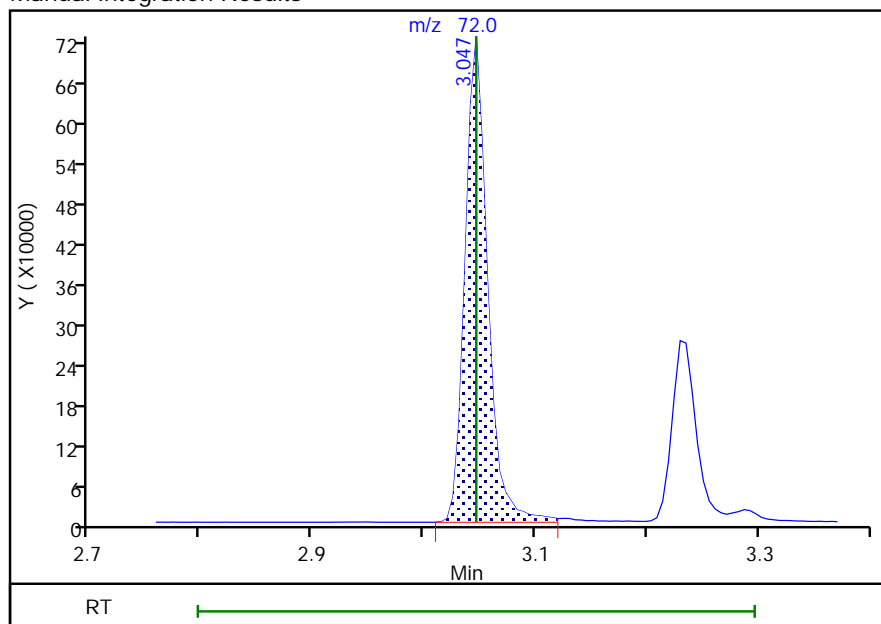
Not Detected
Expected RT: 3.05

Processing Integration Results



Manual Integration Results

RT: 3.05
Area: 1014089
Amount: 473.2327
Amount Units: ug/l



Reviewer: proctors, 09-Apr-2020 12:25:23

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:13

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

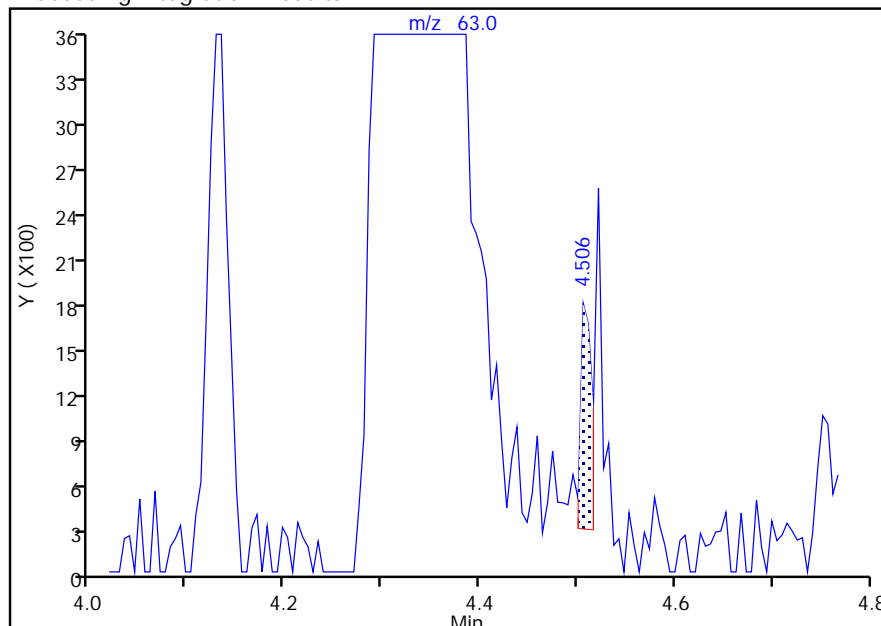
Data File:	\\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D		
Injection Date:	08-Apr-2020 18:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

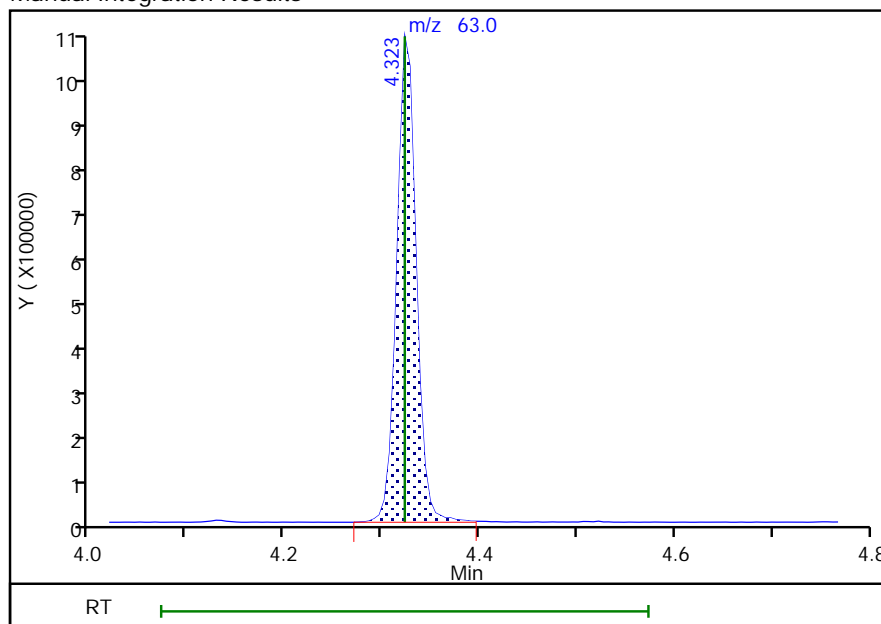
RT: 4.51
Area: 1196
Amount: 0.236193
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 1510026
Amount: 105.3823
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:18:53

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:13

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

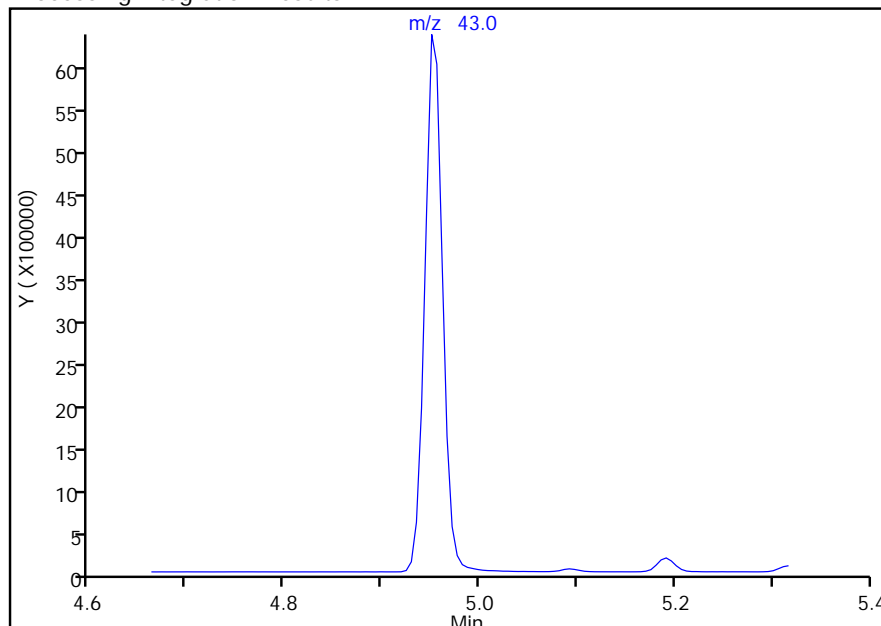
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Injection Date: 08-Apr-2020 18:18:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector MS SCAN

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

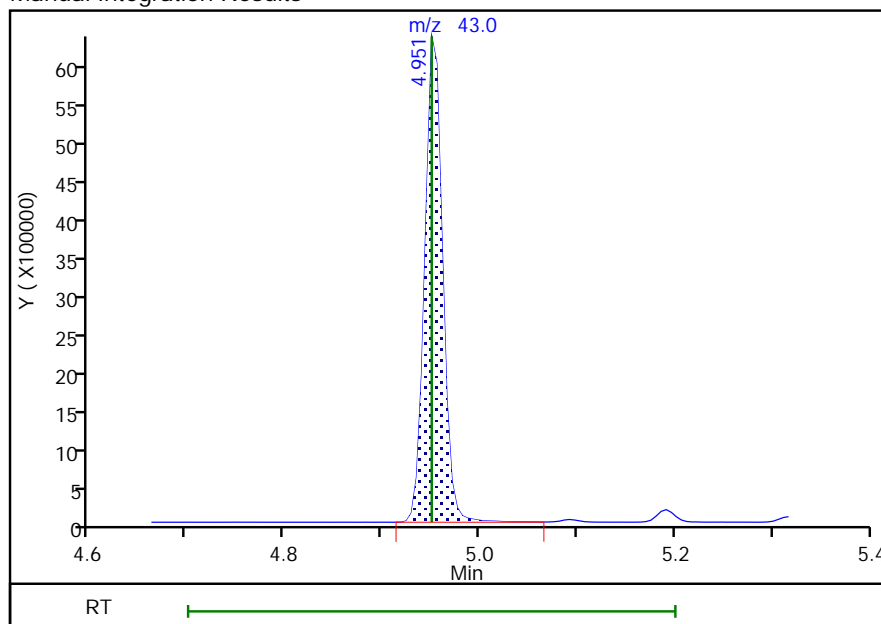
Not Detected
Expected RT: 4.95

Processing Integration Results



RT: 4.95
 Area: 8048503
 Amount: 555.3921
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:28

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:13

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

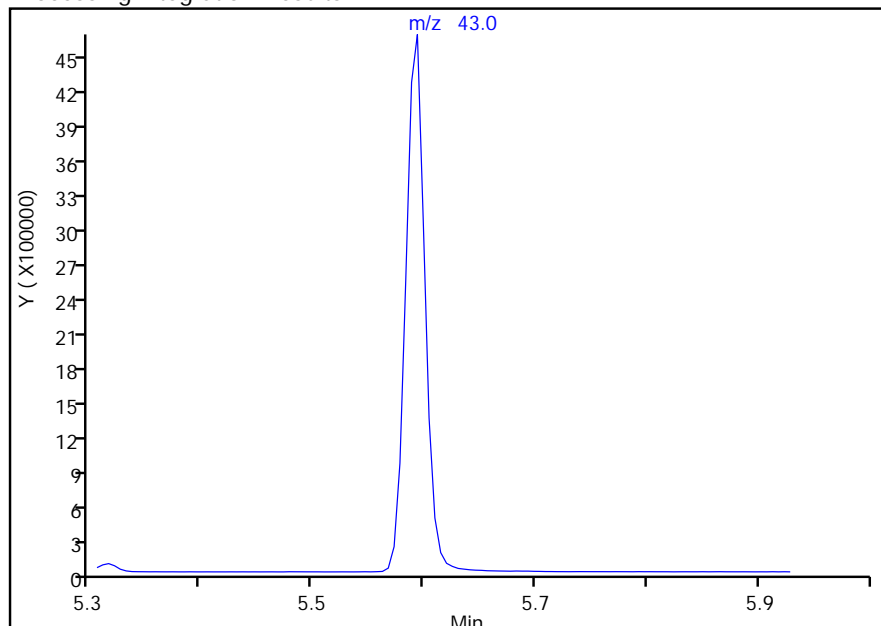
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
Injection Date: 08-Apr-2020 18:18:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

45 2-Hexanone, CAS: 591-78-6

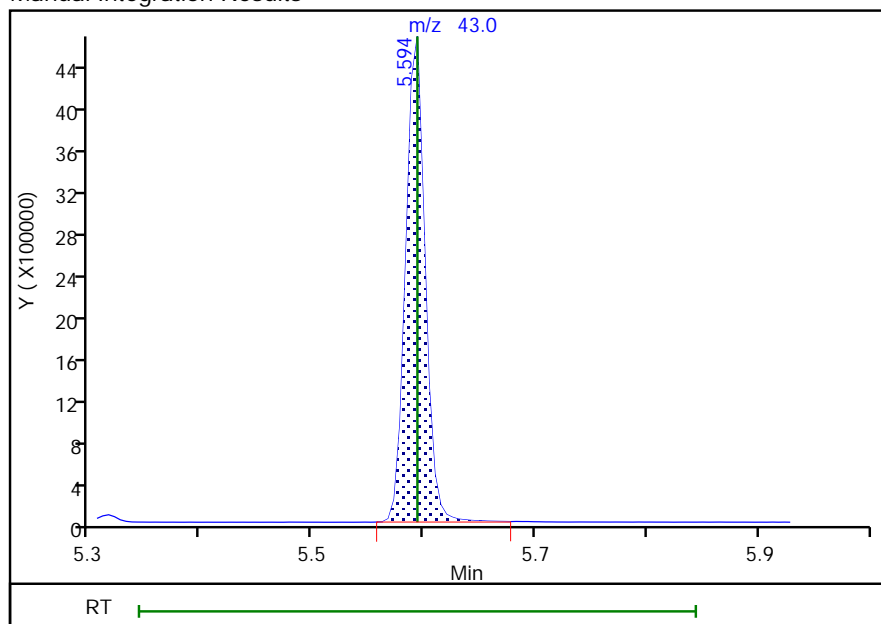
Signal: 1

Not Detected
Expected RT: 5.59

Processing Integration Results

RT: 5.59
Area: 5650574
Amount: 506.8606
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:30

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:12

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Eurofins TestAmerica, Savannah

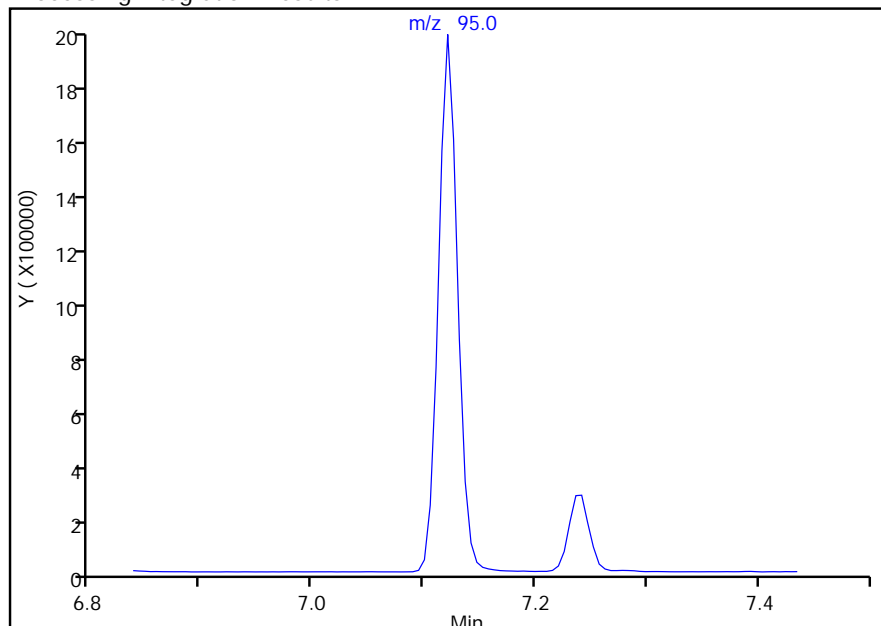
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
Injection Date: 08-Apr-2020 18:18:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector MS SCAN

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

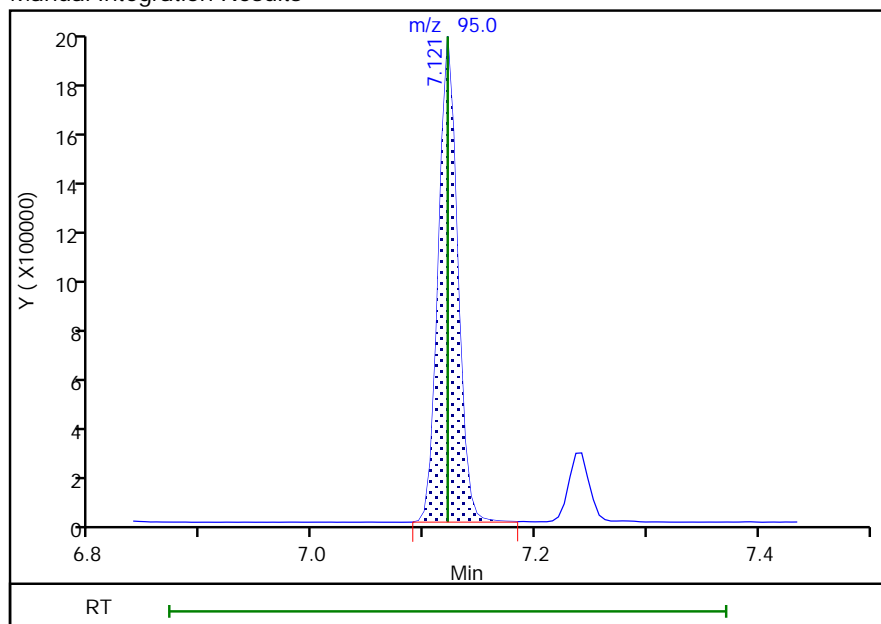
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 2380711
Amount: 99.745028
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 09:20:22

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:13

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

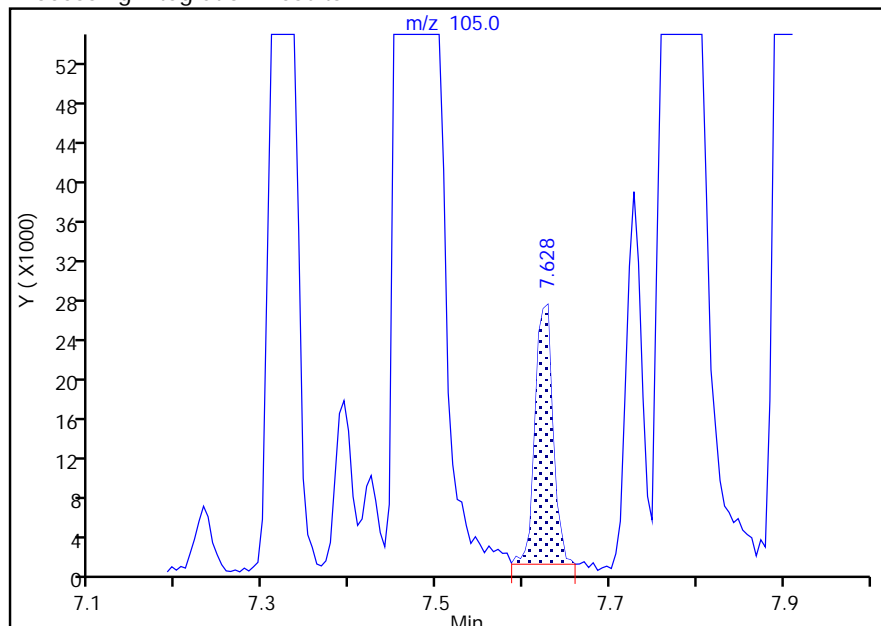
Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Injection Date: 08-Apr-2020 18:18:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

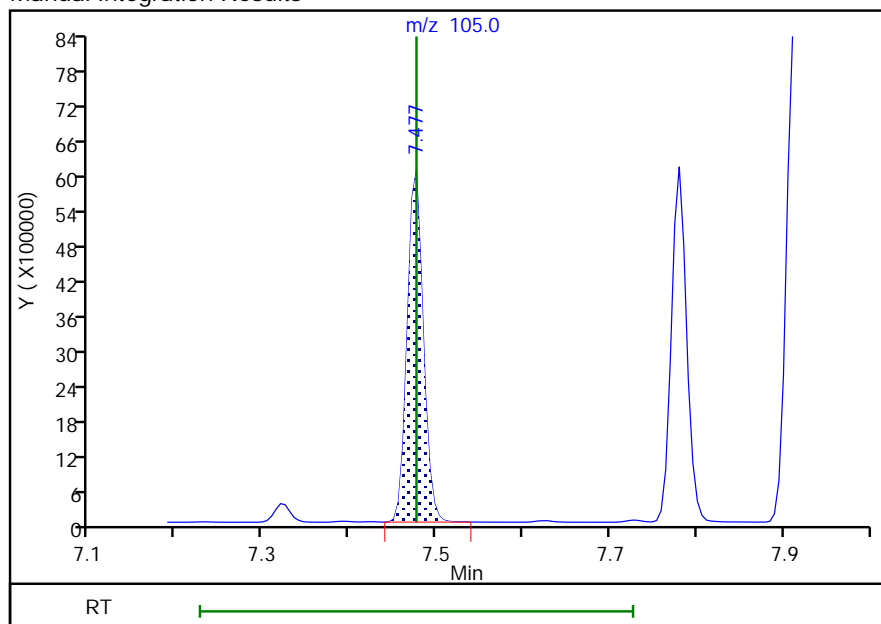
RT: 7.63
 Area: 36891
 Amount: 62.604395
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 7793393
 Amount: 113.8851
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 12:25:38

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 09-Apr-2020 12:37:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D

Injection Date: 08-Apr-2020 18:18:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#:

14

Worklist Smp#:

13

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: U524.2

Limit Group:

524.2

Column: Rtx-624 (0.18 mm)

Detector

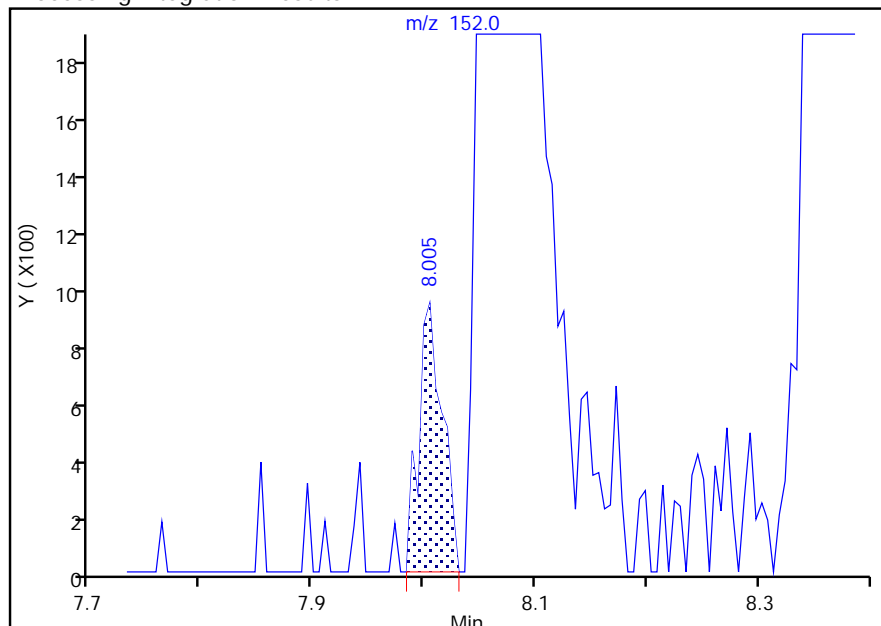
MS SCAN

* 3 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

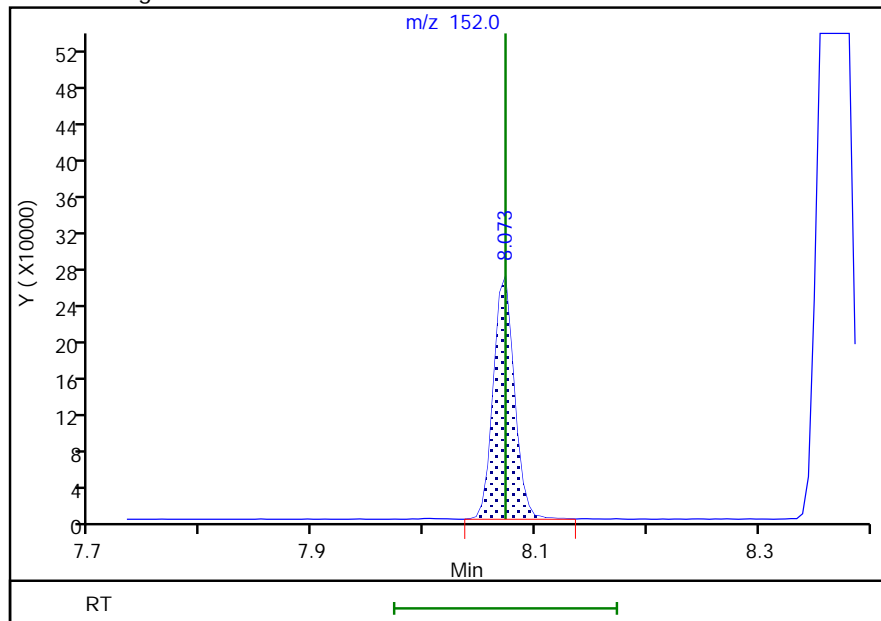
Signal: 1

RT: 8.00
Area: 1340
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results

RT: 8.07
Area: 348202
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 11:33:42

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Kirtland AFB BFF
Quarterly Report - April-June 2020
SWMUs ST-106/SS-111

H-2-1169

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: ICV 680-614624/2 Calibration Date: 04/09/2020 15:11
 Instrument ID: CMSU Calib Start Date: 04/08/2020 15:56
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 04/08/2020 18:18
 Lab File ID: Uc0902.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Freon 113	Ave	0.2425	0.2628		21.7	20.0	8.4	30.0
1,1-Dichloroethene	Lin1		0.2225		25.6	20.0	28.2	30.0
Acetone	Ave	0.0204	0.0185		90.6	100	-9.4	30.0
Methylene Chloride	Ave	0.2172	0.2216		20.4	20.0	2.0	30.0
tert-Butyl alcohol	Ave	0.0242	0.0231		191	200	-4.5	30.0
Methyl tert-butyl ether	Ave	0.6993	0.7065		20.2	20.0	1.0	30.0
trans-1,2-Dichloroethene	Ave	0.2384	0.2579		21.6	20.0	8.2	30.0
1,1-Dichloroethane	Ave	0.3697	0.3906		21.1	20.0	5.7	30.0
2-Butanone (MEK)	Ave	0.0340	0.0322		94.7	100	-5.3	30.0
cis-1,2-Dichloroethene	Ave	0.3390	0.3630		21.4	20.0	7.1	30.0
2,2-Dichloropropane	Ave	0.3403	0.3664		21.5	20.0	7.7	30.0
Chlorobromomethane	Ave	0.1773	0.1762		19.9	20.0	-0.6	30.0
Chloroform	Ave	0.4220	0.4331		20.5	20.0	2.6	30.0
1,1,1-Trichloroethane	Ave	0.4495	0.4981		22.2	20.0	10.8	30.0
Carbon tetrachloride	Ave	0.4246	0.4596		21.6	20.0	8.2	30.0
1,1-Dichloropropene	Ave	0.3752	0.3936		21.0	20.0	4.9	30.0
Benzene	Ave	1.188	1.223		20.6	20.0	2.9	30.0
1,2-Dichloroethane	Ave	0.3761	0.3938		20.9	20.0	4.7	30.0
Trichloroethene	Ave	0.3584	0.3789		21.1	20.0	5.7	30.0
1,2-Dichloropropane	Ave	0.2723	0.2881		21.2	20.0	5.8	30.0
Dibromomethane	Ave	0.2010	0.2105		20.9	20.0	4.7	30.0
Dichlorobromomethane	Ave	0.3877	0.4315		22.3	20.0	11.3	30.0
cis-1,3-Dichloropropene	Ave	0.4611	0.4850		21.0	20.0	5.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2754	0.2848		103	100	3.4	30.0
Toluene	Ave	0.8219	0.8207		20.0	20.0	-0.2	30.0
trans-1,3-Dichloropropene	Ave	0.4290	0.4366		20.4	20.0	1.8	30.0
1,1,2-Trichloroethane	Ave	0.2418	0.2430		20.1	20.0	0.5	30.0
Tetrachloroethene	Ave	0.5914	0.5980		20.2	20.0	1.1	30.0
1,3-Dichloropropane	Ave	0.4544	0.4625		20.4	20.0	1.8	30.0
2-Hexanone	Ave	0.3202	0.3304		103	100	3.2	30.0
Chlorodibromomethane	Ave	0.6058	0.6648		21.9	20.0	9.7	30.0
Ethylene Dibromide	Ave	0.3275	0.3401		20.8	20.0	3.8	30.0
Chlorobenzene	Ave	0.9631	0.9758		20.3	20.0	1.3	30.0
1,1,1,2-Tetrachloroethane	Ave	0.5862	0.6182		21.1	20.0	5.5	30.0
Ethylbenzene	Ave	2.509	2.568		20.5	20.0	2.4	30.0
m-Xylene & p-Xylene	Ave	1.950	2.010		20.6	20.0	3.1	30.0
o-Xylene	Ave	2.039	2.094		20.5	20.0	2.7	30.0
Styrene	Ave	1.680	1.754		20.9	20.0	4.4	30.0
Bromoform	Ave	0.5010	0.5387		21.5	20.0	7.5	30.0
Isopropylbenzene	Ave	2.557	2.671		20.9	20.0	4.4	30.0
Bromobenzene	Ave	0.8445	0.8547		20.2	20.0	1.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: ICV 680-614624/2 Calibration Date: 04/09/2020 15:11
 Instrument ID: CMSU Calib Start Date: 04/08/2020 15:56
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 04/08/2020 18:18
 Lab File ID: Uc0902.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,2,2-Tetrachloroethane	Ave	0.6607	0.6558		19.8	20.0	-0.8	30.0
1,2,3-Trichloropropane	Ave	0.2281	0.2150		18.8	20.0	-5.8	30.0
N-Propylbenzene	Ave	2.903	3.020		20.8	20.0	4.0	30.0
2-Chlorotoluene	Ave	1.738	1.787		20.6	20.0	2.8	30.0
1,3,5-Trimethylbenzene	Ave	1.965	2.027		20.6	20.0	3.1	30.0
4-Chlorotoluene	Ave	2.016	2.116		21.0	20.0	5.0	30.0
tert-Butylbenzene	Ave	1.916	1.957		20.4	20.0	2.2	30.0
1,2,4-Trimethylbenzene	Ave	1.898	1.932		20.4	20.0	1.8	30.0
sec-Butylbenzene	Ave	2.661	2.757		20.7	20.0	3.6	30.0
1,3-Dichlorobenzene	Ave	1.485	1.488		20.0	20.0	0.2	30.0
4-Isopropyltoluene	Ave	2.267	2.343		20.7	20.0	3.4	30.0
1,4-Dichlorobenzene	Ave	1.533	1.538		20.1	20.0	0.4	30.0
1,2-Dichlorobenzene	Ave	1.445	1.444		20.0	20.0	-0.0	30.0
n-Butylbenzene	Ave	1.611	1.667		20.7	20.0	3.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2007	0.2060		20.5	20.0	2.7	30.0
1,2,4-Trichlorobenzene	Ave	0.6996	0.7249		20.7	20.0	3.6	30.0
Hexachlorobutadiene	Ave	0.4729	0.5018		21.2	20.0	6.1	30.0
Naphthalene	Ave	1.989	1.841		18.5	20.0	-7.4	30.0
1,2,3-Trichlorobenzene	Ave	0.6839	0.6803		19.9	20.0	-0.5	30.0
4-Bromofluorobenzene	Ave	0.3792	0.3625		9.56	10.0	-4.4	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9506	0.9315		9.80	10.0	-2.0	30.0

Report Date: 10-Apr-2020 09:26:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0902.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 09-Apr-2020 15:11:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063115-002
 Operator ID: rd Instrument ID: CMSU
 Sublist:
 Method: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\U524.2.m
 Limit Group: 524.2
 Last Update: 10-Apr-2020 09:26:13 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1001

First Level Reviewer: seymourc

Date: 09-Apr-2020 15:40:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1180399	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	475078	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	88	289947	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	90	213943	10.0	9.56	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	270097	10.0	9.80	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	94	310184	20.0	21.7	
13 1,1-Dichloroethene	96	1.880	1.886	-0.006	96	262675	20.0	25.6	
15 Acetone	58	1.896	1.901	-0.005	89	109349	100.0	90.6	
16 Methylene Chloride	84	2.194	2.194	0.000	85	261597	20.0	20.4	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	272613	200.0	191.1	
18 Methyl tert-butyl ether	73	2.362	2.361	0.001	96	834005	20.0	20.2	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	304453	20.0	21.6	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	461083	20.0	21.1	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	190210	100.0	94.7	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	428510	20.0	21.4	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	93	432513	20.0	21.5	
26 Chlorobromomethane	130	3.225	3.224	0.001	80	208012	20.0	19.9	
27 Chloroform	83	3.287	3.292	-0.005	99	511207	20.0	20.5	
28 1,1,1-Trichloroethane	97	3.408	3.413	-0.005	97	473253	20.0	22.2	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	436692	20.0	21.6	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	373943	20.0	21.0	
31 Benzene	78	3.664	3.664	0.000	95	1161822	20.0	20.6	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	98	374209	20.0	20.9	
34 Trichloroethene	132	4.135	4.135	0.000	94	360020	20.0	21.1	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	90	273773	20.0	21.2	a
36 Dibromomethane	93	4.386	4.386	0.000	87	199996	20.0	20.9	
37 Dichlorobromomethane	83	4.516	4.516	0.000	98	409944	20.0	22.3	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	93	460814	20.0	21.0	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.950	0.001	96	1353156	100.0	103.4	
40 Toluene	92	5.092	5.092	0.000	93	779749	20.0	20.0	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	414793	20.0	20.4	

Report Date: 10-Apr-2020 09:26:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0902.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	94	230927	20.0	20.1	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	346774	20.0	20.2	
44 1,3-Dichloropropane	76	5.547	5.552	-0.005	92	439486	20.0	20.4	
45 2-Hexanone	43	5.589	5.594	-0.005	95	958085	100.0	103.2	
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	385515	20.0	21.9	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	323096	20.0	20.8	
48 Chlorobenzene	112	6.190	6.190	0.000	98	927145	20.0	20.3	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	358495	20.0	21.1	
50 Ethylbenzene	91	6.269	6.268	0.001	97	1489395	20.0	20.5	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	1165584	20.0	20.6	
52 o-Xylene	91	6.682	6.682	0.000	95	1214123	20.0	20.5	
53 Styrene	104	6.697	6.703	-0.006	97	1016882	20.0	20.9	
54 Bromoform	173	6.844	6.844	0.000	98	312366	20.0	21.5	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1548670	20.0	20.9	
56 Bromobenzene	156	7.231	7.231	0.000	87	495621	20.0	20.2	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.236	0.005	97	380269	20.0	19.8	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	124665	20.0	18.8	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1751089	20.0	20.8	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1036183	20.0	20.6	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	1175205	20.0	20.6	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	97	1227061	20.0	21.0	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	1134756	20.0	20.4	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1120395	20.0	20.4	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1598974	20.0	20.7	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	862824	20.0	20.0	
67 4-Isopropyltoluene	119	8.042	8.042	0.001	98	1358750	20.0	20.7	
68 1,4-Dichlorobenzene	146	8.094	8.094	0.000	97	891940	20.0	20.1	
70 n-Butylbenzene	91	8.382	8.381	0.001	97	966446	20.0	20.7	
69 1,2-Dichlorobenzene	146	8.382	8.381	0.001	98	837287	20.0	20.0	
71 1,2-Dibromo-3-Chloropropan	157	9.041	9.040	0.001	89	119476	20.0	20.5	
72 1,2,4-Trichlorobenzene	180	9.720	9.720	0.000	94	420381	20.0	20.7	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	290982	20.0	21.2	
74 Naphthalene	128	9.935	9.935	0.000	99	1067806	20.0	18.5	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	394493	20.0	19.9	
S 76 Xylenes, Total	1				0		40.0	41.1	
S 78 1,3-Dichloropropene, Total	1				0		40.0	41.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix2nd_00120

Amount Added: 2.00

Units: uL

524 ISSU/2016_00089

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 10-Apr-2020 09:26:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0902.D

Injection Date: 09-Apr-2020 15:11:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: icv

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

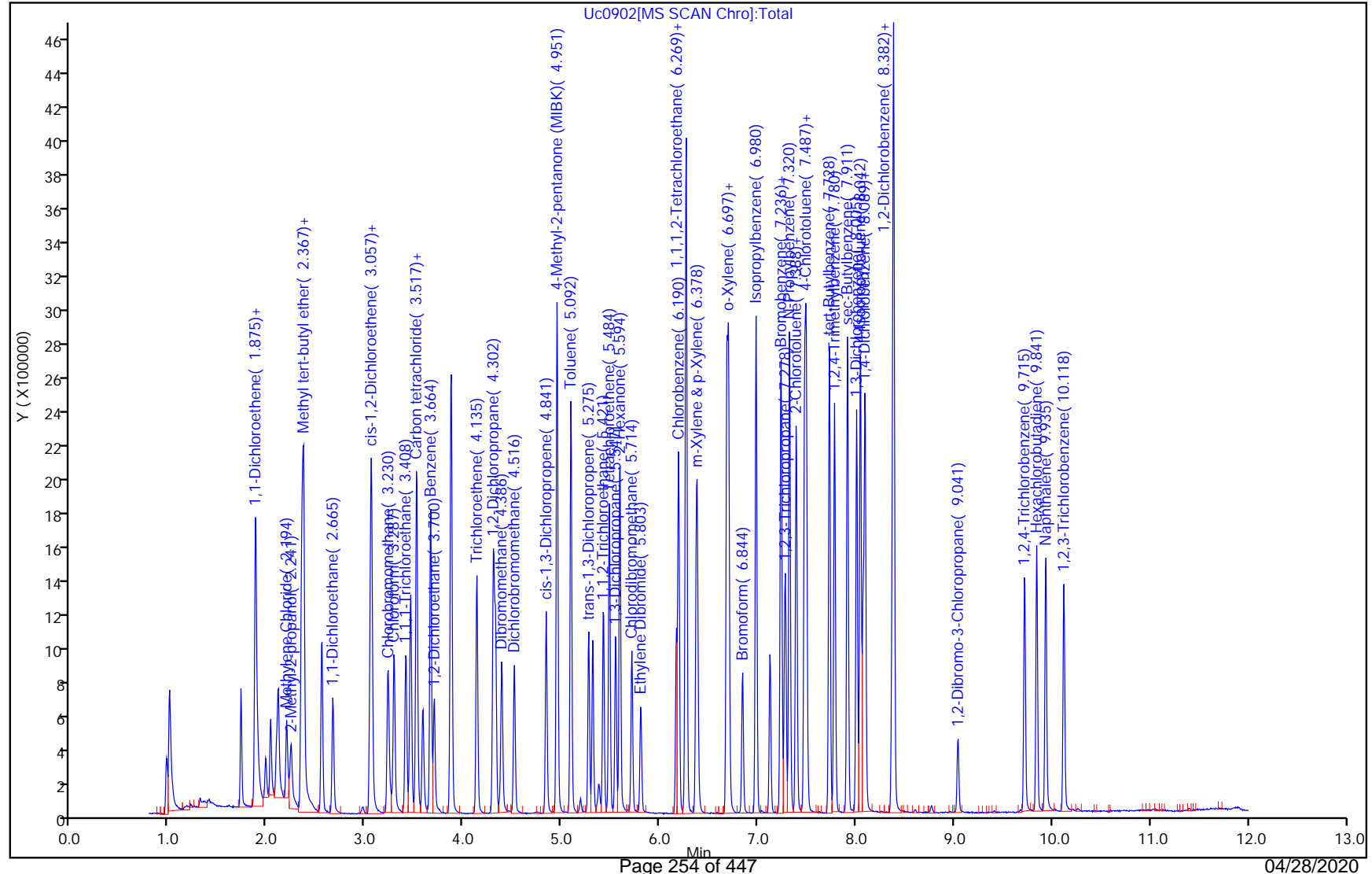
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 10-Apr-2020 09:26:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

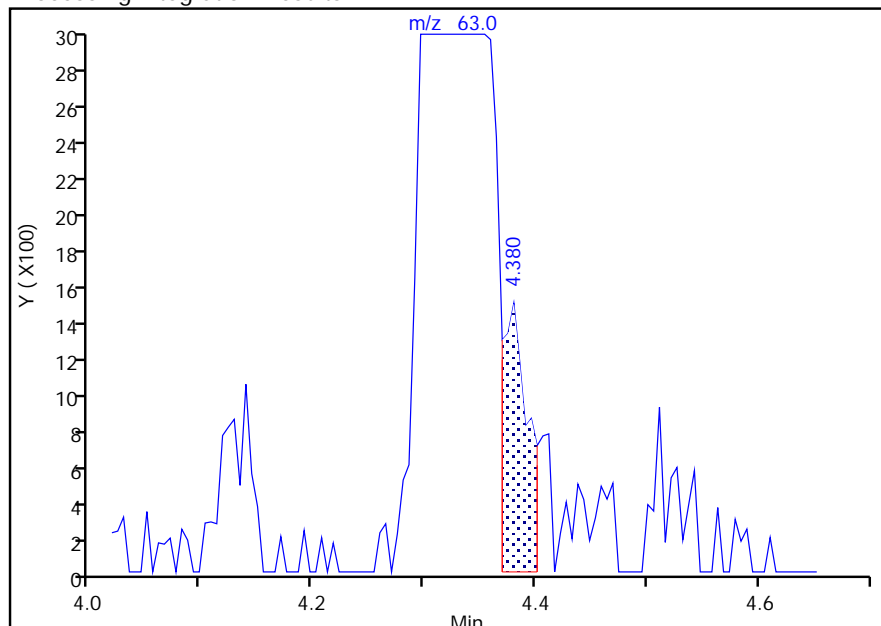
Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0902.D
 Injection Date: 09-Apr-2020 15:11:30 Instrument ID: CMSU
 Lims ID: icv
 Client ID:
 Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

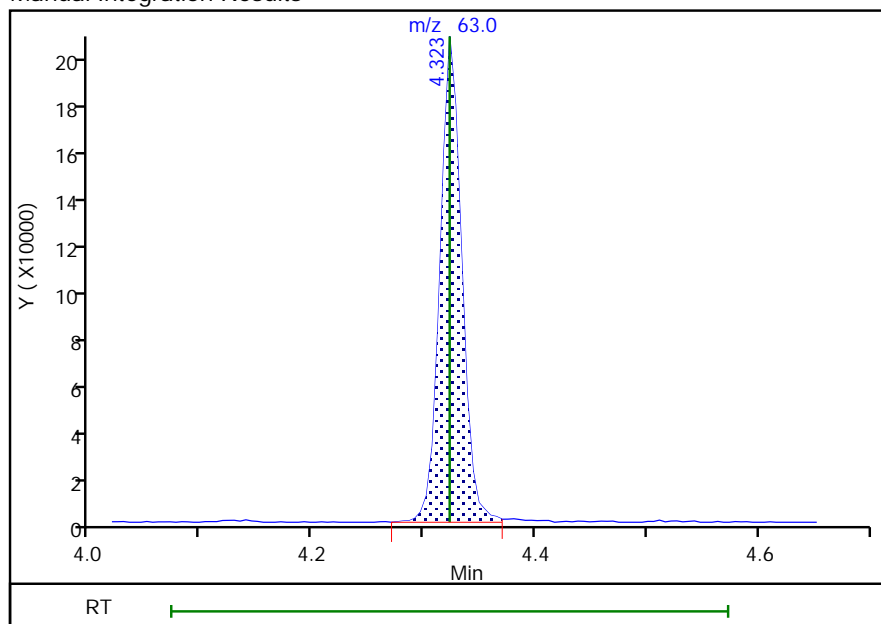
RT: 4.38
 Area: 2348
 Amount: 0.181486
 Amount Units: ug/l

Processing Integration Results



RT: 4.32
 Area: 273773
 Amount: 21.160953
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 16:03:53

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 10-Apr-2020 09:26:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0902.D

Injection Date: 09-Apr-2020 15:11:30

Instrument ID: CMSU

Lims ID: icv

Client ID:

Operator ID: rd

ALS Bottle#: 2

Worklist Smp#: 2

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

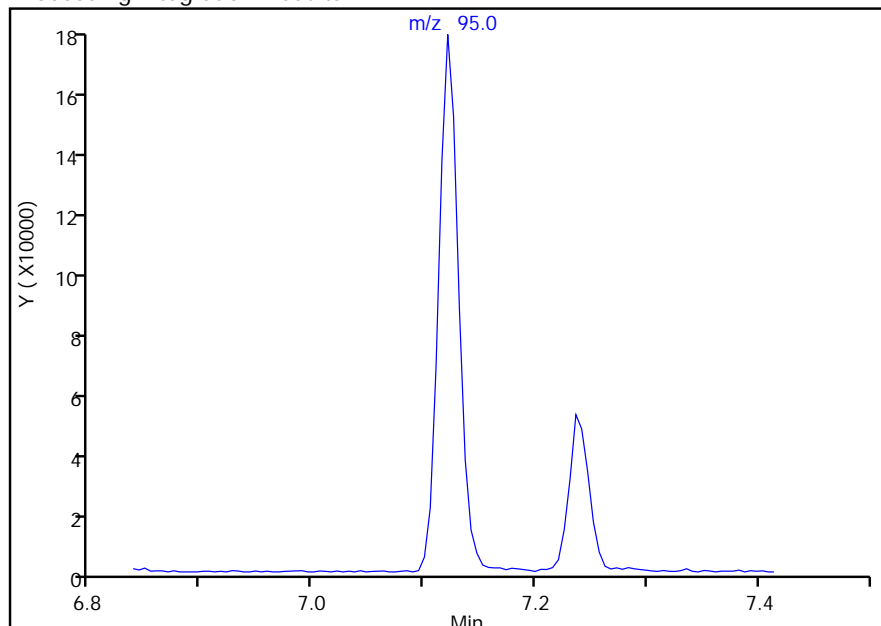
[\\$ 4 4-Bromofluorobenzene, CAS: 460-00-4](#)

Signal: 1

Not Detected

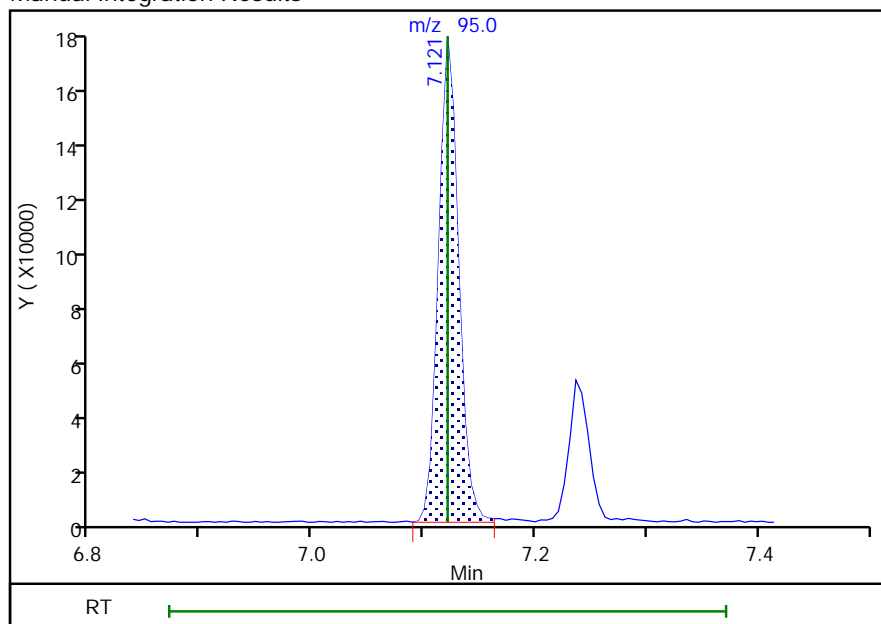
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
 Area: 213943
 Amount: 9.559269
 Amount Units: ug/l



Reviewer: seymourc, 09-Apr-2020 15:40:33

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 10-Apr-2020 09:26:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

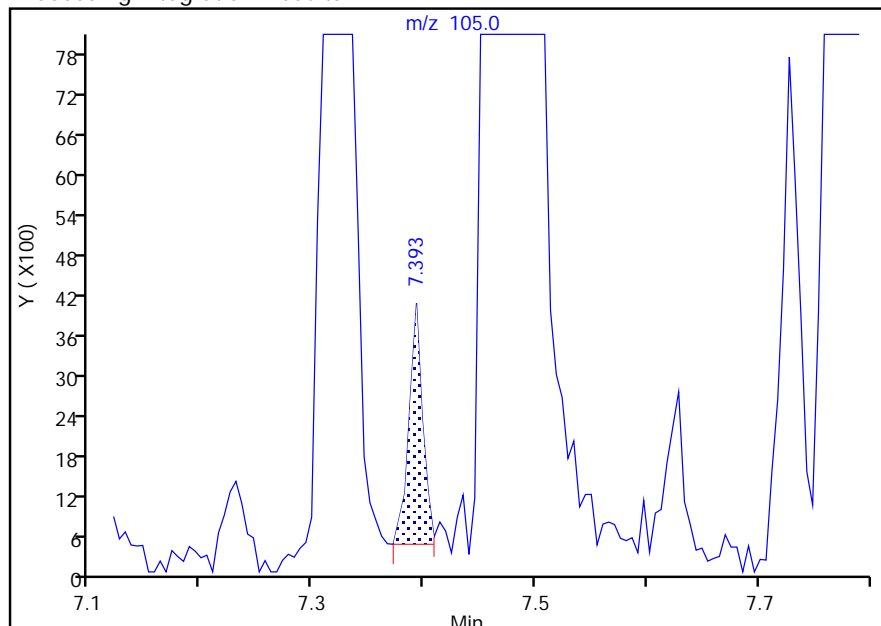
Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0902.D
 Injection Date: 09-Apr-2020 15:11:30 Instrument ID: CMSU
 Lims ID: icv
 Client ID:
 Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

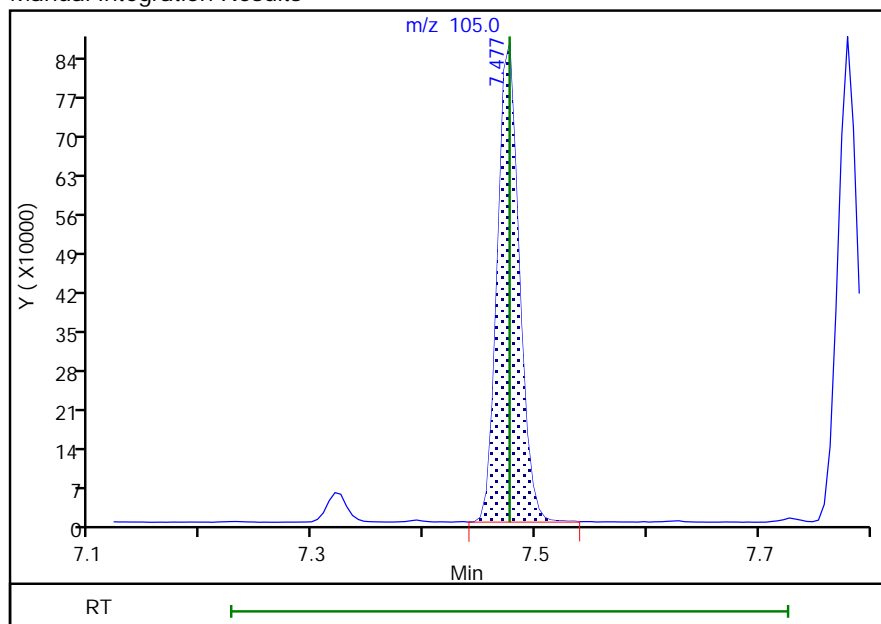
RT: 7.39
 Area: 3079
 Amount: 0.054033
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 1175205
 Amount: 20.623697
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 09-Apr-2020 16:07:14

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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04/28/2020

September 2020

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-616541/2 Calibration Date: 04/26/2020 13:49
 Instrument ID: CMSU Calib Start Date: 03/15/2020 13:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 03/15/2020 15:30
 Lab File ID: Ud2602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diisopropyl ether	Ave	0.6323	0.5987		87.3	16.0	-5.3	30.0
Tert-butyl ethyl ether	Ave	0.6853	0.7052		4140	16.0	2.9	30.0
Tert-amyl methyl ether	Ave	0.7061	0.6507		66.8	16.0	-7.8	30.0

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 26-Apr-2020 13:49:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-002
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:16:57 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:16:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1409963	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.164	6.164	0.000	83	569821	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	89	312161	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	255102	10.0	9.54	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	290241	10.0	9.78	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	410660	20.0	21.8	a
9 Vinyl chloride	62	1.237	1.237	0.000	98	414078	20.0	24.9	
8 Chloromethane	50	1.253	1.253	0.000	99	477926	20.0	23.1	M
10 Bromomethane	94	1.404	1.404	0.000	98	258223	20.0	21.1	
11 Chloroethane	64	1.457	1.457	0.000	99	219859	20.0	19.0	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	98	370656	20.0	21.6	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	98	307465	20.0	18.0	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	95	221331	20.0	18.1	
15 Acetone	58	1.896	1.896	0.000	88	127815	100.0	88.7	
16 Methylene Chloride	84	2.194	2.194	0.000	85	317802	20.0	20.8	
17 2-Methyl-2-propanol	59	2.236	2.236	0.000	98	370413	200.0	217.3	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	937369	20.0	19.0	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	90	328111	20.0	19.5	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	533520	20.0	20.5	
21 Isopropyl ether	45	2.681	2.681	0.000	94	675258	16.0	87.3	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	90	795451	16.0	4142.5	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	247678	100.0	103.2	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	475043	20.0	19.9	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	485166	20.0	20.2	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	230860	20.0	18.5	
27 Chloroform	83	3.287	3.287	0.000	99	571074	20.0	19.2	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	517872	20.0	20.2	
29 Carbon tetrachloride	117	3.517	3.517	0.000	98	469715	20.0	19.4	
30 1,1-Dichloropropene	75	3.517	3.517	0.000	97	433773	20.0	20.3	
31 Benzene	78	3.659	3.659	0.000	95	1353309	20.0	20.0	
32 1,2-Dichloroethane	62	3.695	3.695	0.000	98	419541	20.0	19.6	

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	733935	16.0	66.8	
34 Trichloroethene	132	4.135	4.135	0.000	95	395558	20.0	19.4	
36 Dibromomethane	93	4.386	4.386	0.000	90	224327	20.0	19.6	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	447133	20.0	20.2	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	321047	20.0	20.7	a
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	533670	20.0	20.3	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.950	0.000	95	1750117	100.0	111.5	
40 Toluene	92	5.092	5.092	0.000	93	916788	20.0	19.6	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	506663	20.0	20.7	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	273475	20.0	19.8	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	379872	20.0	20.6	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	538088	20.0	20.8	
45 2-Hexanone	43	5.589	5.589	0.000	95	1242766	100.0	124.3	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	415710	20.0	22.0	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	382952	20.0	20.5	
48 Chlorobenzene	112	6.190	6.190	0.000	97	1081037	20.0	19.7	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	397944	20.0	21.7	
50 Ethylbenzene	91	6.268	6.268	0.000	98	1704663	20.0	21.8	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1325717	20.0	21.8	
52 o-Xylene	91	6.682	6.682	0.000	95	1359693	20.0	21.4	
53 Styrene	104	6.697	6.697	0.000	97	1150172	20.0	21.9	
54 Bromoform	173	6.839	6.839	0.000	97	324235	20.0	20.7	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1725466	20.0	21.6	
56 Bromobenzene	156	7.231	7.231	0.000	89	515427	20.0	19.6	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	467384	20.0	22.7	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	152768	20.0	21.5	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1965423	20.0	21.7	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	1156390	20.0	21.3	
62 4-Chlorotoluene	91	7.487	7.487	0.000	98	1330915	20.0	21.2	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1203385	20.0	20.3	a
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1233372	20.0	20.6	
61 1,3,5-Trimethylbenzene	105	7.471	7.471	0.000	93	1276829	20.0	20.8	a
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1739610	20.0	20.9	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	920059	20.0	19.8	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1438691	20.0	20.3	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	925560	20.0	19.3	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	1032997	20.0	20.5	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	875699	20.0	19.4	
71 1,2-Dibromo-3-Chloropropan	157	9.035	9.035	0.000	92	130470	20.0	20.8	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	422521	20.0	19.3	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	282721	20.0	19.2	
74 Naphthalene	128	9.935	9.935	0.000	99	1181924	20.0	19.0	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	396991	20.0	18.6	
S 76 Xylenes, Total	1				0		40.0	43.1	
S 78 1,3-Dichloropropene, Total	1				0		40.0	41.0	

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00167

Amount Added: 2.00

Units: uL

524 ISSU/2016_00089

Amount Added: 5.00

Units: uL

Run Reagent

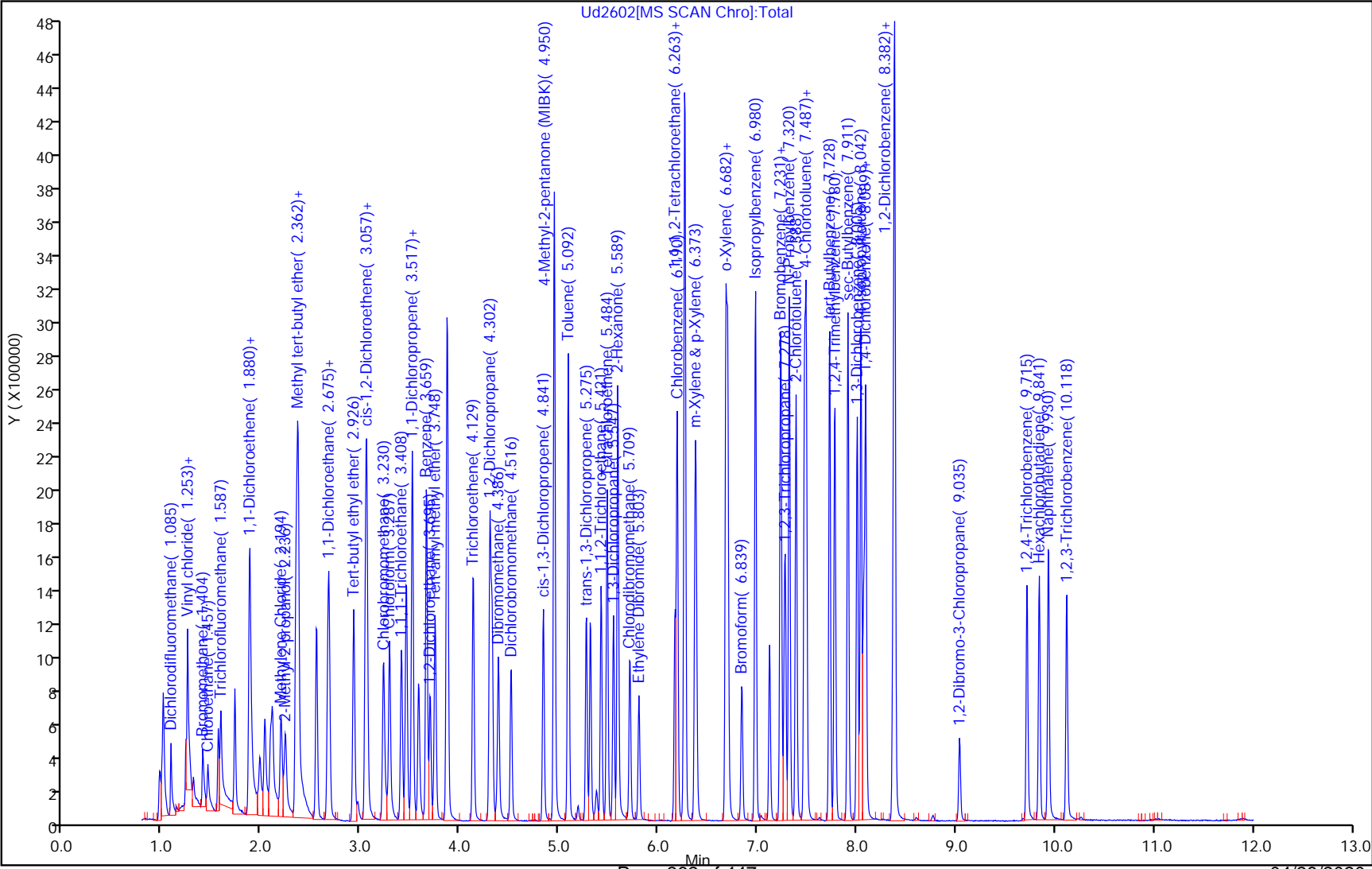
Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
 Injection Date: 26-Apr-2020 13:49:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm)

Operator ID: rd
 Worklist Smp#: 2
 ALS Bottle#: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-616541/2 Calibration Date: 04/26/2020 13:49
 Instrument ID: CMSU Calib Start Date: 04/08/2020 15:56
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 04/08/2020 18:18
 Lab File ID: Ud2602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.2913		21.8	20.0	8.9	30.0
Vinyl chloride	Ave	0.2359	0.2937		24.9	20.0	24.5	30.0
Chloromethane	Lin		0.3390		23.1	20.0	15.7	30.0
Bromomethane	Ave	0.1735	0.1831		21.1	20.0	5.6	30.0
Chloroethane	Lin1		0.1559		19.0	20.0	-4.8	30.0
Trichlorofluoromethane	Ave	0.2437	0.2629		21.6	20.0	7.9	30.0
Freon 113	Ave	0.2425	0.2181		18.0	20.0	-10.1	30.0
1,1-Dichloroethene	Lin1		0.1570		18.1	20.0	-9.5	30.0
Acetone	Ave	0.0204	0.0181		88.7	100	-11.3	30.0
Methylene Chloride	Ave	0.2172	0.2254		20.8	20.0	3.8	30.0
tert-Butyl alcohol	Ave	0.0242	0.0263		217	200	8.7	30.0
Methyl tert-butyl ether	Ave	0.6993	0.6648		19.0	20.0	-4.9	30.0
trans-1,2-Dichloroethene	Ave	0.2384	0.2327		19.5	20.0	-2.4	30.0
1,1-Dichloroethane	Ave	0.3697	0.3784		20.5	20.0	2.3	30.0
2-Butanone (MEK)	Ave	0.0340	0.0351		103	100	3.2	30.0
cis-1,2-Dichloroethene	Ave	0.3390	0.3369		19.9	20.0	-0.6	30.0
2,2-Dichloropropane	Ave	0.3403	0.3441		20.2	20.0	1.1	30.0
Chlorobromomethane	Ave	0.1773	0.1637		18.5	20.0	-7.7	30.0
Chloroform	Ave	0.4220	0.4050		19.2	20.0	-4.0	30.0
1,1,1-Trichloroethane	Ave	0.4495	0.4544		20.2	20.0	1.1	30.0
1,1-Dichloropropene	Ave	0.3752	0.3806		20.3	20.0	1.4	30.0
Carbon tetrachloride	Ave	0.4246	0.4122		19.4	20.0	-2.9	30.0
Benzene	Ave	1.188	1.187		20.0	20.0	-0.0	30.0
1,2-Dichloroethane	Ave	0.3761	0.3681		19.6	20.0	-2.1	30.0
Trichloroethene	Ave	0.3584	0.3471		19.4	20.0	-3.2	30.0
1,2-Dichloropropane	Ave	0.2723	0.2817		20.7	20.0	3.4	30.0
Dibromomethane	Ave	0.2010	0.1968		19.6	20.0	-2.1	30.0
Dichlorobromomethane	Ave	0.3877	0.3924		20.2	20.0	1.2	30.0
cis-1,3-Dichloropropene	Ave	0.4611	0.4683		20.3	20.0	1.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2754	0.3071		112	100	11.5	30.0
Toluene	Ave	0.8219	0.8045		19.6	20.0	-2.1	30.0
trans-1,3-Dichloropropene	Ave	0.4290	0.4446		20.7	20.0	3.6	30.0
1,1,2-Trichloroethane	Ave	0.2418	0.2400		19.8	20.0	-0.8	30.0
Tetrachloroethene	Ave	0.5914	0.6085		20.6	20.0	2.9	30.0
1,3-Dichloropropane	Ave	0.4544	0.4722		20.8	20.0	3.9	30.0
2-Hexanone	Ave	0.3202	0.3981		124	100	24.3	30.0
Chlorodibromomethane	Ave	0.6058	0.6659		22.0	20.0	9.9	30.0
Ethylene Dibromide	Ave	0.3275	0.3360		20.5	20.0	2.6	30.0
Chlorobenzene	Ave	0.9631	0.9486		19.7	20.0	-1.5	30.0
1,1,1,2-Tetrachloroethane	Ave	0.5862	0.6374		21.7	20.0	8.7	30.0
Ethylbenzene	Ave	2.509	2.730		21.8	20.0	8.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-616541/2 Calibration Date: 04/26/2020 13:49
 Instrument ID: CMSU Calib Start Date: 04/08/2020 15:56
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 04/08/2020 18:18
 Lab File ID: Ud2602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
m-Xylene & p-Xylene	Ave	1.950	2.123		21.8	20.0	8.9	30.0
o-Xylene	Ave	2.039	2.178		21.4	20.0	6.8	30.0
Styrene	Ave	1.680	1.842		21.9	20.0	9.7	30.0
Bromoform	Ave	0.5010	0.5193		20.7	20.0	3.7	30.0
Isopropylbenzene	Ave	2.557	2.764		21.6	20.0	8.1	30.0
Bromobenzene	Ave	0.8445	0.8256		19.6	20.0	-2.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6607	0.7486		22.7	20.0	13.3	30.0
1,2,3-Trichloropropane	Ave	0.2281	0.2447		21.5	20.0	7.3	30.0
N-Propylbenzene	Ave	2.903	3.148		21.7	20.0	8.5	30.0
2-Chlorotoluene	Ave	1.738	1.852		21.3	20.0	6.5	30.0
1,3,5-Trimethylbenzene	Ave	1.965	2.045		20.8	20.0	4.1	30.0
4-Chlorotoluene	Ave	2.016	2.132		21.2	20.0	5.8	30.0
tert-Butylbenzene	Ave	1.916	1.976		20.6	20.0	3.1	30.0
1,2,4-Trimethylbenzene	Ave	1.898	1.928		20.3	20.0	1.5	30.0
sec-Butylbenzene	Ave	2.661	2.786		20.9	20.0	4.7	30.0
1,3-Dichlorobenzene	Ave	1.485	1.474		19.8	20.0	-0.8	30.0
4-Isopropyltoluene	Ave	2.267	2.304		20.3	20.0	1.7	30.0
1,4-Dichlorobenzene	Ave	1.533	1.483		19.3	20.0	-3.3	30.0
1,2-Dichlorobenzene	Ave	1.445	1.403		19.4	20.0	-2.9	30.0
n-Butylbenzene	Ave	1.611	1.655		20.5	20.0	2.7	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2007	0.2090		20.8	20.0	4.1	30.0
1,2,4-Trichlorobenzene	Ave	0.6996	0.6768		19.3	20.0	-3.3	30.0
Hexachlorobutadiene	Ave	0.4729	0.4528		19.2	20.0	-4.2	30.0
Naphthalene	Ave	1.989	1.893		19.0	20.0	-4.8	30.0
1,2,3-Trichlorobenzene	Ave	0.6839	0.6359		18.6	20.0	-7.0	30.0
4-Bromofluorobenzene	Ave	0.3792	0.3619		9.54	10.0	-4.6	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9506	0.9298		9.78	10.0	-2.2	30.0

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 26-Apr-2020 13:49:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-002
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:16:57 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:16:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1409963	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.164	6.164	0.000	83	569821	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	89	312161	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	255102	10.0	9.54	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	290241	10.0	9.78	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	410660	20.0	21.8	a
9 Vinyl chloride	62	1.237	1.237	0.000	98	414078	20.0	24.9	
8 Chloromethane	50	1.253	1.253	0.000	99	477926	20.0	23.1	M
10 Bromomethane	94	1.404	1.404	0.000	98	258223	20.0	21.1	
11 Chloroethane	64	1.457	1.457	0.000	99	219859	20.0	19.0	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	98	370656	20.0	21.6	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	98	307465	20.0	18.0	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	95	221331	20.0	18.1	
15 Acetone	58	1.896	1.896	0.000	88	127815	100.0	88.7	
16 Methylene Chloride	84	2.194	2.194	0.000	85	317802	20.0	20.8	
17 2-Methyl-2-propanol	59	2.236	2.236	0.000	98	370413	200.0	217.3	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	937369	20.0	19.0	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	90	328111	20.0	19.5	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	533520	20.0	20.5	
21 Isopropyl ether	45	2.681	2.681	0.000	94	675258	16.0	87.3	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	90	795451	16.0	4142.5	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	247678	100.0	103.2	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	475043	20.0	19.9	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	485166	20.0	20.2	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	230860	20.0	18.5	
27 Chloroform	83	3.287	3.287	0.000	99	571074	20.0	19.2	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	517872	20.0	20.2	
29 Carbon tetrachloride	117	3.517	3.517	0.000	98	469715	20.0	19.4	
30 1,1-Dichloropropene	75	3.517	3.517	0.000	97	433773	20.0	20.3	
31 Benzene	78	3.659	3.659	0.000	95	1353309	20.0	20.0	
32 1,2-Dichloroethane	62	3.695	3.695	0.000	98	419541	20.0	19.6	

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	733935	16.0	66.8	
34 Trichloroethene	132	4.135	4.135	0.000	95	395558	20.0	19.4	
36 Dibromomethane	93	4.386	4.386	0.000	90	224327	20.0	19.6	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	447133	20.0	20.2	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	321047	20.0	20.7	a
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	533670	20.0	20.3	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.950	0.000	95	1750117	100.0	111.5	
40 Toluene	92	5.092	5.092	0.000	93	916788	20.0	19.6	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	506663	20.0	20.7	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	273475	20.0	19.8	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	379872	20.0	20.6	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	538088	20.0	20.8	
45 2-Hexanone	43	5.589	5.589	0.000	95	1242766	100.0	124.3	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	415710	20.0	22.0	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	382952	20.0	20.5	
48 Chlorobenzene	112	6.190	6.190	0.000	97	1081037	20.0	19.7	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	397944	20.0	21.7	
50 Ethylbenzene	91	6.268	6.268	0.000	98	1704663	20.0	21.8	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1325717	20.0	21.8	
52 o-Xylene	91	6.682	6.682	0.000	95	1359693	20.0	21.4	
53 Styrene	104	6.697	6.697	0.000	97	1150172	20.0	21.9	
54 Bromoform	173	6.839	6.839	0.000	97	324235	20.0	20.7	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1725466	20.0	21.6	
56 Bromobenzene	156	7.231	7.231	0.000	89	515427	20.0	19.6	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	467384	20.0	22.7	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	152768	20.0	21.5	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1965423	20.0	21.7	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	1156390	20.0	21.3	
62 4-Chlorotoluene	91	7.487	7.487	0.000	98	1330915	20.0	21.2	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1203385	20.0	20.3	a
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1233372	20.0	20.6	
61 1,3,5-Trimethylbenzene	105	7.471	7.471	0.000	93	1276829	20.0	20.8	a
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1739610	20.0	20.9	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	920059	20.0	19.8	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1438691	20.0	20.3	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	925560	20.0	19.3	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	1032997	20.0	20.5	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	875699	20.0	19.4	
71 1,2-Dibromo-3-Chloropropan	157	9.035	9.035	0.000	92	130470	20.0	20.8	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	422521	20.0	19.3	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	282721	20.0	19.2	
74 Naphthalene	128	9.935	9.935	0.000	99	1181924	20.0	19.0	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	396991	20.0	18.6	
S 76 Xylenes, Total	1				0		40.0	43.1	
S 78 1,3-Dichloropropene, Total	1				0		40.0	41.0	

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00167

Amount Added: 2.00

Units: uL

524 ISSU/2016_00089

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D

Injection Date: 26-Apr-2020 13:49:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ccvis

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

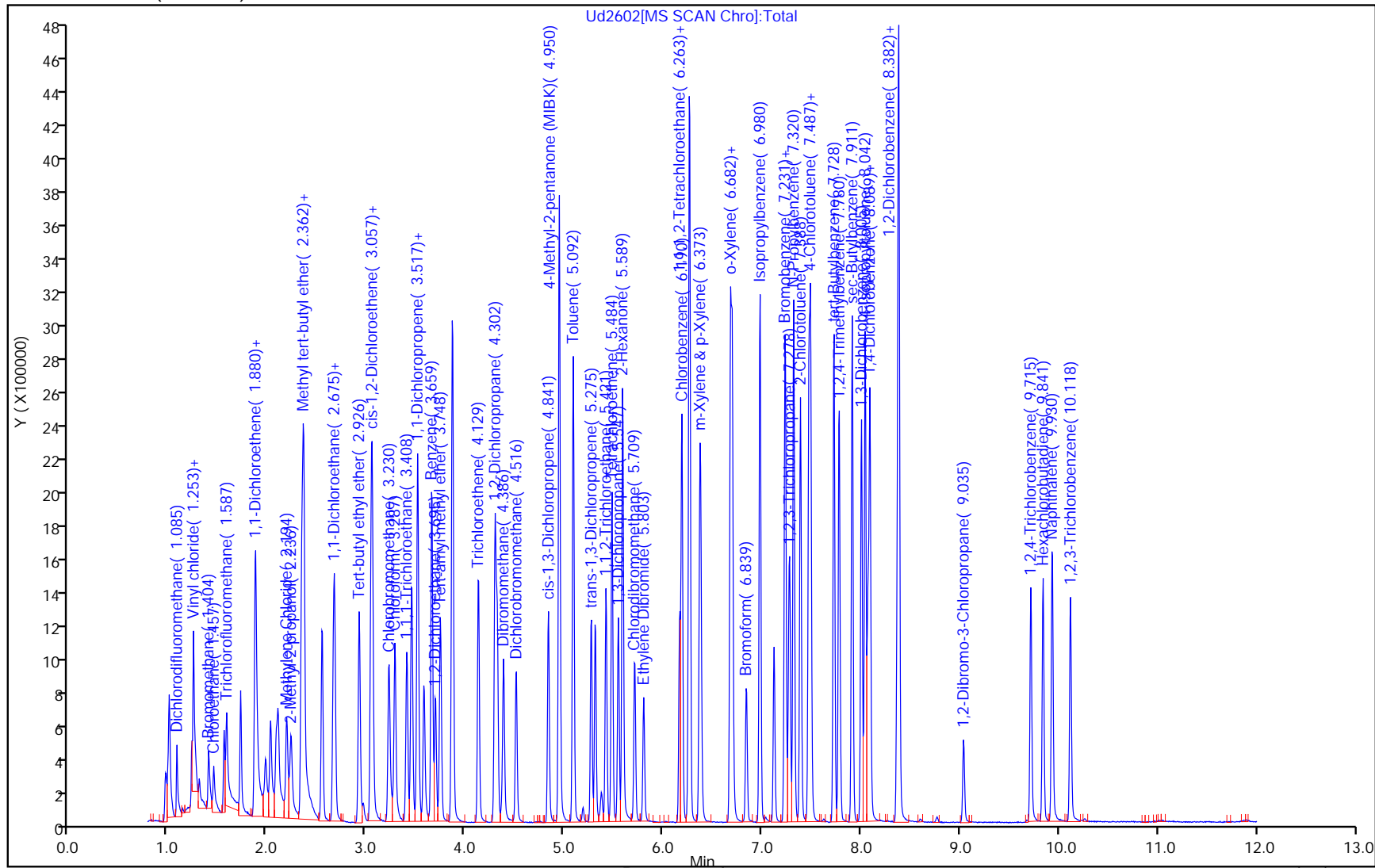
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D

Injection Date: 26-Apr-2020 13:49:30

Instrument ID: CMSU

Lims ID: ccvis

Client ID:

Operator ID: rd

ALS Bottle#: 2

Worklist Smp#: 2

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

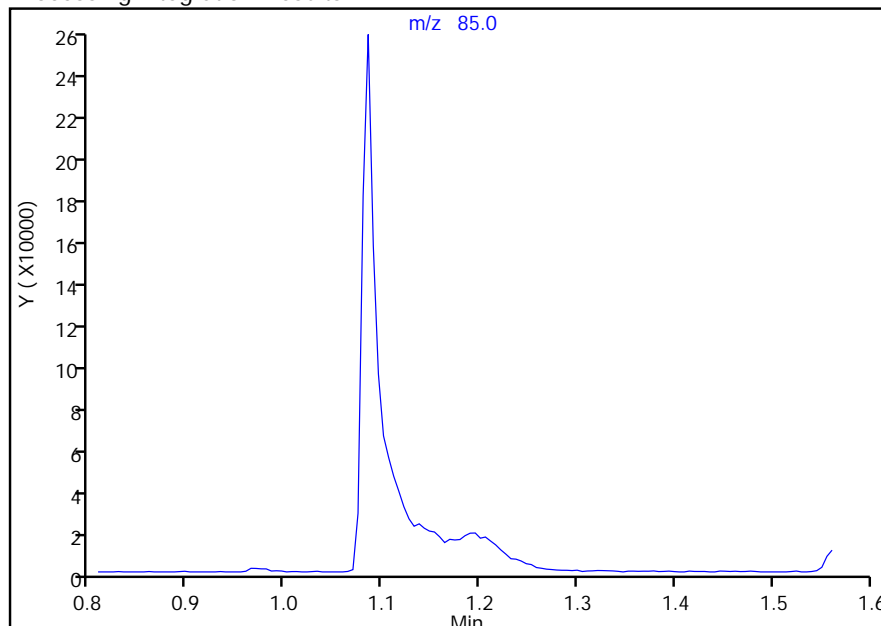
7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

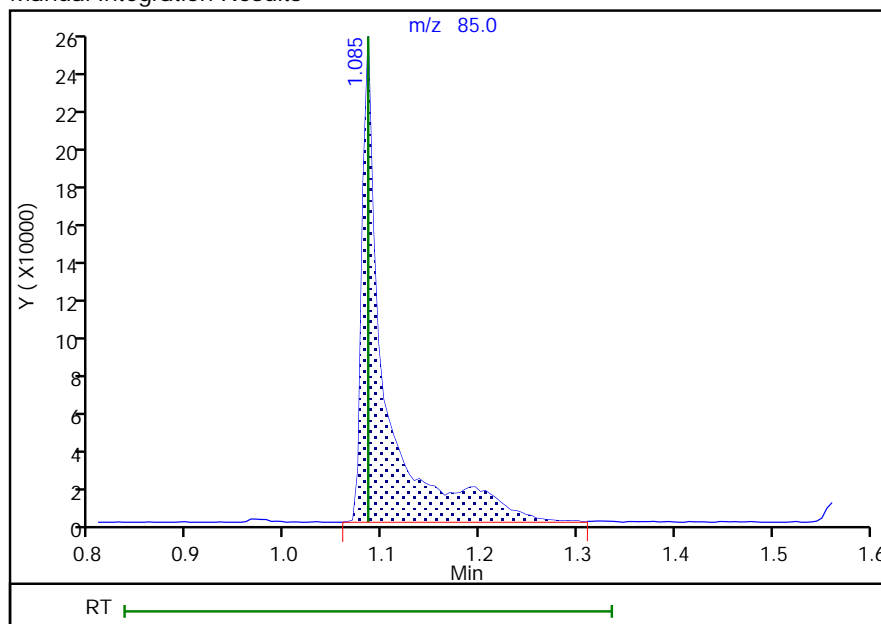
Not Detected

Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 410660
Amount: 21.788986
Amount Units: ug/l

Manual Integration Results



Reviewer: diogor, 26-Apr-2020 14:33:38

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

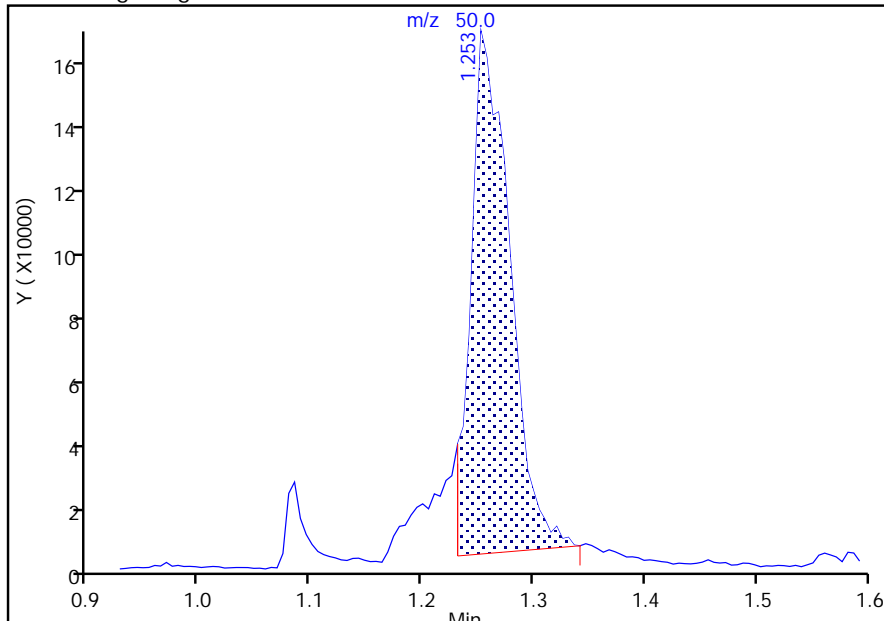
Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
Injection Date: 26-Apr-2020 13:49:30 Instrument ID: CMSU
Lims ID: ccvis
Client ID:
Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

8 Chloromethane, CAS: 74-87-3

Signal: 1

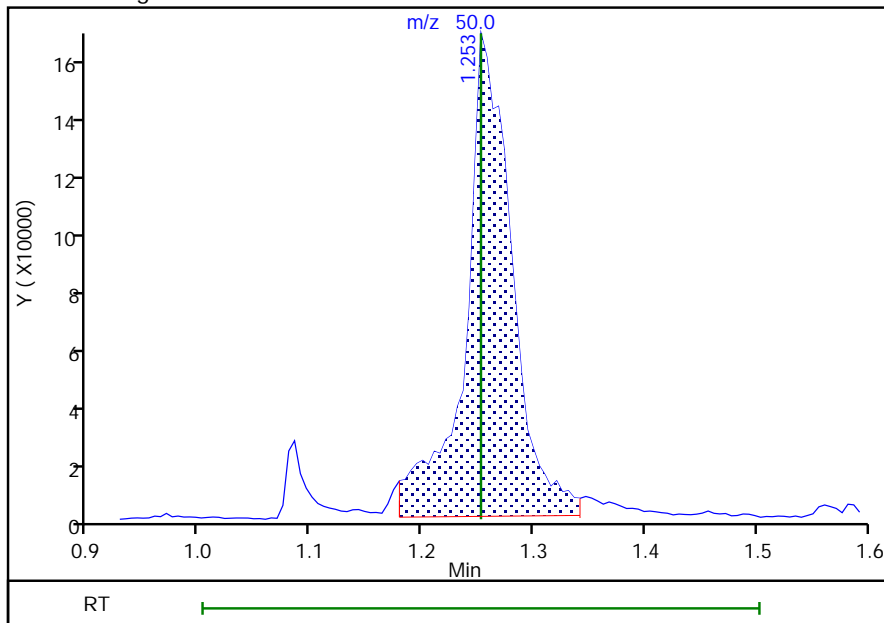
RT: 1.25
Area: 387249
Amount: 18.726804
Amount Units: ug/l

Processing Integration Results



RT: 1.25
Area: 477926
Amount: 23.131896
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:16:14
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

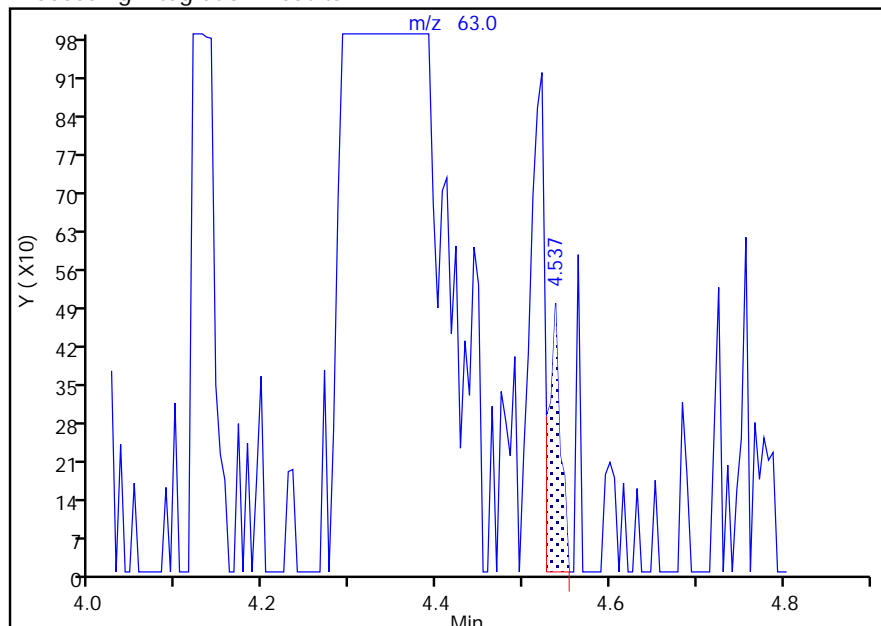
Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
 Injection Date: 26-Apr-2020 13:49:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

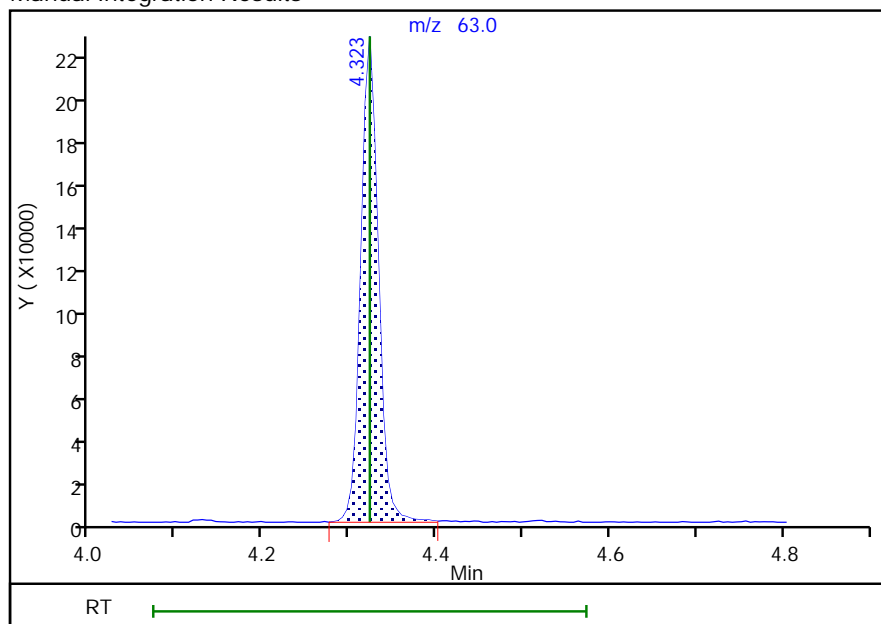
RT: 4.54
 Area: 465
 Amount: 0.029966
 Amount Units: ug/l

Processing Integration Results



RT: 4.32
 Area: 321047
 Amount: 20.689009
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:15:47

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D

Injection Date: 26-Apr-2020 13:49:30

Instrument ID: CMSU

Lims ID: ccvis

Client ID:

Operator ID: rd

ALS Bottle#: 2

Worklist Smp#: 2

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

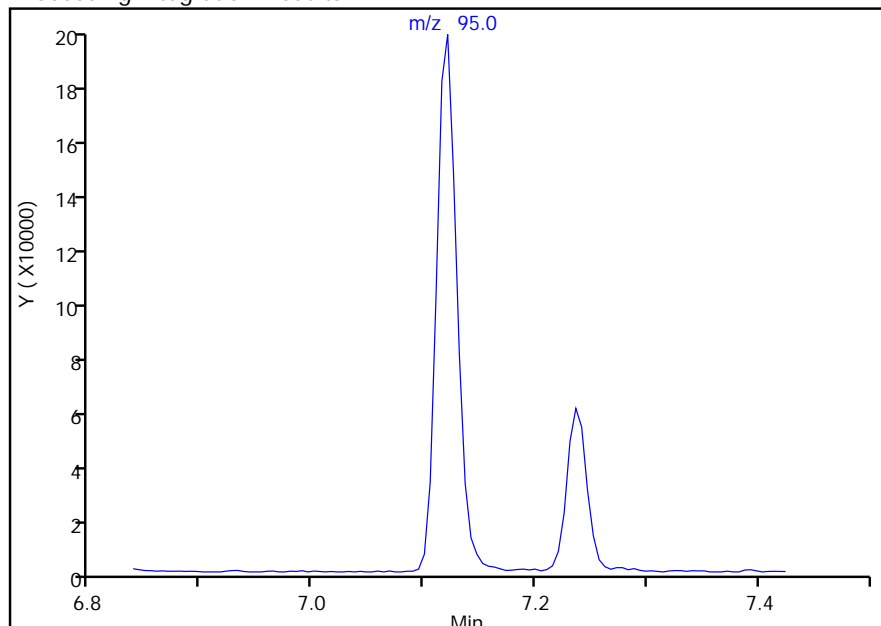
[\\$ 4 4-Bromofluorobenzene, CAS: 460-00-4](#)

Signal: 1

Not Detected

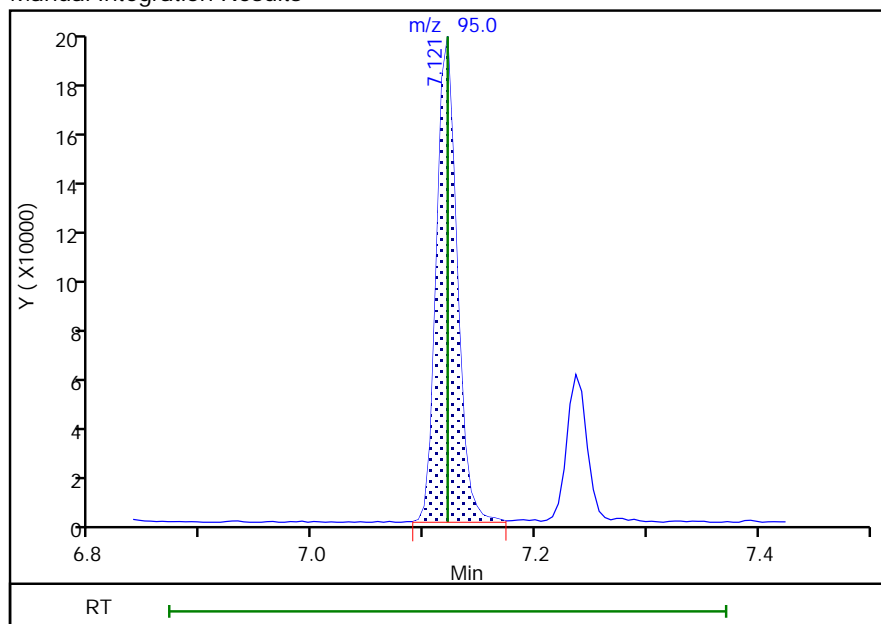
Expected RT: 7.12

Processing Integration Results



RT: 7.12
 Area: 255102
 Amount: 9.542488
 Amount Units: ug/l

Manual Integration Results



Reviewer: diogor, 26-Apr-2020 14:33:34

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

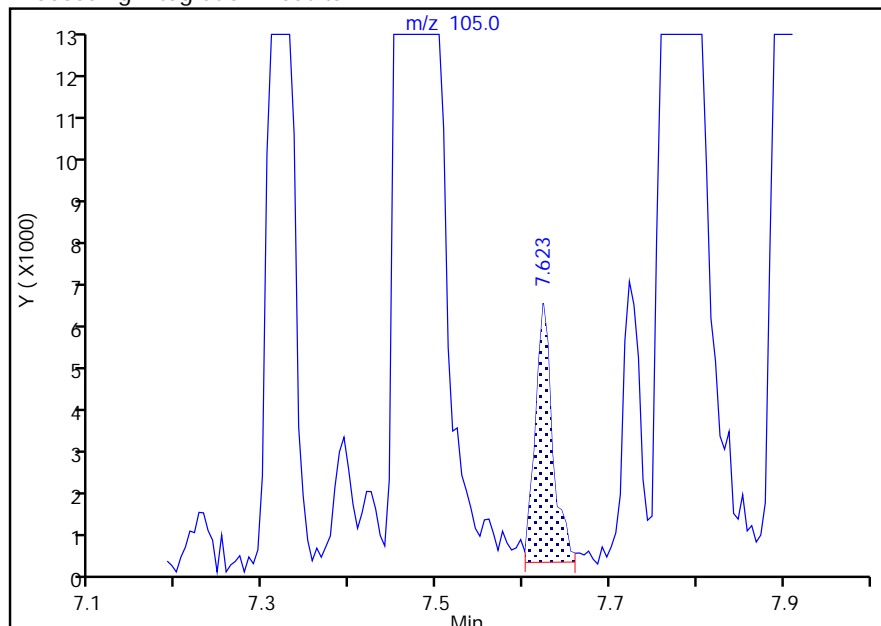
Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
 Injection Date: 26-Apr-2020 13:49:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

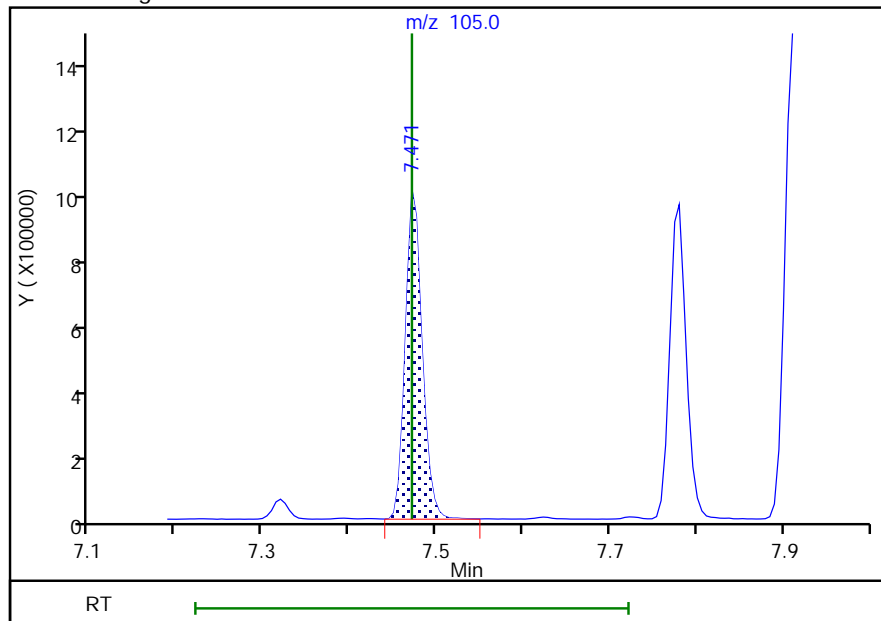
RT: 7.62
 Area: 8364
 Amount: 0.136335
 Amount Units: ug/l

Processing Integration Results



RT: 7.47
 Area: 1276829
 Amount: 20.812565
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:15:37

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 28-Apr-2020 08:16:57

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

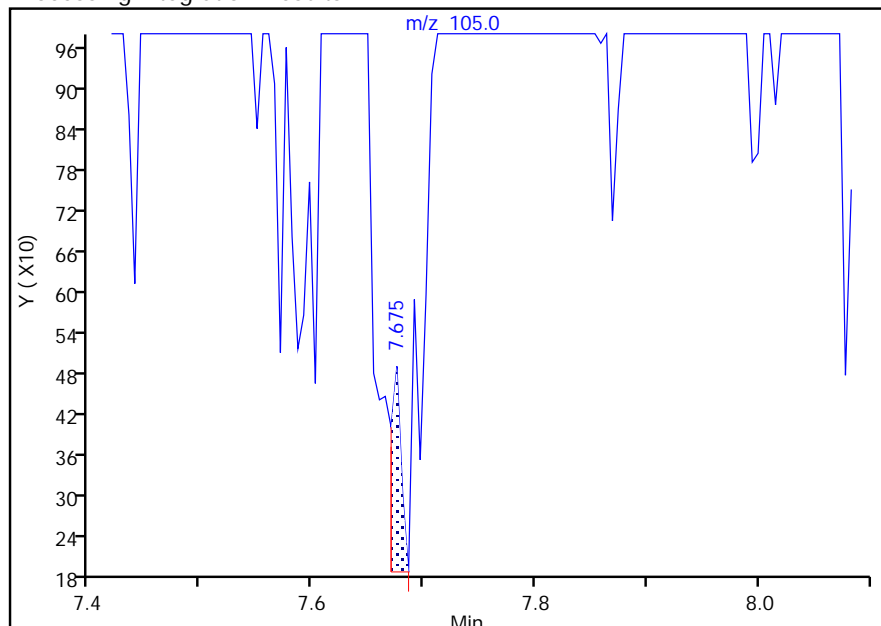
Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2602.D
 Injection Date: 26-Apr-2020 13:49:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

64 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

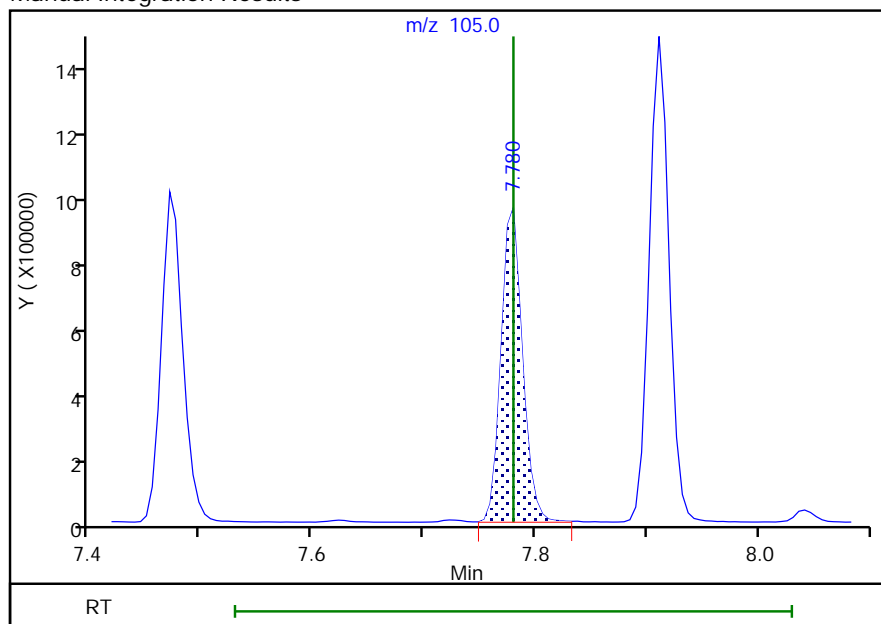
RT: 7.68
 Area: 196
 Amount: 0.003307
 Amount Units: ug/l

Processing Integration Results



RT: 7.78
 Area: 1203385
 Amount: 20.306402
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:15:28

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 09-Apr-2020 12:30:16

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0801.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 08-Apr-2020 13:43:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0063087-001
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\U524.2.m
 Limit Group: 524.2
 Last Update: 09-Apr-2020 12:30:15 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1003

First Level Reviewer: diogor

Date: 08-Apr-2020 14:01:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

Reagents:

VM_bfb_00214

Amount Added: 2.00

Units: uL

Report Date: 09-Apr-2020 12:30:16

Chrom Revision: 2.3 11-Mar-2020 18:53:20
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0801.D

Injection Date: 08-Apr-2020 13:43:30

Instrument ID: CMSU

Lims ID: bfb

Client ID:

Operator ID: rd

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 5.0 mL

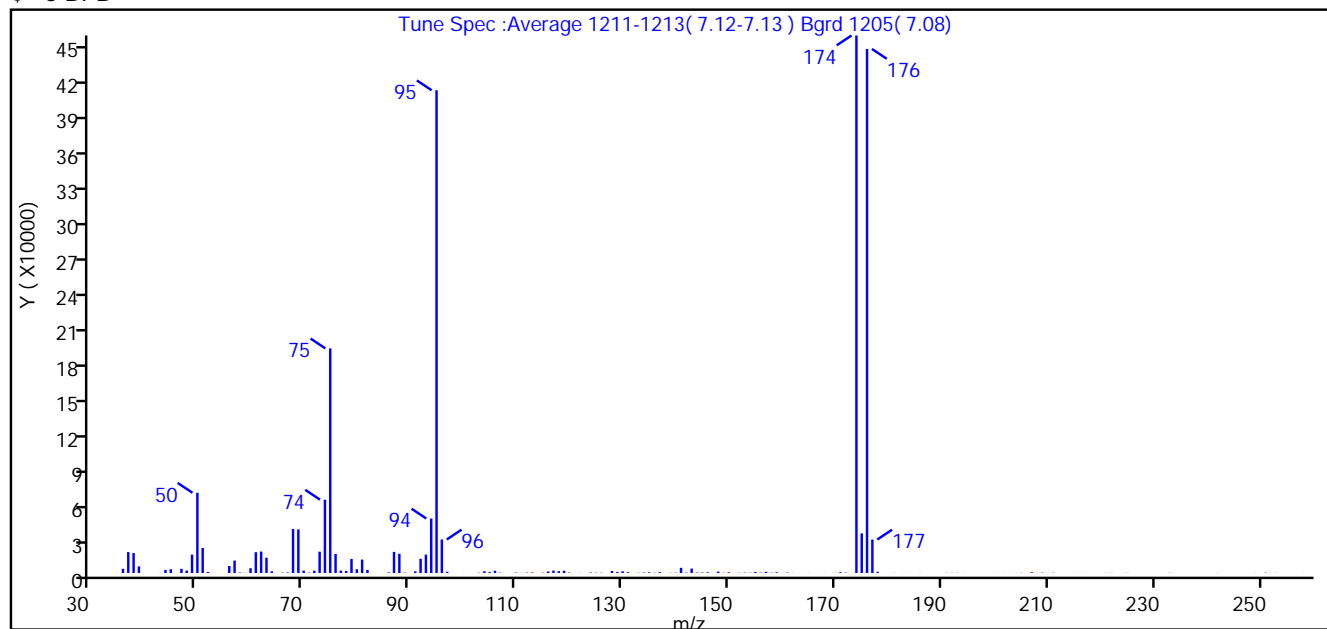
Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	16.6
75	30-80% of mass 95	46.5
96	5-9% of mass 95	6.9
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	111.3
175	5-9% of mass 174	8.2 (7.4)
176	>95% but <101% of mass 174	108.6 (97.5)
177	5-9% of mass 176	6.9 (6.4)

Report Date: 09-Apr-2020 12:30:16

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0801.D\U524.2.rslt\spectra.d
 Injection Date: 08-Apr-2020 13:43:30
 Spectrum: Tune Spec :Average 1211-1213(7.12-7.13) Bgrd 1205(7.08)
 Base Peak: 174.00
 Minimum % Base Peak: 0
 Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3553	79.00	11881	129.00	808	175.00	33504
37.00	17696	80.00	3172	130.00	1454	176.00	443392
38.00	16880	81.00	11357	131.00	688	177.00	28288
39.00	5589	82.00	2559	133.00	175	178.00	1035
43.00	114	85.00	19	134.00	335	181.00	113
44.00	2595	86.00	528	135.00	573	183.00	57
45.00	3139	87.00	17840	136.00	189	184.00	58
47.00	3552	88.00	16276	137.00	732	186.00	68
48.00	2059	89.00	279	139.00	138	191.00	101
49.00	15499	91.00	1393	140.00	242	192.00	144
50.00	67864	92.00	11989	141.00	4364	193.00	105
51.00	21208	93.00	15567	142.00	322	194.00	52
52.00	828	94.00	46072	143.00	3717	200.00	50
53.00	78	95.00	408448	144.00	339	202.00	55
56.00	5929	96.00	28320	145.00	406	203.00	52
57.00	10538	97.00	1037	146.00	576	204.00	54
58.00	377	100.00	68	148.00	1199	205.00	140
59.00	113	103.00	203	149.00	188	207.00	603
60.00	4015	104.00	1463	150.00	576	208.00	72
61.00	17576	105.00	723	151.00	47	209.00	275
62.00	18136	106.00	1946	152.00	173	211.00	180
63.00	12896	107.00	285	153.00	293	215.00	60
64.00	1407	110.00	324	154.00	206	217.00	50
65.00	17	111.00	88	155.00	906	221.00	74
66.00	323	112.00	290	156.00	254	222.00	126
67.00	456	113.00	449	157.00	975	224.00	63
68.00	37200	115.00	246	158.00	236	225.00	133
69.00	36832	116.00	1302	159.00	588	233.00	146
70.00	1999	117.00	2047	160.00	68	242.00	86
71.00	320	118.00	1536	161.00	366	249.00	64
72.00	1990	119.00	1933	162.00	110	251.00	283
73.00	18040	120.00	355	165.00	76	252.00	50
74.00	62024	122.00	69	168.00	72	253.00	91

Report Date: 09-Apr-2020 12:30:16

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0801.D\U524.2.rslt\spectra.d

Injection Date: 08-Apr-2020 13:43:30

Spectrum: Tune Spec :Average 1211-1213(7.12-7.13) Bgrd 1205(7.08)

Base Peak: 174.00

Minimum % Base Peak: 0

Number of Points: 145

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	190016	124.00	390	170.00	91	258.00	56
76.00	16135	125.00	218	171.00	621		
77.00	2043	126.00	198	172.00	273		
78.00	1768	128.00	1705	174.00	454784		

Report Date: 09-Apr-2020 12:30:16

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0801.D

Injection Date: 08-Apr-2020 13:43:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

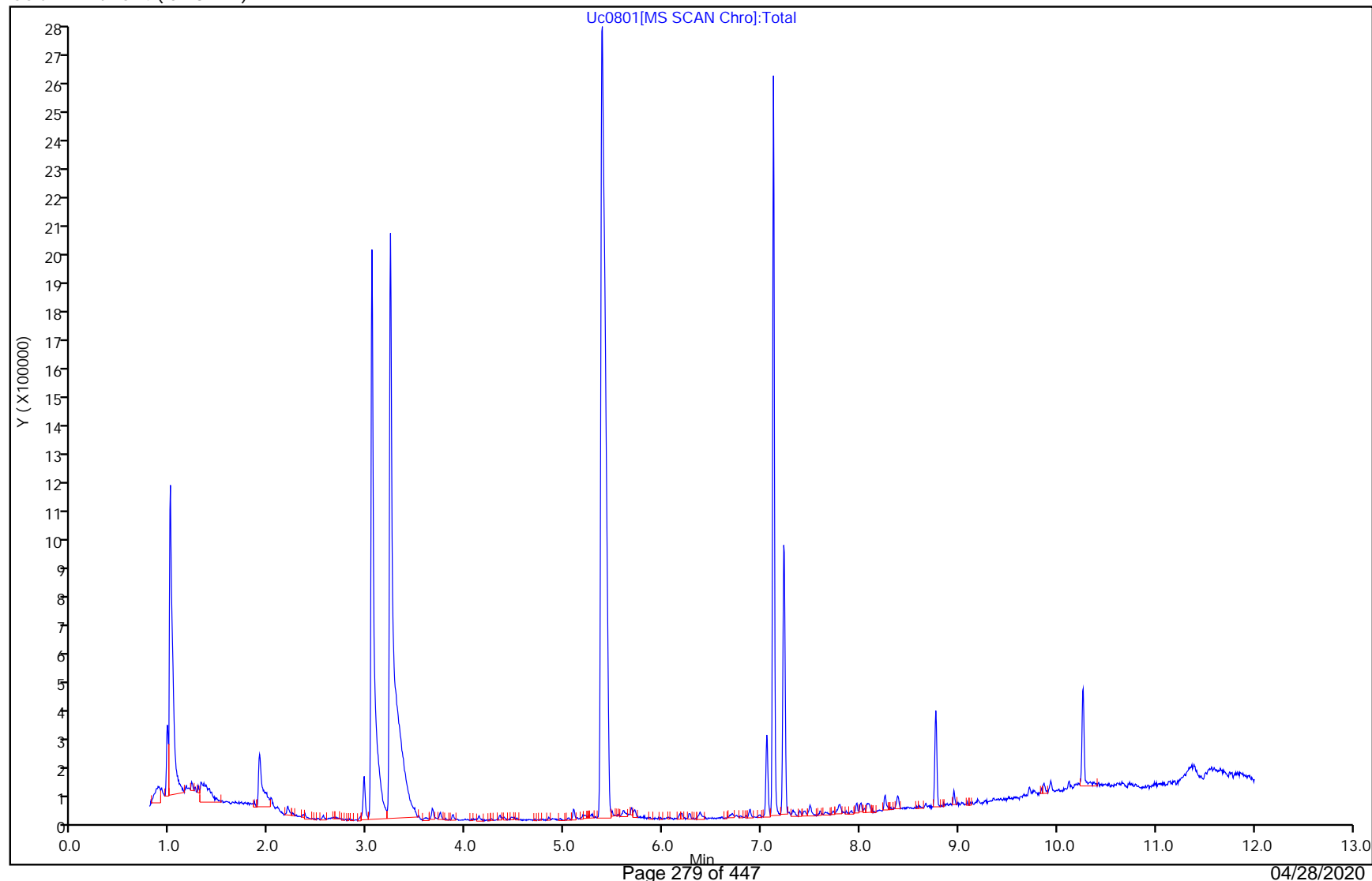
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 10-Apr-2020 09:26:13

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0901.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 09-Apr-2020 14:42:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0063115-001
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\U524.2.m
 Limit Group: 524.2
 Last Update: 10-Apr-2020 09:26:13 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1001

First Level Reviewer: diogor

Date: 09-Apr-2020 14:56:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

Reagents:

VM_bfb_00214

Amount Added: 2.00

Units: uL

Report Date: 10-Apr-2020 09:26:13

Chrom Revision: 2.3 11-Mar-2020 18:53:20
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0901.D

Injection Date: 09-Apr-2020 14:42:30

Instrument ID: CMSU

Lims ID: bfb

Client ID:

Operator ID: rd

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 5.0 mL

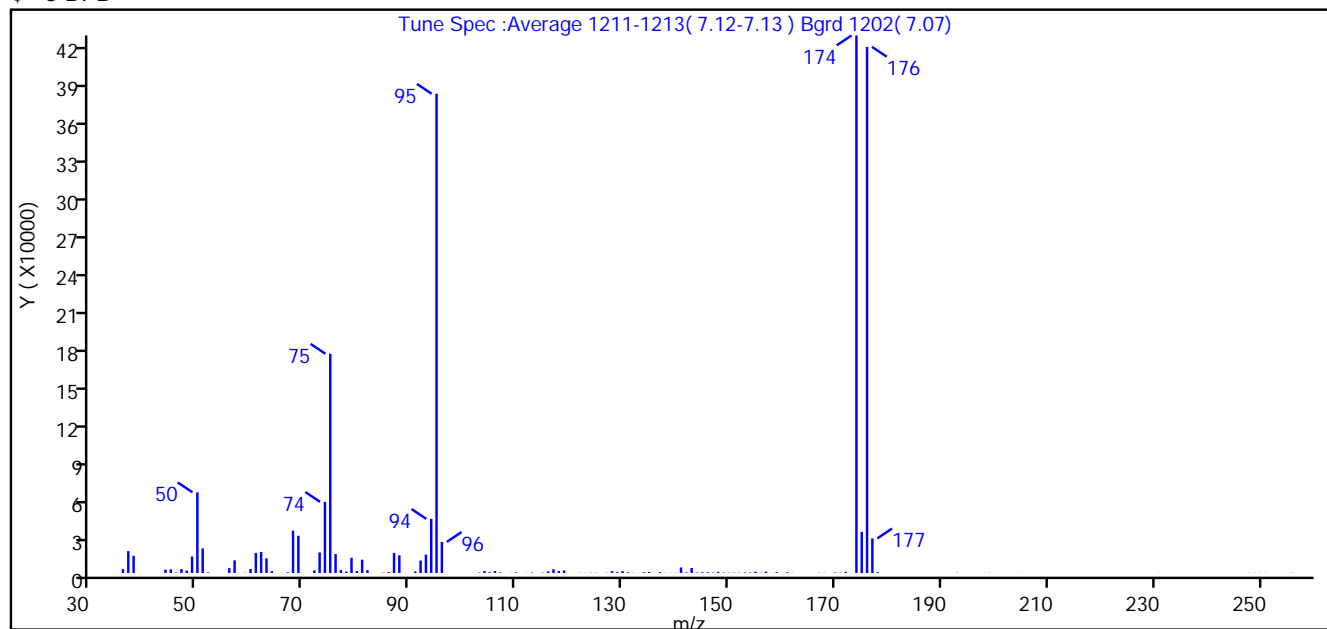
Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	16.8
75	30-80% of mass 95	45.7
96	5-9% of mass 95	6.5
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	112.2
175	5-9% of mass 174	8.6 (7.6)
176	>95% but <101% of mass 174	109.8 (97.9)
177	5-9% of mass 176	7.2 (6.6)

Report Date: 10-Apr-2020 09:26:13

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0901.D\U524.2.rslt\spectra.d
 Injection Date: 09-Apr-2020 14:42:30
 Spectrum: Tune Spec :Average 1211-1213(7.12-7.13) Bgrd 1202(7.07)
 Base Peak: 174.00
 Minimum % Base Peak: 0
 Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3011	81.00	10389	128.00	1449	162.00	121
37.00	17112	82.00	2270	129.00	634	167.00	134
38.00	13452	85.00	258	130.00	1394	168.00	118
44.00	2599	86.00	657	131.00	545	170.00	376
45.00	2884	87.00	15678	132.00	127	171.00	163
46.00	377	88.00	13824	133.00	59	172.00	917
47.00	3034	89.00	85	134.00	580	174.00	420480
48.00	1918	91.00	1203	135.00	841	175.00	32152
49.00	12874	92.00	9747	136.00	69	176.00	411584
50.00	63120	93.00	14384	137.00	741	177.00	27064
51.00	19200	94.00	42304	138.00	70	178.00	712
52.00	466	95.00	374912	139.00	97	181.00	52
56.00	3786	96.00	24296	140.00	139	185.00	74
57.00	9877	102.00	57	141.00	4316	193.00	197
59.00	131	103.00	334	142.00	481	198.00	60
60.00	3116	104.00	1537	143.00	3917	199.00	96
61.00	15604	105.00	591	144.00	363	203.00	51
62.00	16392	106.00	1515	145.00	605	205.00	92
63.00	11406	107.00	441	146.00	567	207.00	36
64.00	1422	109.00	115	147.00	324	208.00	31
66.00	78	110.00	430	148.00	943	214.00	61
67.00	546	112.00	81	149.00	329	219.00	50
68.00	33160	113.00	340	150.00	230	223.00	53
69.00	29120	115.00	275	151.00	178	231.00	78
72.00	2056	116.00	1212	152.00	198	247.00	59
73.00	16076	117.00	2926	153.00	438	248.00	58
74.00	55656	118.00	1547	154.00	386	249.00	109
75.00	171520	119.00	2024	155.00	1023	250.00	90
76.00	14819	122.00	127	156.00	171	251.00	103
77.00	2254	123.00	132	157.00	1010	256.00	145
78.00	1062	124.00	213	158.00	70		
79.00	11887	125.00	198	159.00	650		
80.00	1451	127.00	140	161.00	530		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3011	81.00	10389	128.00	1449	162.00	121
37.00	17112	82.00	2270	129.00	634	167.00	134
38.00	13452	85.00	258	130.00	1394	168.00	118
44.00	2599	86.00	657	131.00	545	170.00	376
45.00	2884	87.00	15678	132.00	127	171.00	163
46.00	377	88.00	13824	133.00	59	172.00	917
47.00	3034	89.00	85	134.00	580	174.00	420480
48.00	1918	91.00	1203	135.00	841	175.00	32152
49.00	12874	92.00	9747	136.00	69	176.00	411584
50.00	63120	93.00	14384	137.00	741	177.00	27064
51.00	19200	94.00	42304	138.00	70	178.00	712
52.00	466	95.00	374912	139.00	97	181.00	52
56.00	3786	96.00	24296	140.00	139	185.00	74
57.00	9877	102.00	57	141.00	4316	193.00	197
59.00	131	103.00	334	142.00	481	198.00	60
60.00	3116	104.00	1537	143.00	3917	199.00	96
61.00	15604	105.00	591	144.00	363	203.00	51
62.00	16392	106.00	1515	145.00	605	205.00	92
63.00	11406	107.00	441	146.00	567	207.00	36
64.00	1422	109.00	115	147.00	324	208.00	31
66.00	78	110.00	430	148.00	943	214.00	61
67.00	546	112.00	81	149.00	329	219.00	50
68.00	33160	113.00	340	150.00	230	223.00	53
69.00	29120	115.00	275	151.00	178	231.00	78
72.00	2056	116.00	1212	152.00	198	247.00	59
73.00	16076	117.00	2926	153.00	438	248.00	58
74.00	55656	118.00	1547	154.00	386	249.00	109
75.00	171520	119.00	2024	155.00	1023	250.00	90
76.00	14819	122.00	127	156.00	171	251.00	103
77.00	2254	123.00	132	157.00	1010	256.00	145
78.00	1062	124.00	213	158.00	70		
79.00	11887	125.00	198	159.00	650		
80.00	1451	127.00	140	161.00	530		

Report Date: 10-Apr-2020 09:26:13

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromna\Savannah\ChromData\CMSU\20200409-63115.b\Uc0901.D

Injection Date: 09-Apr-2020 14:42:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

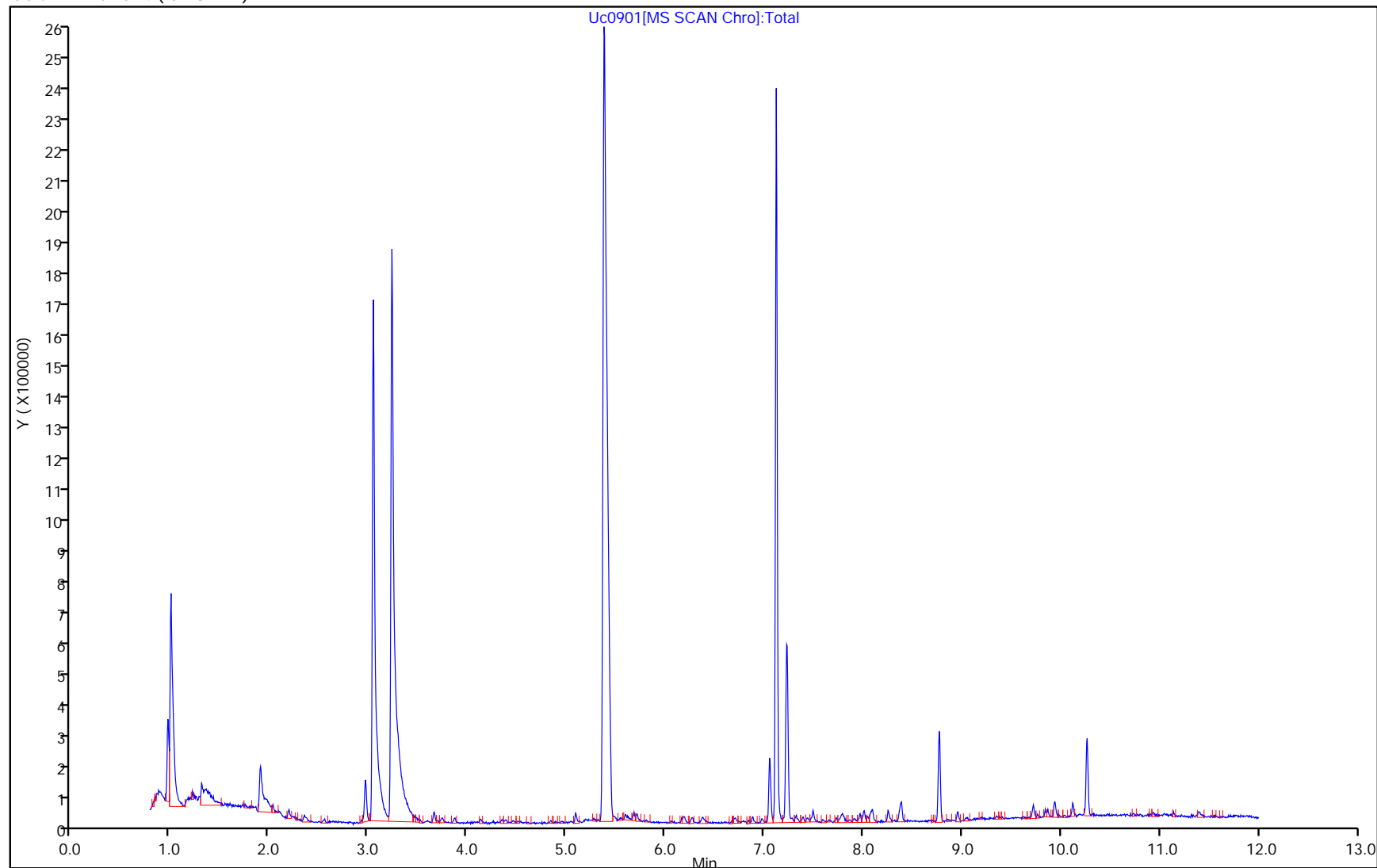
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:15:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2601.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 26-Apr-2020 13:04:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-001
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:15:10 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:15:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

Reagents:

VM_bfb_00215

Amount Added: 2.00

Units: uL

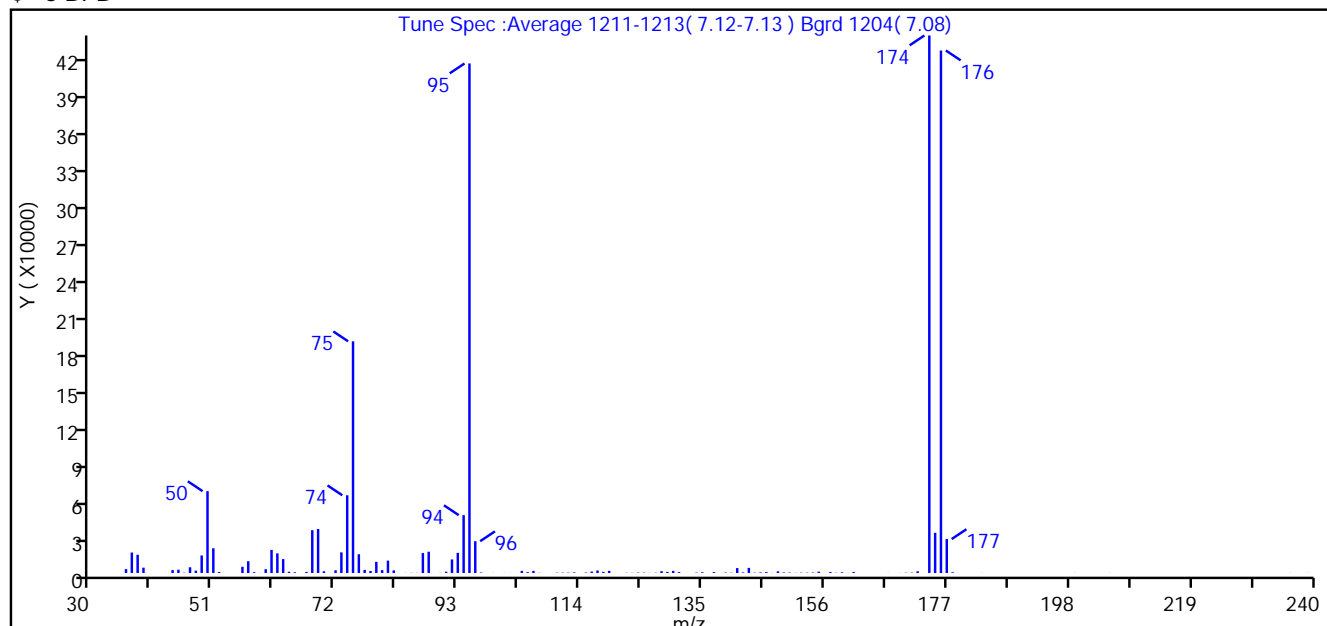
Report Date: 28-Apr-2020 08:15:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2601.D
 Injection Date: 26-Apr-2020 13:04:30 Instrument ID: CMSU
 Lims ID: bfb
 Client ID:
 Operator ID: rd ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	16.1
75	30-80% of mass 95	45.5
96	5-9% of mass 95	6.2
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	105.5
175	5-9% of mass 174	7.9 (7.5)
176	>95% but <101% of mass 174	102.5 (97.2)
177	5-9% of mass 176	6.7 (6.5)

Report Date: 28-Apr-2020 08:15:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2601.D\U524.2.rsl\spectra.d
 Injection Date: 26-Apr-2020 13:04:30
 Spectrum: Tune Spec :Average 1211-1213(7.12-7.13) Bgrd 1204(7.08)
 Base Peak: 174.00
 Minimum % Base Peak: 0
 Number of Points: 118

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3175	74.00	63264	111.00	313	148.00	1361
37.00	16648	75.00	188608	112.00	267	149.00	441
38.00	14812	76.00	15262	113.00	457	150.00	348
39.00	4338	77.00	2471	115.00	361	151.00	118
44.00	2344	78.00	1619	116.00	1141	152.00	284
45.00	2688	79.00	9088	117.00	2057	153.00	269
46.00	214	80.00	2336	118.00	910	154.00	369
47.00	4645	81.00	10071	119.00	1720	155.00	1075
48.00	1900	82.00	2102	122.00	172	157.00	750
49.00	14254	84.00	64	123.00	129	158.00	184
50.00	66616	85.00	129	124.00	292	159.00	593
51.00	20136	86.00	133	125.00	255	160.00	81
52.00	867	87.00	16229	126.00	68	161.00	840
56.00	5060	88.00	17312	127.00	220	167.00	50
57.00	9594	90.00	94	128.00	1488	169.00	64
58.00	673	91.00	1017	129.00	873	170.00	227
59.00	62	92.00	11042	130.00	1723	171.00	269
60.00	3068	93.00	16392	131.00	726	172.00	1398
61.00	18808	94.00	47088	134.00	296	174.00	437568
62.00	16005	95.00	414784	135.00	610	175.00	32704
63.00	11298	96.00	25872	137.00	738	176.00	425344
64.00	988	97.00	417	139.00	345	177.00	27616
65.00	576	99.00	53	140.00	209	178.00	595
67.00	869	101.00	51	141.00	3983	183.00	59
68.00	34824	102.00	54	142.00	467	199.00	63
69.00	35800	104.00	1729	143.00	4166	205.00	56
70.00	1379	105.00	689	144.00	247	236.00	59
71.00	16	106.00	1699	145.00	489	239.00	72
72.00	2185	107.00	145	146.00	718		
73.00	16776	110.00	219	147.00	80		

Report Date: 28-Apr-2020 08:15:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2601.D

Injection Date: 26-Apr-2020 13:04:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

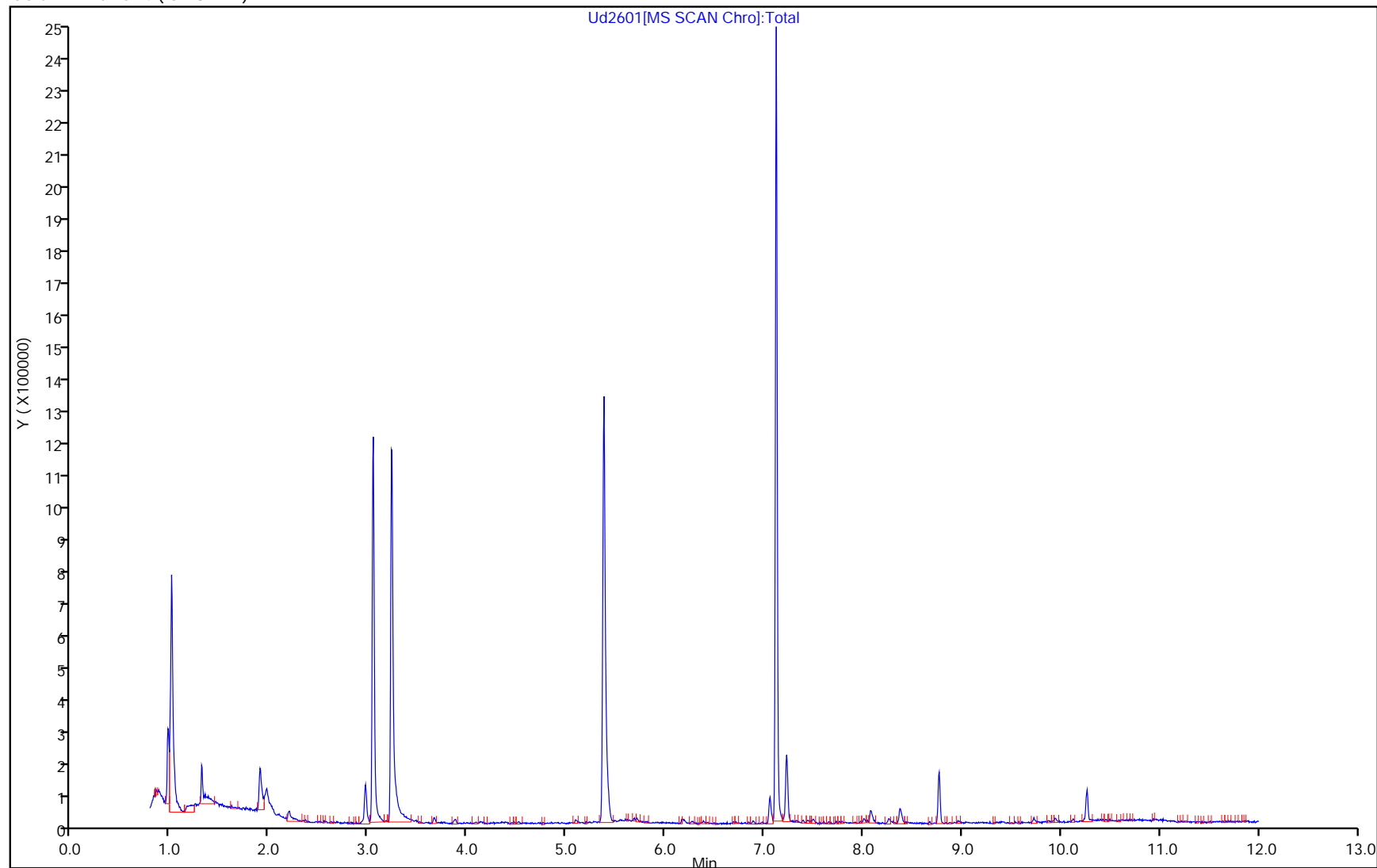
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-616541/10
 Matrix: Water Lab File ID: Ud2610.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/26/2020 16:30
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	99		70-130
460-00-4	4-Bromofluorobenzene	86		70-130

Report Date: 28-Apr-2020 08:32:03

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2610.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 26-Apr-2020 16:30:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-010
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:32:02 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:32:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	1441211	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	541234	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	281650	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	234836	10.0	8.59	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	265451	10.0	9.91	
\$ 6 BFB									
15 Acetone	58	1.896	1.901	-0.005	89	8864		6.02	
16 Methylene Chloride	84	2.194	2.194	0.000	88	10622		0.6786	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00089

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Apr-2020 08:32:03

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2610.D

Injection Date: 26-Apr-2020 16:30:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: mb

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

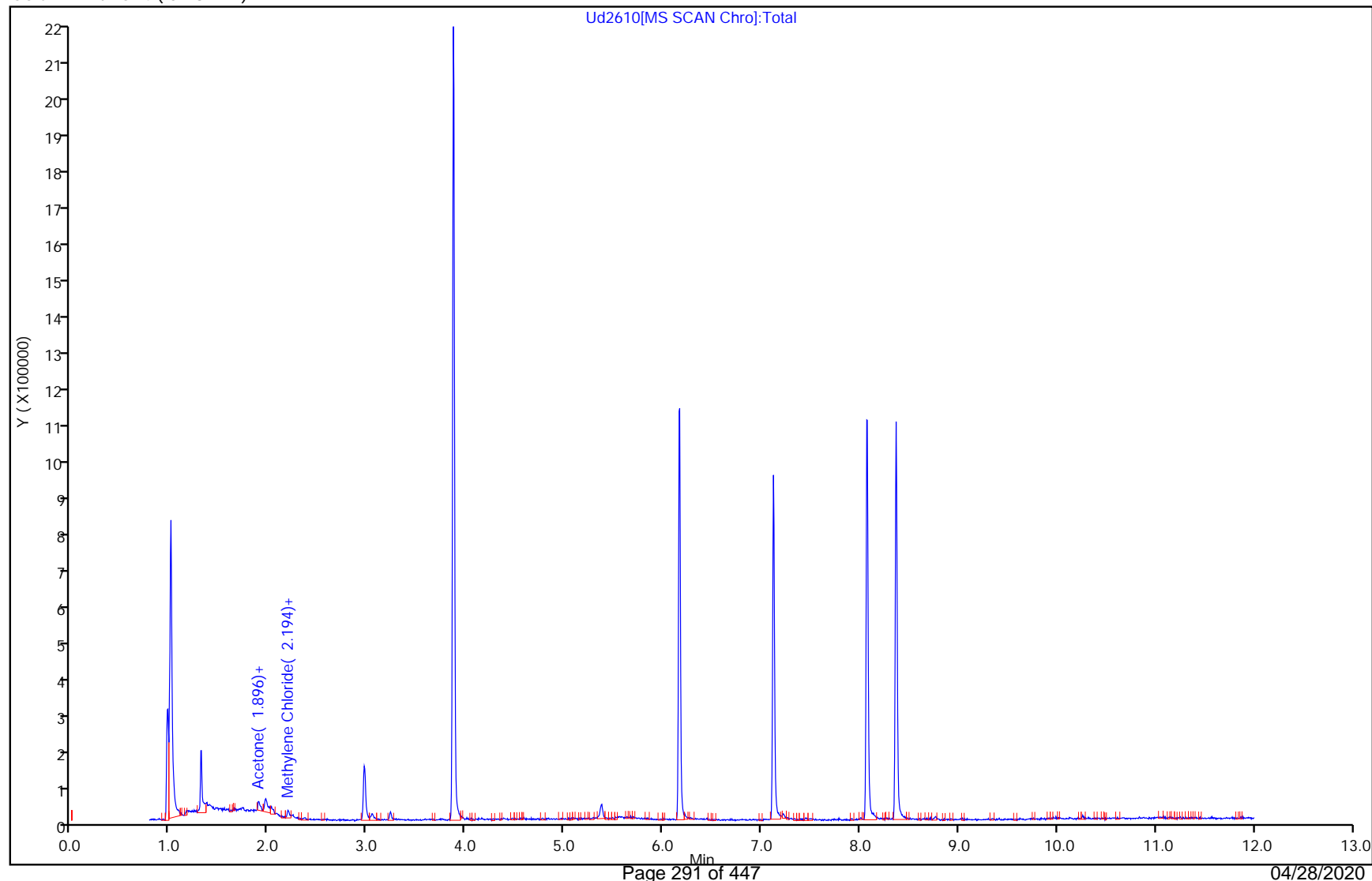
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:32:03

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2610.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 26-Apr-2020 16:30:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-010
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:32:02 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:32:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	8.59	85.94
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.91	99.15

Report Date: 28-Apr-2020 08:32:03

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

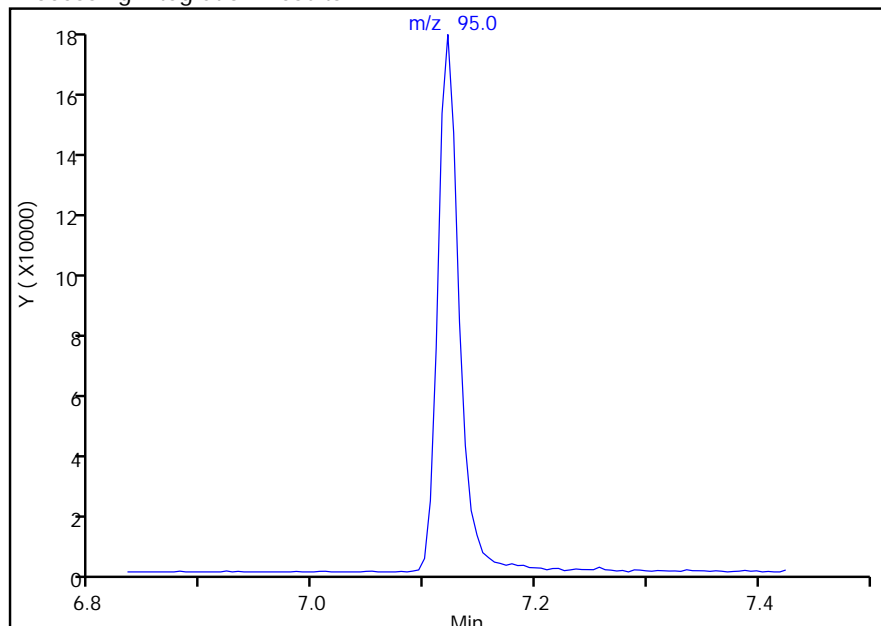
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2610.D		
Injection Date:	26-Apr-2020 16:30:30	Instrument ID:	CMSU
Lims ID:	mb		
Client ID:			
Operator ID:	rd	ALS Bottle#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

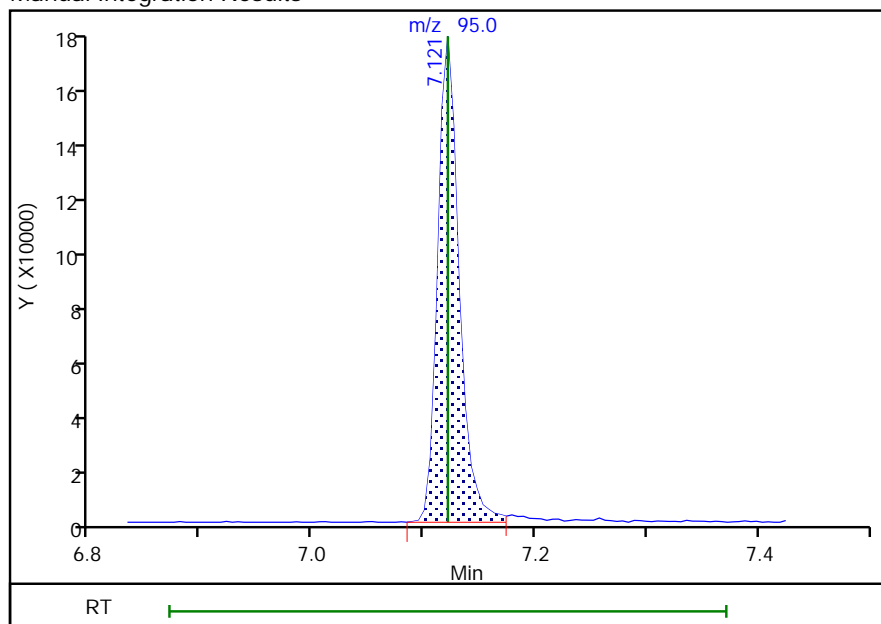
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	234836
Amount:	8.593945
Amount Units:	ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:31:14

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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04/28/2020

September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-616541/4
 Matrix: Water Lab File ID: Ud2604.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/26/2020 14:29
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	21.5		0.50	0.082
100-41-4	Ethylbenzene	22.1		0.50	0.099
127-18-4	Tetrachloroethene	20.4		0.50	0.18
108-88-3	Toluene	20.3		0.50	0.086
79-01-6	Trichloroethene	21.0		0.50	0.13
75-01-4	Vinyl chloride	25.1		0.50	0.16
1330-20-7	Xylenes, Total	43.7		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	96		70-130
460-00-4	4-Bromofluorobenzene	94		70-130

Report Date: 28-Apr-2020 08:18:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2604.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 26-Apr-2020 14:29:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-004
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:18:01 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:18:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1415572	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	552644	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	91	313705	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	252262	10.0	9.40	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	287374	10.0	9.64	
7 Dichlorodifluoromethane	85	1.086	1.086	0.000	99	417147	20.0	22.0	a
9 Vinyl chloride	62	1.237	1.237	0.000	98	419223	20.0	25.1	
8 Chloromethane	50	1.253	1.253	0.000	98	394156	20.0	19.0	
10 Bromomethane	94	1.405	1.405	0.000	99	261093	20.0	21.3	
11 Chloroethane	64	1.457	1.457	0.000	99	237750	20.0	20.5	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	99	393846	20.0	22.8	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	97	325031	20.0	18.9	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	210059	20.0	17.1	
15 Acetone	58	1.901	1.901	0.000	88	135548	100.0	93.7	
16 Methylene Chloride	84	2.194	2.194	0.000	86	363196	20.0	23.6	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	403527	200.0	235.8	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	986959	20.0	19.9	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	347863	20.0	20.6	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	553545	20.0	21.2	
21 Isopropyl ether	45	2.681	2.681	0.000	94	698667	16.0	90.0	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	89	843243	16.0	4374.0	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	245814	100.0	102.0	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	494631	20.0	20.6	
25 2,2-Dichloropropane	77	3.063	3.063	0.000	95	498305	20.0	20.7	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	198012	20.0	15.8	
27 Chloroform	83	3.287	3.287	0.000	99	609961	20.0	20.4	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	98	539486	20.0	21.7	
29 Carbon tetrachloride	117	3.518	3.518	0.000	98	491249	20.0	20.9	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	460345	20.0	22.2	
31 Benzene	78	3.664	3.664	0.000	95	1415177	20.0	21.5	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	436850	20.0	21.0	
33 Tert-amyl methyl ether	73	3.753	3.753	0.000	99	747686	16.0	67.8	

Report Date: 28-Apr-2020 08:18:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2604.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	95	415134	20.0	21.0	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	331248	20.0	22.0	a
36 Dibromomethane	93	4.386	4.386	0.000	93	232991	20.0	21.0	
37 Dichlorobromomethane	83	4.517	4.517	0.000	99	465522	20.0	21.7	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	550248	20.0	21.6	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	95	1788816	100.0	117.5	
40 Toluene	92	5.092	5.092	0.000	93	921449	20.0	20.3	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	518248	20.0	21.9	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	277608	20.0	20.8	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	378976	20.0	20.4	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	542025	20.0	21.6	
45 2-Hexanone	43	5.589	5.589	0.000	95	1267138	100.0	126.2	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	413964	20.0	21.8	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	381986	20.0	21.1	
48 Chlorobenzene	112	6.190	6.190	0.000	97	1073005	20.0	20.2	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	399351	20.0	21.7	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1738993	20.0	22.1	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1354134	20.0	22.1	
52 o-Xylene	91	6.682	6.682	0.000	94	1377895	20.0	21.5	
53 Styrene	104	6.698	6.698	0.000	97	1132450	20.0	21.5	
54 Bromoform	173	6.839	6.839	0.000	98	310583	20.0	19.8	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1747043	20.0	21.8	
56 Bromobenzene	156	7.231	7.231	0.000	93	520204	20.0	19.6	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	474193	20.0	22.9	
58 1,2,3-Trichloropropane	110	7.278	7.278	0.000	98	151434	20.0	21.2	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	2006664	20.0	22.0	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1189634	20.0	21.8	
61 1,3,5-Trimethylbenzene	105	7.472	7.472	0.000	93	1304952	20.0	21.2	a
62 4-Chlorotoluene	91	7.487	7.487	0.000	97	1372549	20.0	21.7	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1245810	20.0	20.7	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1233862	20.0	20.7	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1764709	20.0	21.1	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	939909	20.0	20.2	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1469687	20.0	20.7	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	935014	20.0	19.4	
70 n-Butylbenzene	91	8.376	8.376	0.000	97	1076548	20.0	21.3	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	97	898415	20.0	19.8	
71 1,2-Dibromo-3-Chloropropan	157	9.035	9.035	0.000	91	135150	20.0	21.5	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	437763	20.0	19.9	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	280002	20.0	18.9	
74 Naphthalene	128	9.930	9.930	0.000	99	1231356	20.0	19.7	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	408630	20.0	19.0	
S 76 Xylenes, Total	1				0		40.0	43.7	
S 77 Trihalomethanes, Total	1				0			83.7	
S 78 1,3-Dichloropropene, Total	1				0		40.0	43.5	

Report Date: 28-Apr-2020 08:18:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00167

Amount Added: 2.00

Units: uL

524 ISSU/2016_00089

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Apr-2020 08:18:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2604.D

Injection Date: 26-Apr-2020 14:29:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: lcs

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

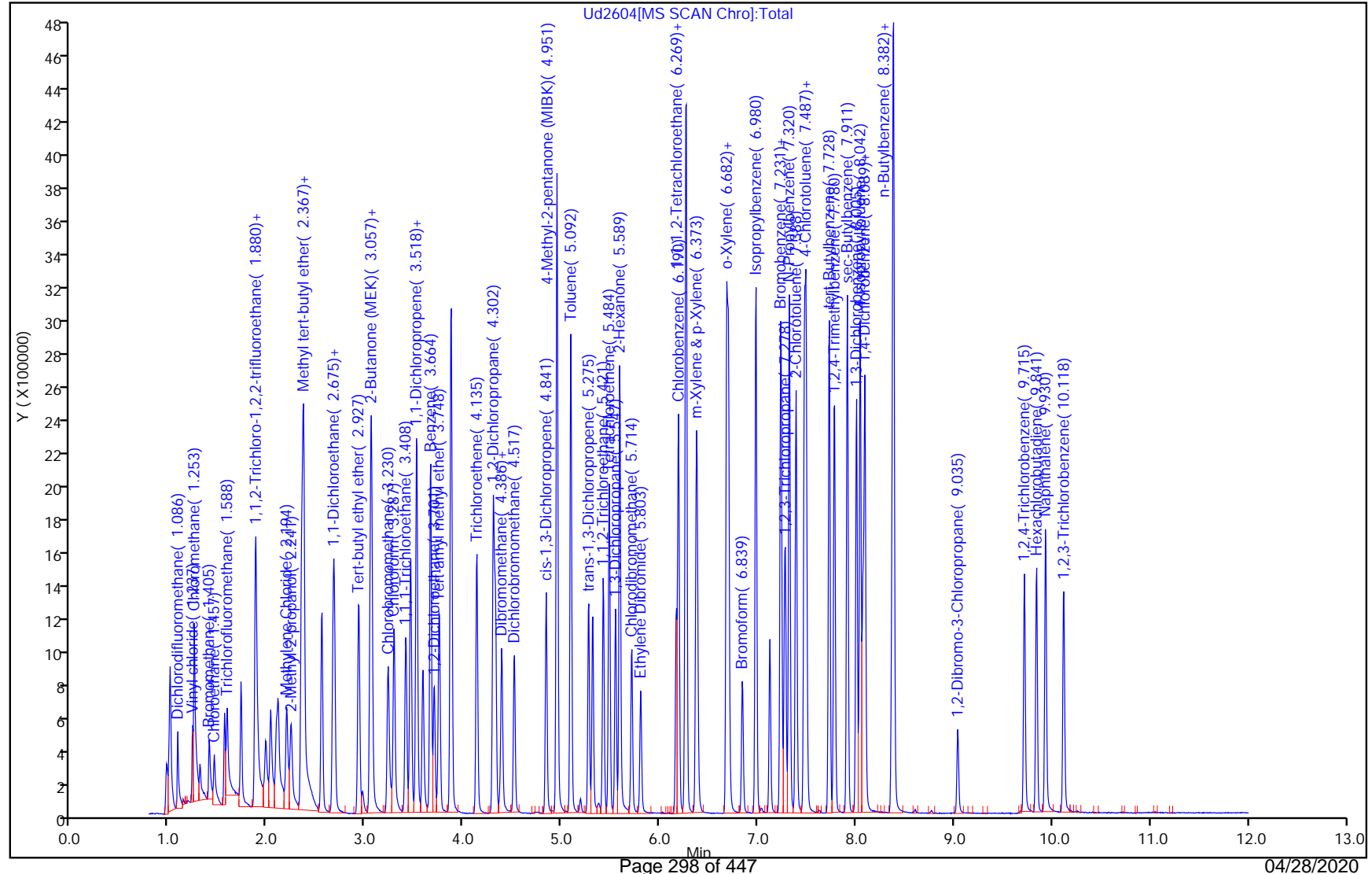
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:18:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2604.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 26-Apr-2020 14:29:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-004
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:18:01 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:18:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.40	93.99
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.64	96.37

Report Date: 28-Apr-2020 08:18:02

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2604.D		
Injection Date:	26-Apr-2020 14:29:30	Instrument ID:	CMSU
Lims ID:	lcs		
Client ID:			
Operator ID:	rd	ALS Bottle#:	4
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	4

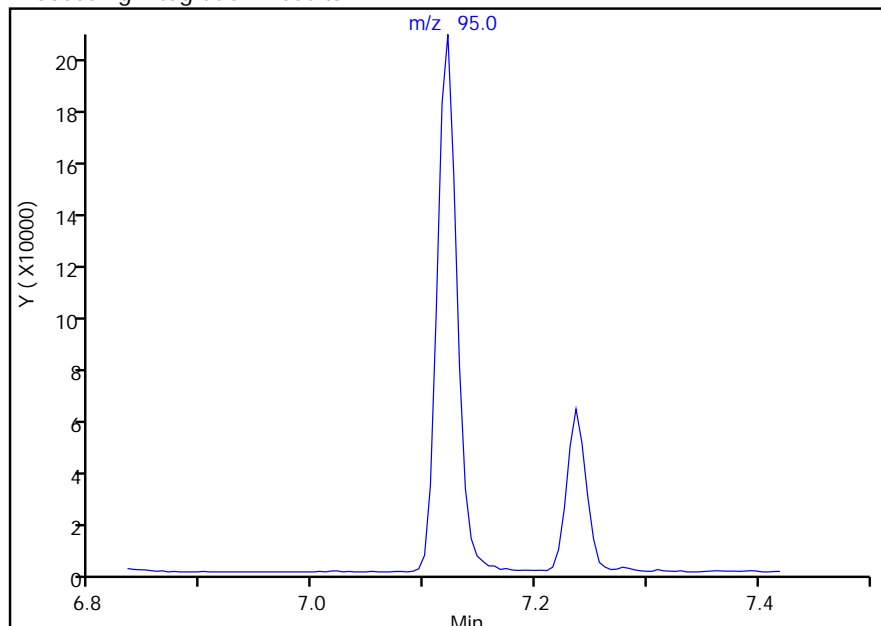
\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

Not Detected

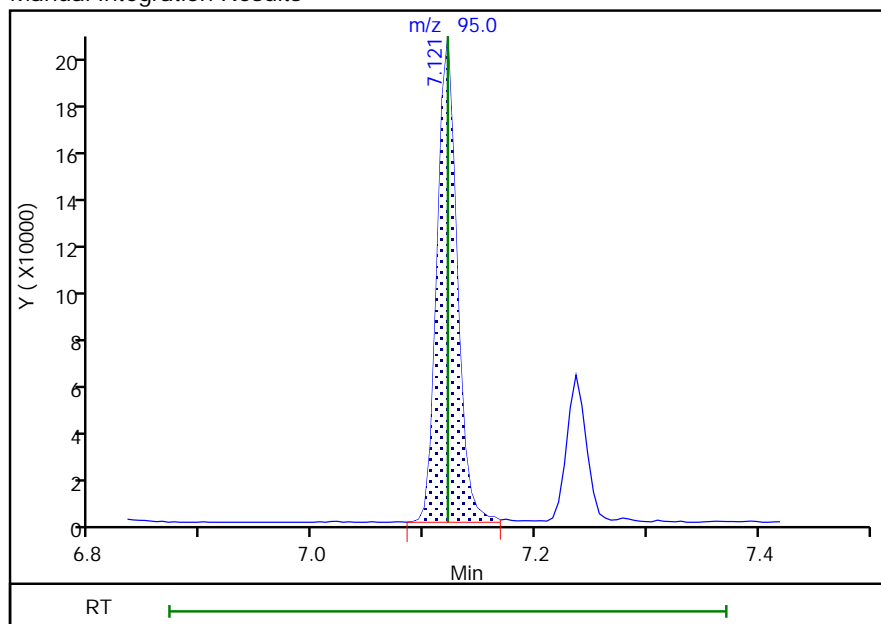
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
Area: 252262
Amount: 9.398863
Amount Units: ug/l



Reviewer: intarachau, 28-Apr-2020 08:17:34

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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04/28/2020

September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-616541/5
 Matrix: Water Lab File ID: Ud2605.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/26/2020 14:49
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 616541 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	20.0		0.50	0.082
100-41-4	Ethylbenzene	20.7		0.50	0.099
127-18-4	Tetrachloroethene	19.3		0.50	0.18
108-88-3	Toluene	18.7		0.50	0.086
79-01-6	Trichloroethene	19.1		0.50	0.13
75-01-4	Vinyl chloride	23.3		0.50	0.16
1330-20-7	Xylenes, Total	41.0		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	99		70-130
460-00-4	4-Bromofluorobenzene	95		70-130

Report Date: 28-Apr-2020 08:19:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2605.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 26-Apr-2020 14:49:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-005
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:19:14 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:19:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1321858	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	527181	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	89	296315	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	238601	10.0	9.52	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	278423	10.0	9.88	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	364803	20.0	20.7	a
9 Vinyl chloride	62	1.237	1.237	0.000	98	362773	20.0	23.3	
8 Chloromethane	50	1.258	1.253	0.005	99	343970	20.0	17.7	
10 Bromomethane	94	1.404	1.405	-0.001	99	236231	20.0	20.6	
11 Chloroethane	64	1.457	1.457	0.000	99	195318	20.0	18.1	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	98	363371	20.0	22.6	
14 1,1,2-Trichloro-1,2,2-trif	151	1.875	1.875	0.000	96	278716	20.0	17.4	
13 1,1-Dichloroethene	96	1.886	1.880	0.006	95	217830	20.0	19.0	
15 Acetone	58	1.896	1.901	-0.005	87	124324	100.0	92.0	
16 Methylene Chloride	84	2.194	2.194	0.000	86	339331	20.0	23.6	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	370287	200.0	231.7	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	897081	20.0	19.4	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	299029	20.0	19.0	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	483997	20.0	19.8	
21 Isopropyl ether	45	2.681	2.681	0.000	94	639479	16.0	88.2	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	90	757720	16.0	4209.0	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	232380	100.0	103.3	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	442505	20.0	19.7	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	94	432642	20.0	19.2	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	202513	20.0	17.3	
27 Chloroform	83	3.293	3.287	0.006	99	545226	20.0	19.5	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	98	471145	20.0	19.9	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	96	428549	20.0	19.1	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	402846	20.0	20.4	
31 Benzene	78	3.664	3.664	0.000	94	1251027	20.0	20.0	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	396980	20.0	20.0	
33 Tert-amyl methyl ether	73	3.748	3.753	-0.005	98	683727	16.0	66.4	

Report Date: 28-Apr-2020 08:19:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2605.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	95	361151	20.0	19.1	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	293343	20.0	20.4	a
36 Dibromomethane	93	4.386	4.386	0.000	89	212007	20.0	20.0	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	99	413356	20.0	20.2	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	497144	20.0	20.5	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	95	1663864	100.0	114.6	
40 Toluene	92	5.092	5.092	0.000	92	811092	20.0	18.7	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	475914	20.0	21.0	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	258817	20.0	20.3	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	337968	20.0	19.3	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	500144	20.0	20.9	
45 2-Hexanone	43	5.589	5.589	0.000	94	1179487	100.0	124.3	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	377256	20.0	21.0	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	352903	20.0	20.4	
48 Chlorobenzene	112	6.190	6.190	0.000	97	964440	20.0	19.0	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	355230	20.0	20.5	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1537770	20.0	20.7	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1185430	20.0	20.5	
52 o-Xylene	91	6.682	6.682	0.000	93	1236486	20.0	20.5	
53 Styrene	104	6.697	6.698	-0.001	97	1026126	20.0	20.6	
54 Bromoform	173	6.839	6.839	0.000	97	287554	20.0	19.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1539306	20.0	20.3	
56 Bromobenzene	156	7.231	7.231	0.000	88	466261	20.0	18.6	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	435289	20.0	22.2	
58 1,2,3-Trichloropropane	110	7.278	7.278	0.000	98	140890	20.0	20.8	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1770761	20.0	20.6	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1061571	20.0	20.6	
61 1,3,5-Trimethylbenzene	105	7.472	7.472	0.000	93	1150477	20.0	19.8	a
62 4-Chlorotoluene	91	7.492	7.487	0.005	97	1235863	20.0	20.7	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1096956	20.0	19.3	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1087791	20.0	19.3	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1536168	20.0	19.5	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	830406	20.0	18.9	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1277643	20.0	19.0	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	856089	20.0	18.9	
70 n-Butylbenzene	91	8.382	8.376	0.006	97	932790	20.0	19.5	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	823833	20.0	19.2	
71 1,2-Dibromo-3-Chloropropan	157	9.035	9.035	0.000	91	126755	20.0	21.3	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	389323	20.0	18.8	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	253162	20.0	18.1	
74 Naphthalene	128	9.930	9.930	0.000	99	1135747	20.0	19.3	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	368308	20.0	18.2	
S 76 Xylenes, Total	1				0		40.0	41.0	
S 78 1,3-Dichloropropene, Total	1				0		40.0	41.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Report Date: 28-Apr-2020 08:19:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

524MMix_00167

Amount Added: 2.00

Units: uL

524 ISSU/2016_00089

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 28-Apr-2020 08:19:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2605.D

Injection Date: 26-Apr-2020 14:49:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: lcsd

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

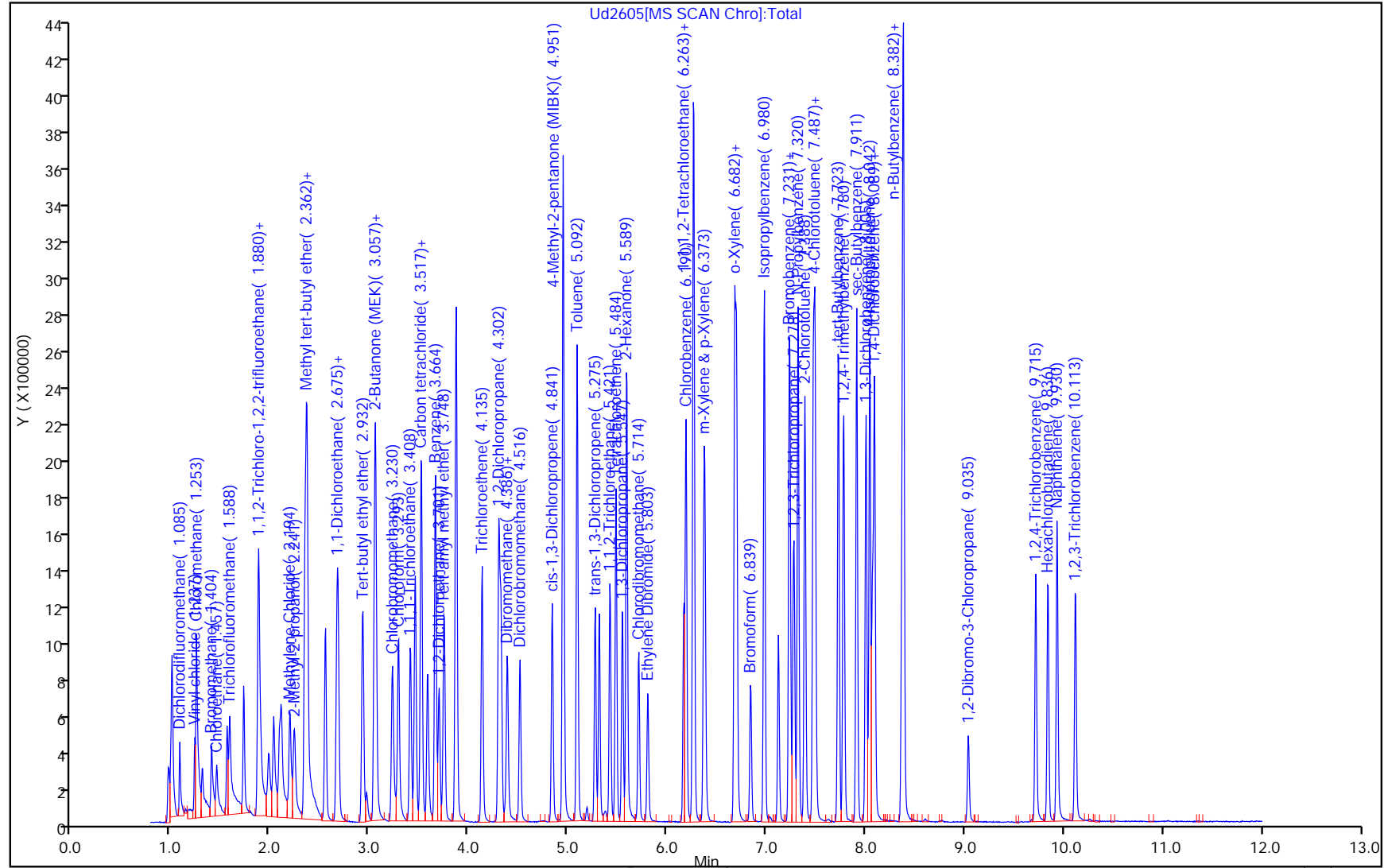
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 28-Apr-2020 08:19:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2605.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 26-Apr-2020 14:49:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063399-005
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\U524.2.m
 Limit Group: 524.2
 Last Update: 28-Apr-2020 08:19:14 Calib Date: 08-Apr-2020 18:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Savannah\ChromData\CMSU\20200408-63087.b\Uc0814.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1006

First Level Reviewer: intarachau

Date: 28-Apr-2020 08:19:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.52	95.20
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.88	98.85

Report Date: 28-Apr-2020 08:19:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

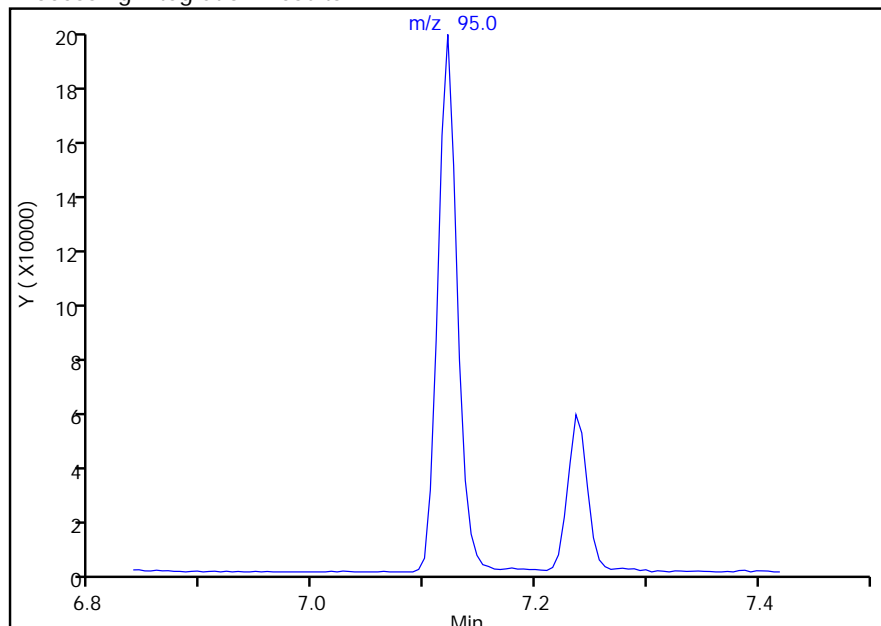
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200426-63399.b\Ud2605.D		
Injection Date:	26-Apr-2020 14:49:30	Instrument ID:	CMSU
Lims ID:	lcsd		
Client ID:			
Operator ID:	rd	ALS Bottle#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	5

§ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

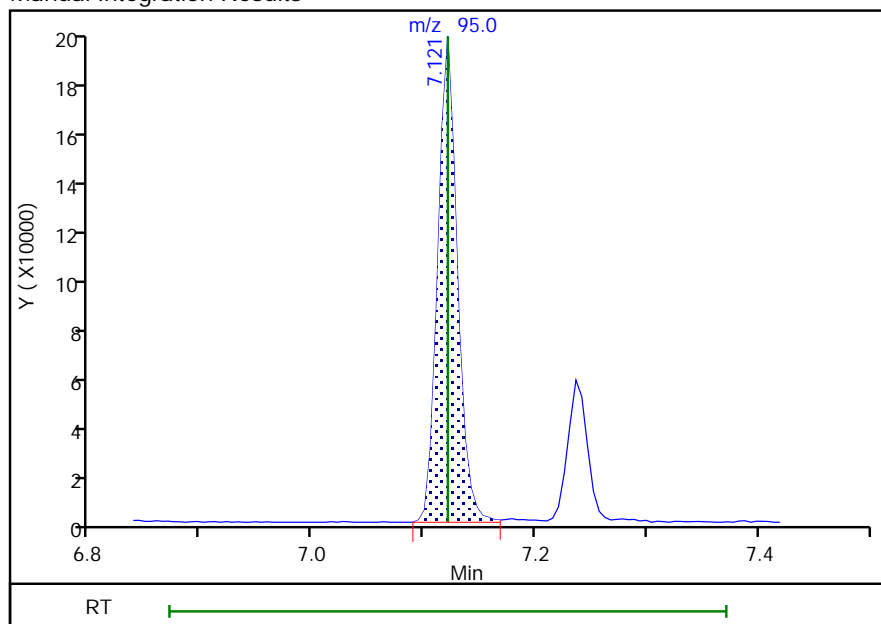
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 238601
Amount: 9.520131
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 28-Apr-2020 08:18:23

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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04/28/2020

September 2020

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 04/08/2020 13:43
 Analysis Batch Number: 614432 End Date: 04/08/2020 18:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-614432/1		04/08/2020 13:43	1	Uc0801.D	Rtx-624 0.18 (mm)
IC 680-614432/6		04/08/2020 15:56	1	Uc0807.D	Rtx-624 0.18 (mm)
ZZZZZ		04/08/2020 15:56	1		Rtx-624 0.18 (mm)
IC 680-614432/7		04/08/2020 16:16	1	Uc0808.D	Rtx-624 0.18 (mm)
ZZZZZ		04/08/2020 16:16	1		Rtx-624 0.18 (mm)
IC 680-614432/8		04/08/2020 16:37	1	Uc0809.D	Rtx-624 0.18 (mm)
ZZZZZ		04/08/2020 16:37	1		Rtx-624 0.18 (mm)
IC 680-614432/9		04/08/2020 16:57	1	Uc0810.D	Rtx-624 0.18 (mm)
ZZZZZ		04/08/2020 16:57	1		Rtx-624 0.18 (mm)
IC 680-614432/10		04/08/2020 17:17	1	Uc0811.D	Rtx-624 0.18 (mm)
ICIS 680-614432/11		04/08/2020 17:37	1	Uc0812.D	Rtx-624 0.18 (mm)
IC 680-614432/12		04/08/2020 17:58	1	Uc0813.D	Rtx-624 0.18 (mm)
IC 680-614432/13		04/08/2020 18:18	1	Uc0814.D	Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 04/09/2020 14:42
 Analysis Batch Number: 614624 End Date: 04/10/2020 00:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-614624/1		04/09/2020 14:42	1	Uc0901.D	Rtx-624 0.18 (mm)
ICV 680-614624/2		04/09/2020 15:11	1	Uc0902.D	Rtx-624 0.18 (mm)
CCVIS 680-614624/4		04/09/2020 15:51	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 16:12	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 16:32	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 17:12	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 17:53	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 18:13	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 18:33	100		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 18:54	100		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 19:14	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 19:34	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 19:54	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 20:15	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 20:35	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 20:55	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 21:15	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 21:36	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 21:56	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 22:16	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 22:36	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 22:57	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 23:17	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 23:37	1		Rtx-624 0.18 (mm)
ZZZZZ		04/09/2020 23:57	1		Rtx-624 0.18 (mm)
ZZZZZ		04/10/2020 00:18	1		Rtx-624 0.18 (mm)
ZZZZZ		04/10/2020 00:38	1		Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 04/26/2020 13:04
 Analysis Batch Number: 616541 End Date: 04/27/2020 00:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-616541/1		04/26/2020 13:04	1	Ud2601.D	Rtx-624 0.18 (mm)
CCVIS 680-616541/2		04/26/2020 13:49	1	Ud2602.D	Rtx-624 0.18 (mm)
LCS 680-616541/4		04/26/2020 14:29	1	Ud2604.D	Rtx-624 0.18 (mm)
LCSD 680-616541/5		04/26/2020 14:49	1	Ud2605.D	Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 15:30	1		Rtx-624 0.18 (mm)
MB 680-616541/10		04/26/2020 16:30	1	Ud2610.D	Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 20:29	1		Rtx-624 0.18 (mm)
680-182910-4		04/26/2020 20:49	1	Ud2612.D	Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 21:09	1		Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 21:29	1		Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 21:50	1		Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 22:10	1		Rtx-624 0.18 (mm)
680-182910-2		04/26/2020 22:30	1	Ud2617.D	Rtx-624 0.18 (mm)
680-182910-1		04/26/2020 22:50	1	Ud2618.D	Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 23:10	1		Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 23:31	1		Rtx-624 0.18 (mm)
ZZZZZ		04/26/2020 23:51	1		Rtx-624 0.18 (mm)
680-182910-3		04/27/2020 00:11	1	Ud2622.D	Rtx-624 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Batch Number: 616541 Batch Start Date: 04/26/20 13:04 Batch Analyst: Intaracha, Unchaleeya

Batch Method: 524.2 Batch End Date: 04/27/20 00:11

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	ChlorineCheck	FinalAmount	524 ISSU/2016 00089	524MMix 00167
BFB 680-616541/1		524.2			5 mL		5 mL		
CCVIS 680-616541/2		524.2			5 mL		5 mL	5 uL	2 uL
LCS 680-616541/4		524.2			5 mL		5 mL	5 uL	2 uL
LCSD 680-616541/5		524.2			5 mL		5 mL	5 uL	2 uL
MB 680-616541/10		524.2			5 mL		5 mL	5 uL	
680-182910-A-4	TB2021-03	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-182910-A-2	GWK003-2021-1	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-182910-A-1	GWK016-2021-1	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-182910-A-3	GWVA2-2021-1	524.2	T	<2	5 mL	N	5 mL	5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_bfb 00215					
BFB 680-616541/1		524.2		2 uL					
CCVIS 680-616541/2		524.2							
LCS 680-616541/4		524.2							
LCSD 680-616541/5		524.2							
MB 680-616541/10		524.2							
680-182910-A-4	TB2021-03	524.2	T						
680-182910-A-2	GWK003-2021-1	524.2	T						
680-182910-A-1	GWK016-2021-1	524.2	T						
680-182910-A-3	GWVA2-2021-1	524.2	T						

Batch Notes	
pH Indicator ID	pHPaper 1 - 2.5_00062
Residual Chlorine Indicator ID	KIStarchPaper_00005

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Batch Number: 616541 Batch Start Date: 04/26/20 13:04 Batch Analyst: Intaracha, UnchaleeyaBatch Method: 524.2 Batch End Date: 04/27/20 00:11

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

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04/28/2020

September 2020

Method 504.1

**EDB, DBCP, and 1,2,3-TCP (GC) by
Method 504.1**

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): CLP I 0.25 ID: 0.25 (mm) GC Column (2): CLP II 0.25 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	PCA1 #	PCA2 #
GWK016-2021-1	680-182910-1		83
GWK003-2021-1	680-182910-2	90	
GWVA2-2021-1	680-182910-3	89	
TB2021-03	680-182910-4	89	
	MB 680-616089/3-A		80
	LCS 680-616089/4-A	77	
	LCS 680-616089/5-A	80	

PCA = Pentachloroethane

QC LIMITS
70-130

Column to be used to flag recovery values

FORM II 504.1

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XD22017.D
 Lab ID: LCS 680-616089/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylene Dibromide	0.100	0.101	101	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM III
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XD22018.D
 Lab ID: LCSD 680-616089/5-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Ethylene Dibromide	0.100	0.0991	99	2	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: MB 680-616089/3-A
 Matrix: Water Date Extracted: 04/22/2020 11:00
 Lab File ID: (1) XD22016.D Lab File ID: (2) XD22016.D
 Date Analyzed: (1) 04/22/2020 15:00 Date Analyzed: (2) 04/22/2020 15:00
 Instrument ID: (1) CSGX Instrument ID: (2) CSGX
 GC Column: (1) CLP I 0.25 ID: 0.25(mm) GC Column: (2) CLP II 0.25 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-616089/4-A	04/22/2020 15:10	04/22/2020 15:10
	LCSD 680-616089/5-A	04/22/2020 15:19	04/22/2020 15:19
GWK016-2021-1	680-182910-1	04/22/2020 18:46	04/22/2020 18:46
GWK003-2021-1	680-182910-2	04/22/2020 18:56	04/22/2020 18:56
GWVA2-2021-1	680-182910-3	04/22/2020 19:06	04/22/2020 19:06
TB2021-03	680-182910-4	04/22/2020 19:15	04/22/2020 19:15

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-616089/4-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 04/22/2020 15:10 Date Analyzed (2): 04/22/2020 15:10
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0983		2.8
	2		1.59	1.56	1.62	0.101		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-616089/5-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 04/22/2020 15:19 Date Analyzed (2): 04/22/2020 15:19
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0988		0.2
	2		1.59	1.56	1.62	0.0991		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWK016-2021-1 Lab Sample ID: 680-182910-1
 Matrix: Water Lab File ID: XD22039.D
 Analysis Method: 504.1 Date Collected: 04/16/2020 13:49
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35.4 (mL) Date Analyzed: 04/22/2020 18:46
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22039.D
 Lims ID: 680-182910-E-1-A
 Client ID: GWK016-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 18:46:21 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-039
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	430895	0.3570
2	2.552	2.552	0.000	381977	0.3616

RPD = 1.27

Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22039.D

Injection Date: 22-Apr-2020 18:46:21

Instrument ID: CSGX

Operator ID:

Lims ID: 680-182910-E-1-A

Lab Sample ID: 680-182910-1

Worklist Smp#: 39

Client ID: GWK016-2021-1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

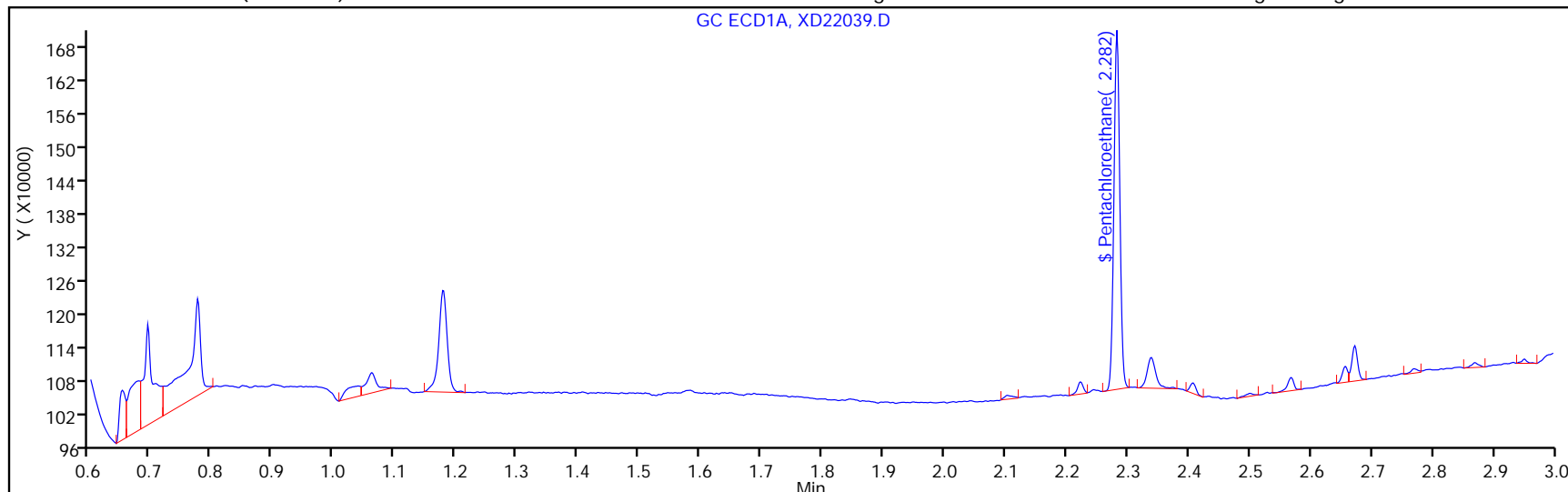
ALS Bottle#: 39

Method: EDBDBCP_CSGX

Limit Group: 504.1

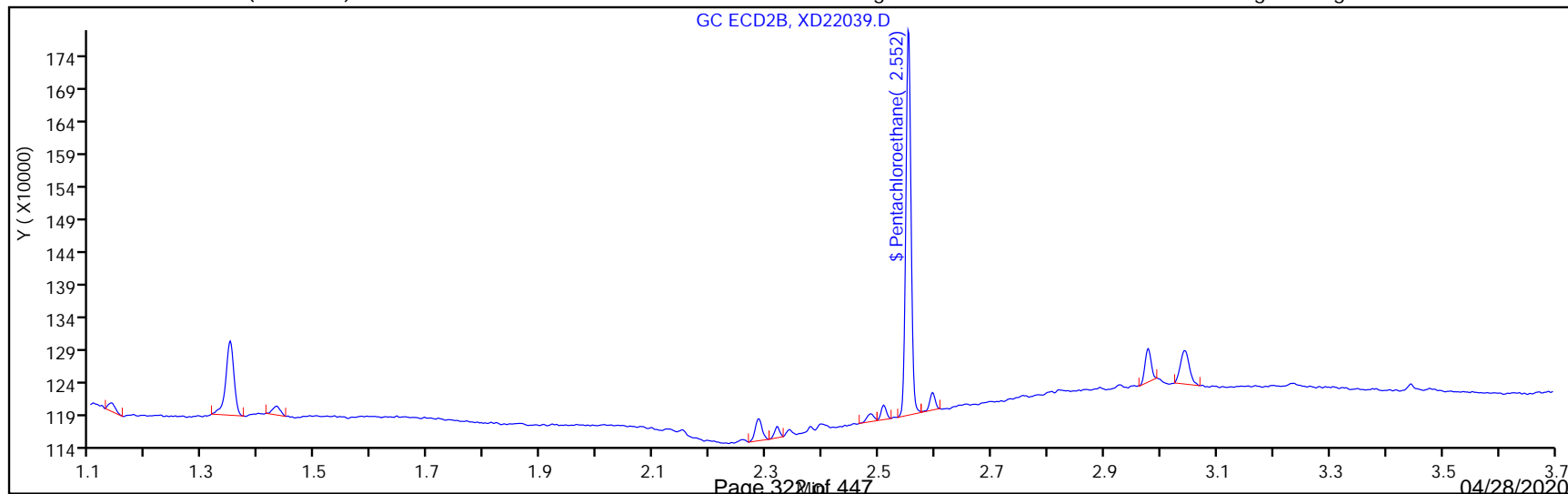
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22039.D
 Lims ID: 680-182910-E-1-A
 Client ID: GWK016-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 18:46:21 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-039
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3570	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3616	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWK016-2021-1 Lab Sample ID: 680-182910-1
 Matrix: Water Lab File ID: XD22039.D
 Analysis Method: 504.1 Date Collected: 04/16/2020 13:49
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35.4 (mL) Date Analyzed: 04/22/2020 18:46
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	83		70-130

Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22039.D
 Lims ID: 680-182910-E-1-A
 Client ID: GWK016-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 18:46:21 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-039
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	430895	0.3570
2	2.552	2.552	0.000	381977	0.3616

RPD = 1.27

Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22039.D

Injection Date: 22-Apr-2020 18:46:21

Instrument ID: CSGX

Operator ID:

Lims ID: 680-182910-E-1-A

Lab Sample ID: 680-182910-1

Worklist Smp#: 39

Client ID: GWK016-2021-1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

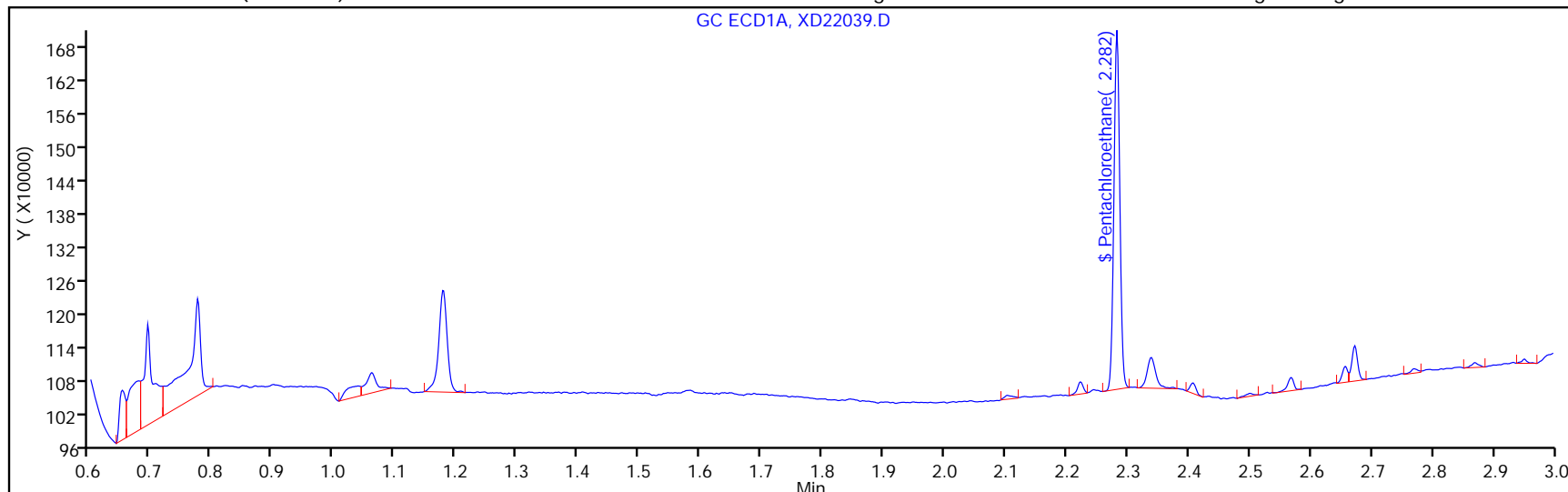
ALS Bottle#: 39

Method: EDBDBCP_CSGX

Limit Group: 504.1

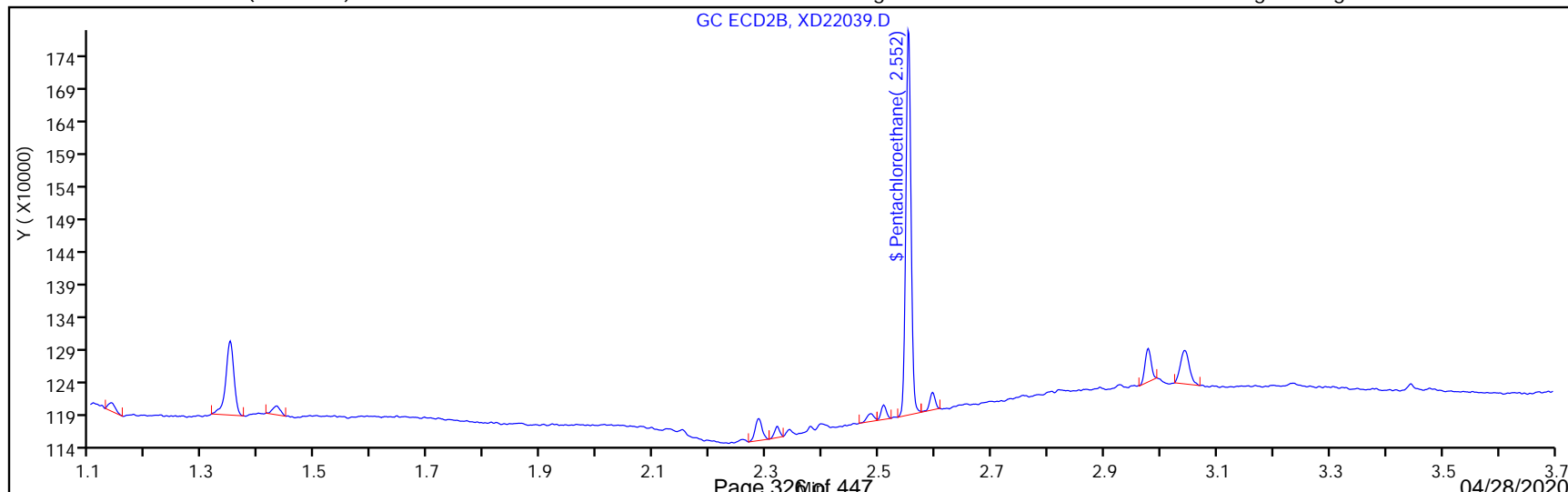
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22039.D
 Lims ID: 680-182910-E-1-A
 Client ID: GWK016-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 18:46:21 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-039
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3570	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3616	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWK003-2021-1 Lab Sample ID: 680-182910-2
 Matrix: Water Lab File ID: XD22040.D
 Analysis Method: 504.1 Date Collected: 04/16/2020 14:15
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35.2 (mL) Date Analyzed: 04/22/2020 18:56
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	90		70-130

Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22040.D
 Lims ID: 680-182910-E-2-A
 Client ID: GWK003-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 18:56:18 ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-040
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	477277	0.3955
2	2.553	2.552	0.001	399737	0.3784

RPD = 4.41

Report Date: 23-Apr-2020 14:28:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22040.D

Injection Date: 22-Apr-2020 18:56:18

Instrument ID: CSGX

Operator ID:

Lims ID: 680-182910-E-2-A

Lab Sample ID: 680-182910-2

Worklist Smp#: 40

Client ID: GWK003-2021-1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

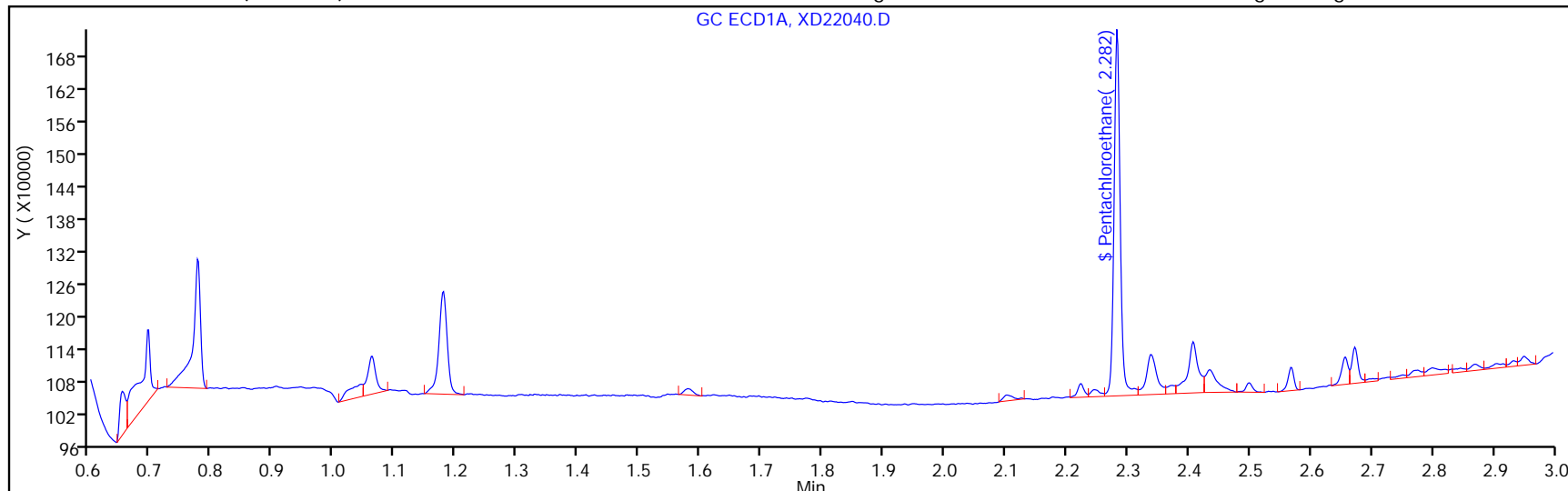
ALS Bottle#: 40

Method: EDBDBCP_CSGX

Limit Group: 504.1

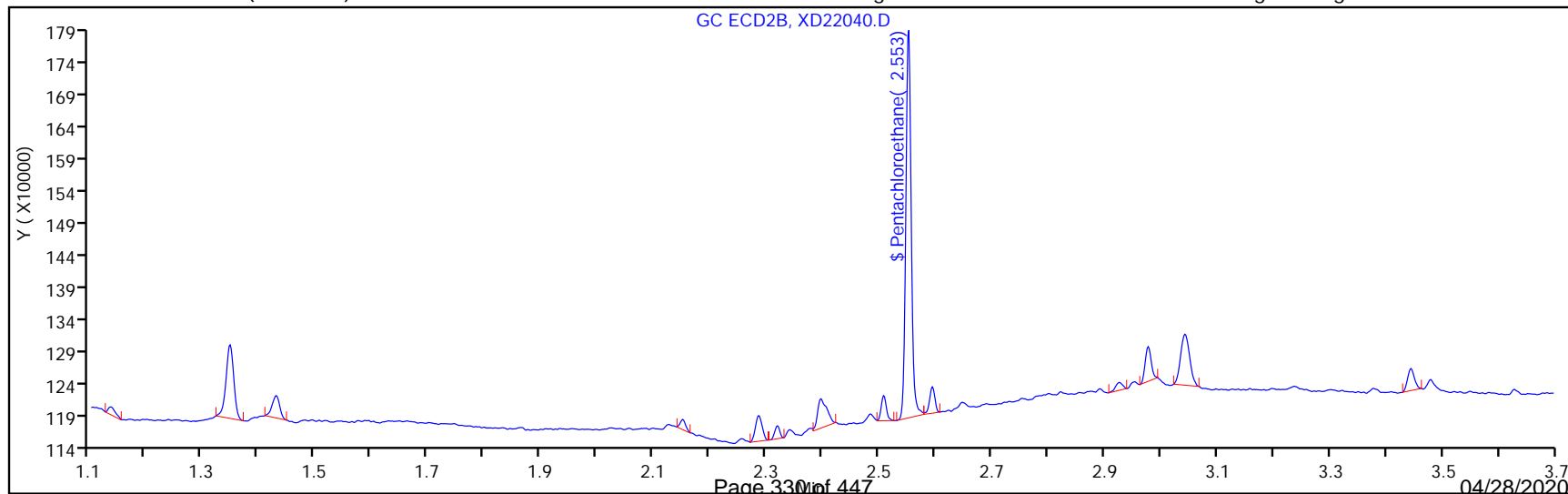
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:50

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Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22040.D
 Lims ID: 680-182910-E-2-A
 Client ID: GWK003-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 18:56:18 ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-040
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3955	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3784	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: GWVA2-2021-1 Lab Sample ID: 680-182910-3
 Matrix: Water Lab File ID: XD22041.D
 Analysis Method: 504.1 Date Collected: 04/16/2020 15:05
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35.9 (mL) Date Analyzed: 04/22/2020 19:06
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0024

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	89		70-130

Report Date: 23-Apr-2020 14:28:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22041.D
 Lims ID: 680-182910-D-3-A
 Client ID: GWVA2-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 19:06:08 ALS Bottle#: 41 Worklist Smp#: 41
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-041
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	471116	0.3904
2	2.553	2.552	0.001	391097	0.3702

RPD = 5.29

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Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22041.D

Injection Date: 22-Apr-2020 19:06:08

Instrument ID: CSGX

Operator ID:

Lims ID: 680-182910-D-3-A

Lab Sample ID: 680-182910-3

Worklist Smp#: 41

Client ID: GWVA2-2021-1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

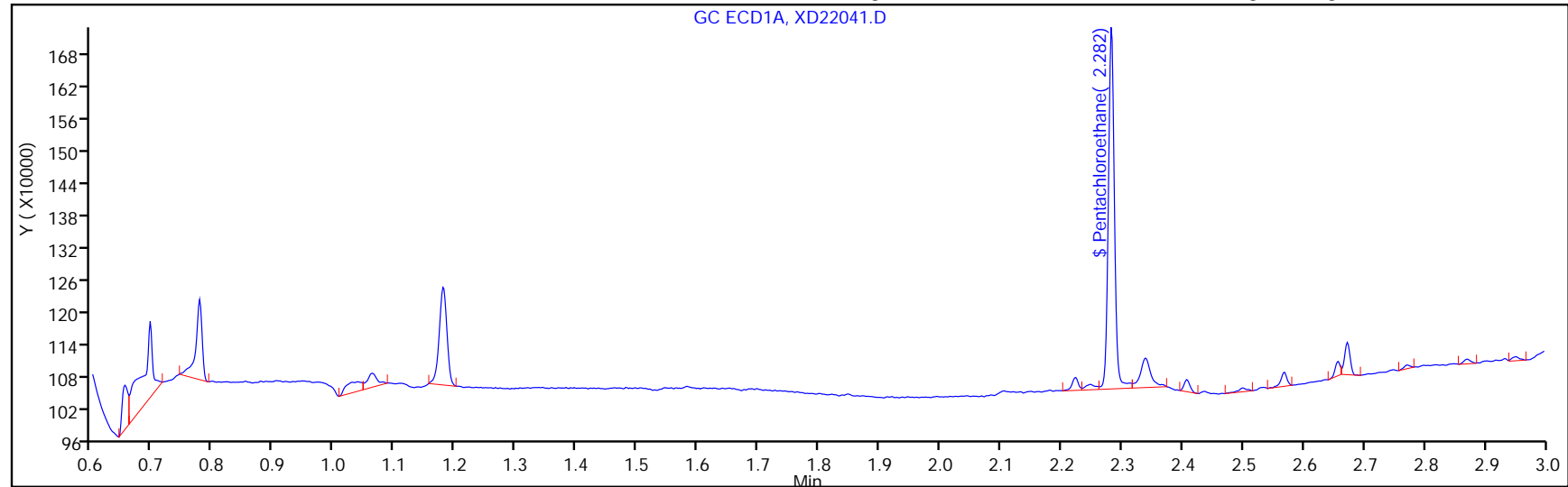
ALS Bottle#: 41

Method: EDBDBCP_CSGX

Limit Group: 504.1

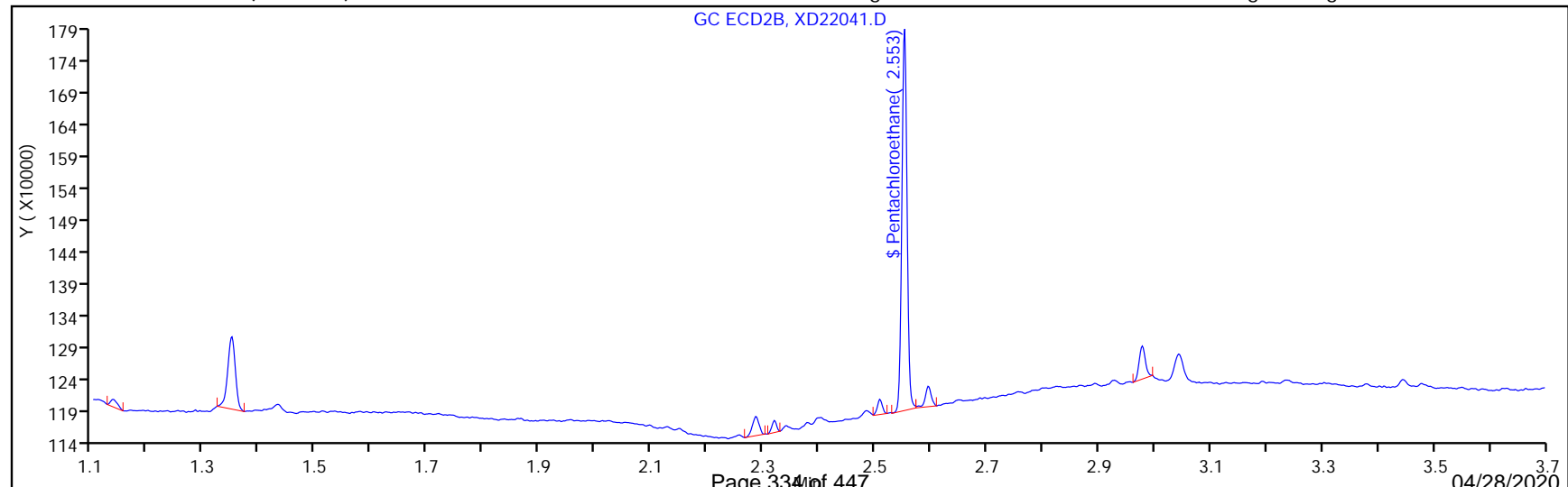
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22041.D
 Lims ID: 680-182910-D-3-A
 Client ID: GWVA2-2021-1
 Sample Type: Client
 Inject. Date: 22-Apr-2020 19:06:08 ALS Bottle#: 41 Worklist Smp#: 41
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-041
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3904	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3702	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: TB2021-03 Lab Sample ID: 680-182910-4
 Matrix: Water Lab File ID: XD22042.D
 Analysis Method: 504.1 Date Collected: 04/16/2020 16:17
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 36.1 (mL) Date Analyzed: 04/22/2020 19:15
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.017	0.0024

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	89		70-130

Report Date: 23-Apr-2020 14:28:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22042.D
 Lims ID: 680-182910-D-4-A
 Client ID: TB2021-03
 Sample Type: Client
 Inject. Date: 22-Apr-2020 19:15:56 ALS Bottle#: 42 Worklist Smp#: 42
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-042
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	468992	0.3886
2	2.553	2.552	0.001	385976	0.3654

RPD = 6.16

Report Date: 23-Apr-2020 14:28:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22042.D

Injection Date: 22-Apr-2020 19:15:56

Instrument ID: CSGX

Operator ID:

Lims ID: 680-182910-D-4-A

Lab Sample ID: 680-182910-4

Worklist Smp#: 42

Client ID: TB2021-03

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

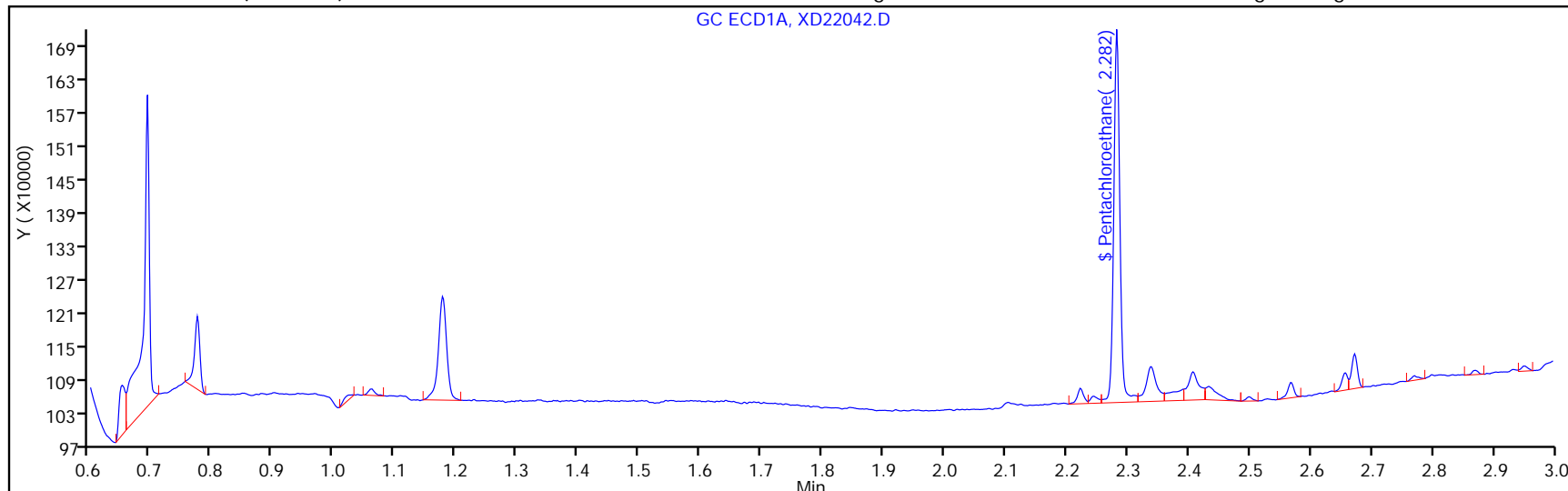
ALS Bottle#: 42

Method: EDBDBCP_CSGX

Limit Group: 504.1

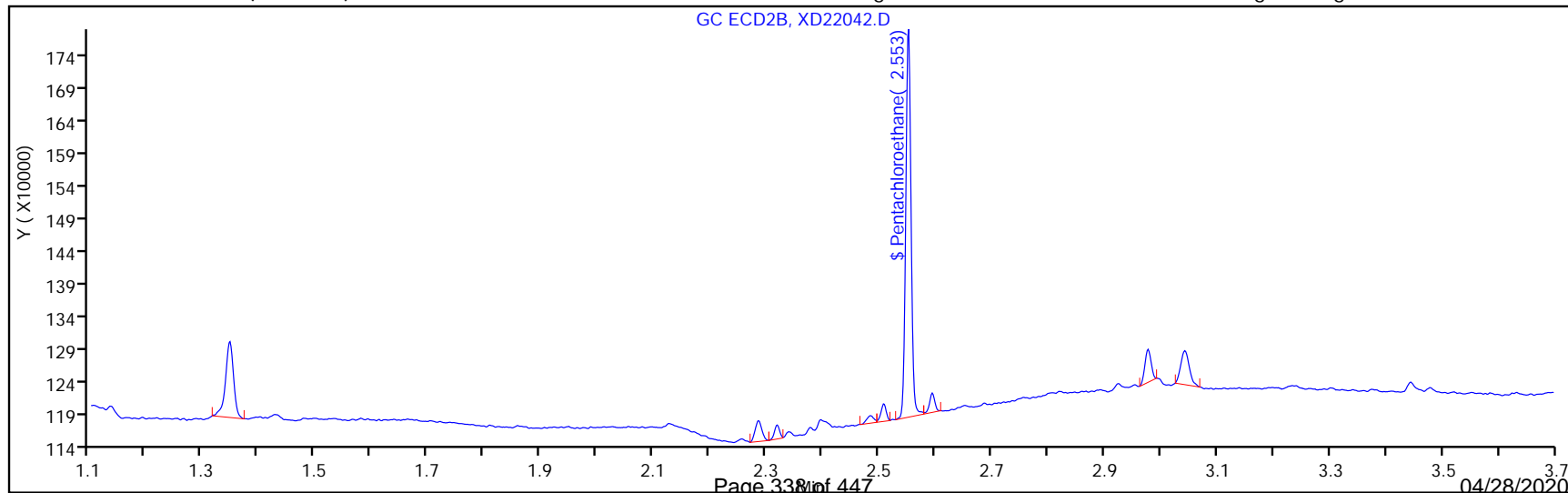
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22042.D
 Lims ID: 680-182910-D-4-A
 Client ID: TB2021-03
 Sample Type: Client
 Inject. Date: 22-Apr-2020 19:15:56 ALS Bottle#: 42 Worklist Smp#: 42
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-042
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3886	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3654	0.00

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 616105
 SDG No.: _____
 Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 04/22/2020 13:21 Calibration End Date: 04/22/2020 14:30 Calibration ID: 75356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616105/13	XD22013.D
Level 2	IC 680-616105/12	XD22012.D
Level 3	IC 680-616105/11	XD22011.D
Level 4	IC 680-616105/10	XD22010.D
Level 5	IC 680-616105/9	XD22009.D
Level 6	IC 680-616105/8	XD22008.D
Level 7	IC 680-616105/7	XD22007.D
Level 8	IC 680-616105/6	XD22006.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.061						1.032 - 1.092	1.061
Ethylene Dibromide	1.240	1.239	1.239	1.239	1.238	1.238	1.240	1.238			1.208 - 1.268	1.239
1,2,3-Trichloropropane	2.170	2.169	2.169	2.168	2.168	2.168	2.168	2.168			2.138 - 2.198	2.169
1,2-Dibromo-3-Chloropropane	2.899	2.899	2.899	2.899	2.899	2.900	2.900	2.899			2.868 - 2.928	2.899
Pentachloroethane	2.283	2.282	2.282	2.283	2.283	2.283	2.283	2.283			2.253 - 2.313	2.283

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 616105

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2020 13:21 Calibration End Date: 04/22/2020 14:30 Calibration ID: 75356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616105/13	XD22013.D
Level 2	IC 680-616105/12	XD22012.D
Level 3	IC 680-616105/11	XD22011.D
Level 4	IC 680-616105/10	XD22010.D
Level 5	IC 680-616105/9	XD22009.D
Level 6	IC 680-616105/8	XD22008.D
Level 7	IC 680-616105/7	XD22007.D
Level 8	IC 680-616105/6	XD22006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	585840				Ave		585839.857						20.0			
Ethylene Dibromide	337152 337903	319341 327217	323099 310132	323438 304360	Ave		322830.187			3.6			20.0			
1,2,3-Trichloropropane	48296 39113	45341 38648	42452 37950	40018 37193	Ave		41126.3901			9.5			20.0			
1,2-Dibromo-3-Chloropropane	584147 506734	538013 504093	529915 491340	513880 480519	Ave		518580.071			6.3			20.0			
Pentachloroethane	1718608 1146013	1277888 1125449	1145768 1076344	1090066 1074534	Ave		1206833.66			18.0			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 616105

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2020 13:21 Calibration End Date: 04/22/2020 14:30 Calibration ID: 75356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616105/13	XD22013.D
Level 2	IC 680-616105/12	XD22012.D
Level 3	IC 680-616105/11	XD22011.D
Level 4	IC 680-616105/10	XD22010.D
Level 5	IC 680-616105/9	XD22009.D
Level 6	IC 680-616105/8	XD22008.D
Level 7	IC 680-616105/7	XD22007.D
Level 8	IC 680-616105/6	XD22006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					4100879					7.00
Ethylene Dibromide	Ave	52680 664659	99794 775330	201937 951124	353760	527974	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
1,2,3-Trichloropropane	Ave	37731 392515	70846 474373	132663 581146	218846	305574	0.781 10.2	1.56 12.5	3.13 15.6	5.47	7.81
1,2-Dibromo-3-Chloropropane	Ave	91273 1023938	168129 1228349	331197 1501623	562056	791772	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
Pentachloroethane	Ave	107413 914427	159736 1076344	286442 1343167	476904	716258	0.0625 0.813	0.125 1.00	0.250 1.25	0.438	0.625

Curve Type Legend:

Ave = Average

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Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22006.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 22-Apr-2020 13:21:48 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:21 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.238	0.000	951124	3.13	2.95	
2	1.585	1.586	-0.001	800885	3.13	3.00	
						RPD = 1.84	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	581146	15.6	14.1	
2	2.405	2.404	0.001	507680	15.6	15.8	
						RPD = 11.31	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	1343167	1.25	1.11	
2	2.552	2.553	-0.001	1189188	1.25	1.13	
						RPD = 1.14	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.898	0.001	1501623	3.13	2.90	
2	3.372	3.371	0.001	1274432	3.13	2.83	
						RPD = 2.31	

Reagents:

504 WS #1_00167

Amount Added: 100.00

Units: uL

Report Date: 23-Apr-2020 14:08:21

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22006.D

Injection Date: 22-Apr-2020 13:21:48

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

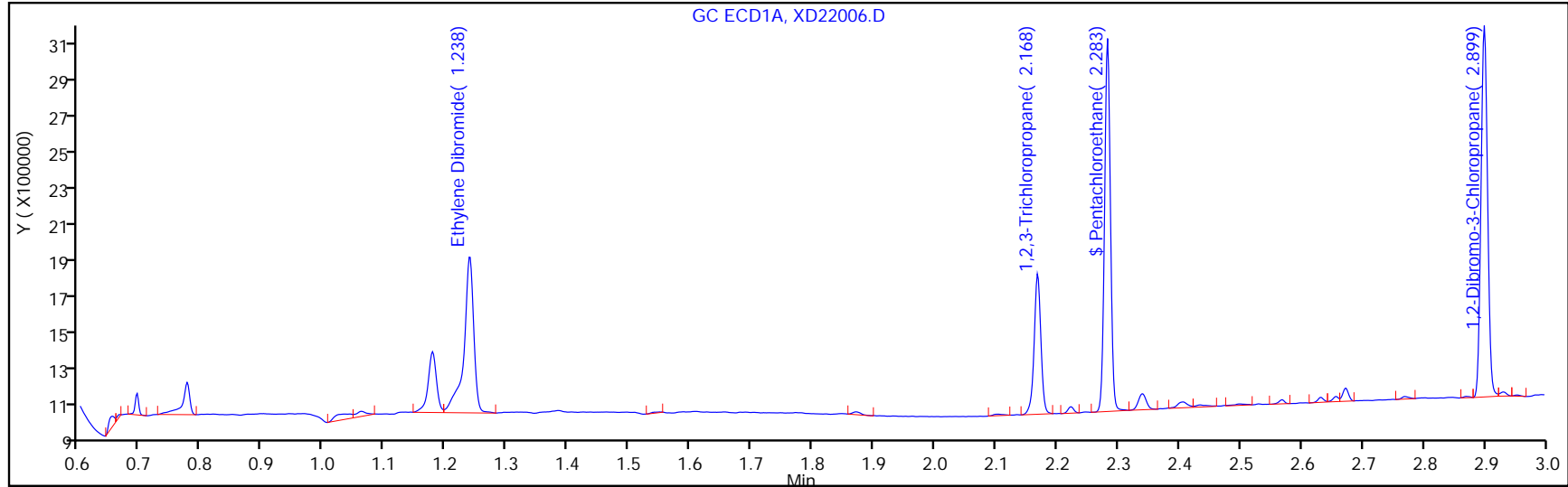
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

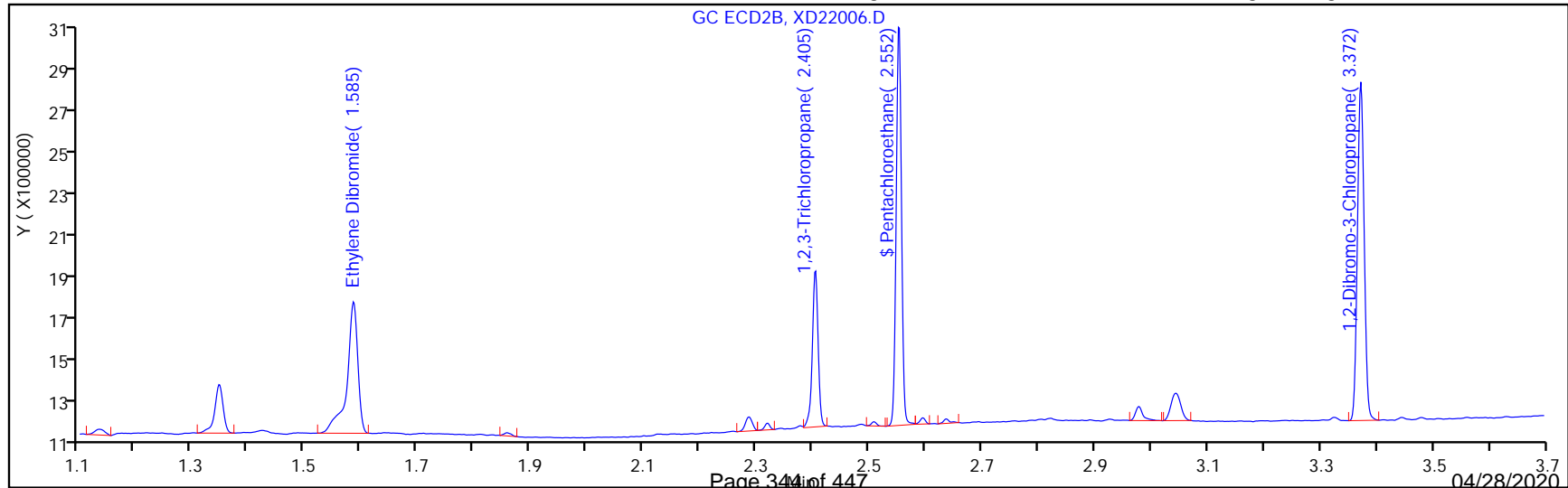
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:22

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22007.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-Apr-2020 13:31:37 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-007
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:22 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.238	0.002	775330	2.50	2.40	
2	1.586	1.586	0.000	650618	2.50	2.44	
						RPD = 1.50	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	474373	12.5	11.5	
2	2.404	2.404	0.000	412218	12.5	12.6	
						RPD = 8.61	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	1076344	1.00	0.8919	
2	2.552	2.553	-0.001	957586	1.00	0.9065	
						RPD = 1.63	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.898	0.002	1228349	2.50	2.37	
2	3.371	3.371	0.000	1043429	2.50	2.32	
						RPD = 2.22	

Reagents:

504 WS #1_00167 Amount Added: 80.00 Units: uL

Report Date: 23-Apr-2020 14:08:22

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22007.D

Injection Date: 22-Apr-2020 13:31:37

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

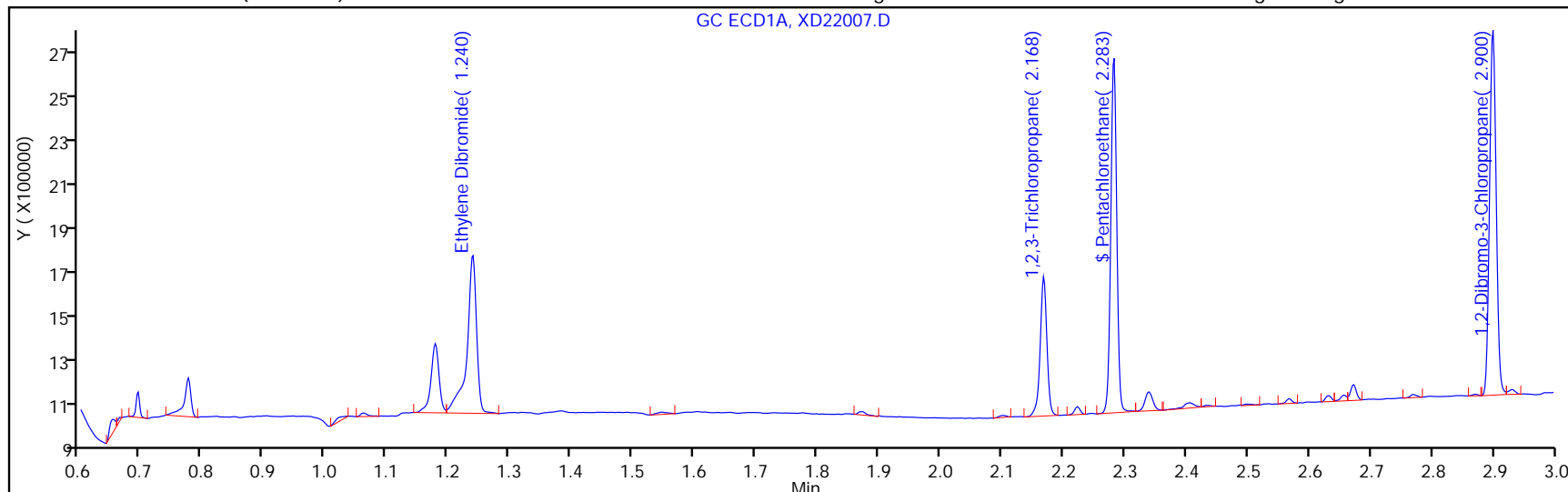
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

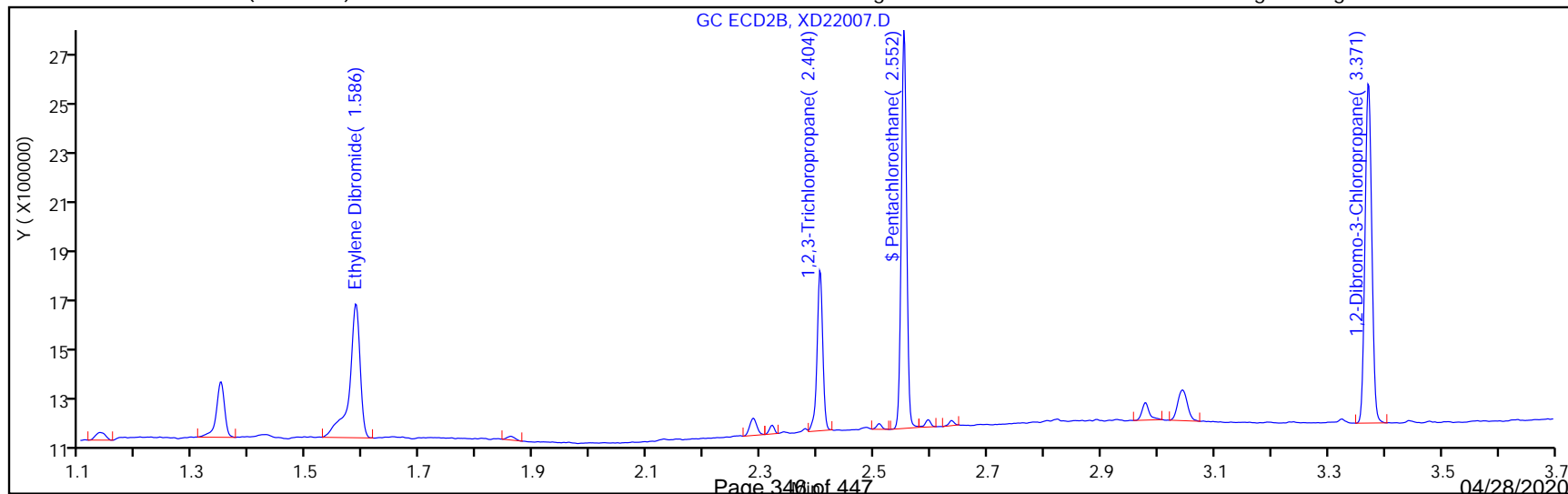
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:24

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22008.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-Apr-2020 13:41:26 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-008
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:23 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.238	0.000	664659	2.03	2.06	
2	1.586	1.586	0.000	532501	2.03	2.00	
						RPD = 3.14	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	392515	10.2	9.54	
2	2.404	2.404	0.000	346052	10.2	10.3	
						RPD = 7.79	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	914427	0.8125	0.7577	
2	2.552	2.553	-0.001	820166	0.8125	0.7764	
						RPD = 2.44	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.898	0.002	1023938	2.03	1.97	
2	3.371	3.371	0.000	883704	2.03	1.96	
						RPD = 0.63	

Reagents:

504 WS #1_00167 Amount Added: 65.00 Units: uL

Report Date: 23-Apr-2020 14:08:24

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22008.D

Injection Date: 22-Apr-2020 13:41:26

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

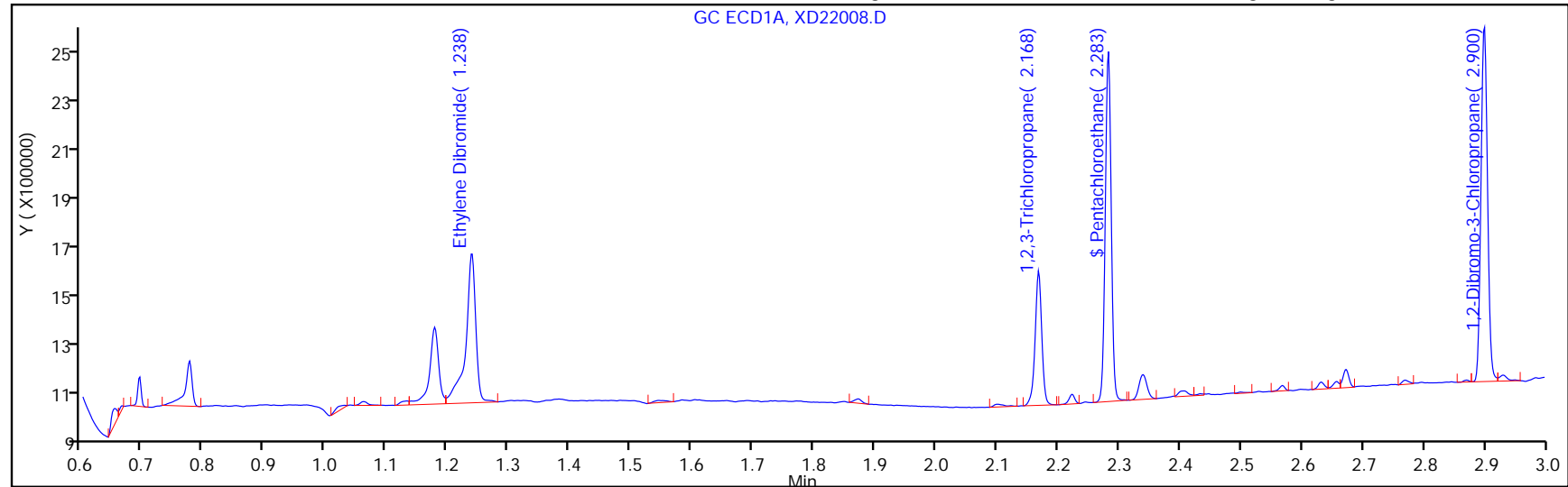
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

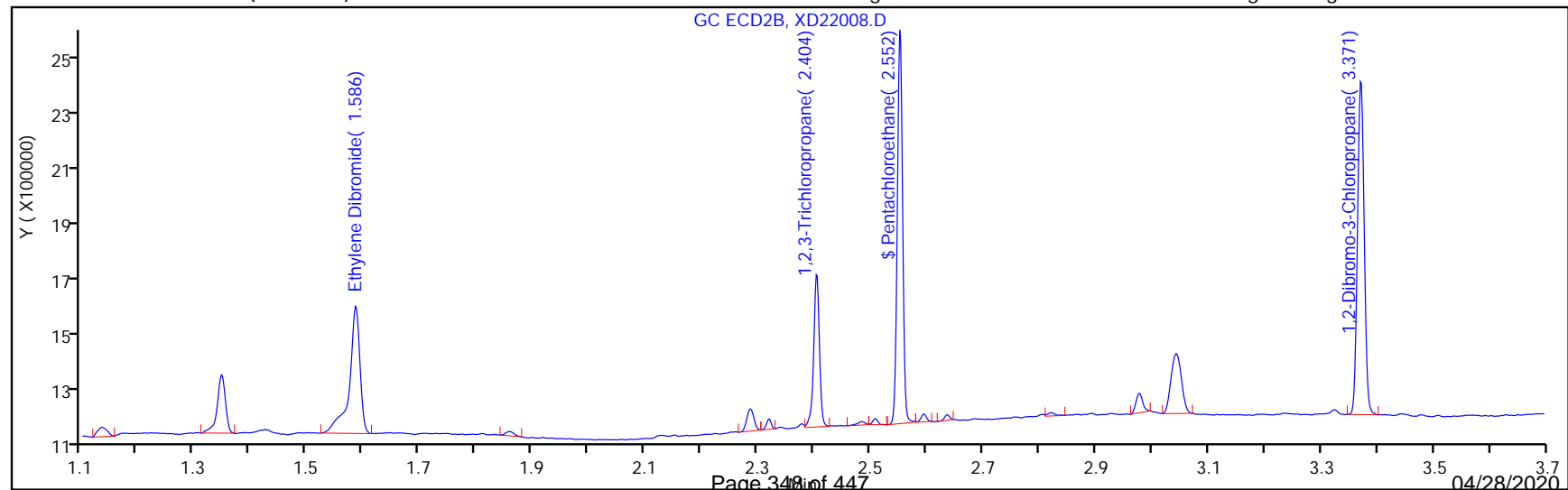
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:25

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22009.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-Apr-2020 13:51:17 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-009
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:25 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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1 Chlorodibromomethane

1	1.061	1.062	-0.001	4100879	7.00	7.00	
2	1.430	1.429	0.001	3467951	7.00	7.00	
							RPD = 0.00

2 Ethylene Dibromide

1	1.238	1.238	0.000	527974	1.56	1.64	
2	1.585	1.586	-0.001	416829	1.56	1.56	
							RPD = 4.60

3 1,2,3-Trichloropropane

1	2.168	2.168	0.000	305574	7.81	7.43	
2	2.405	2.404	0.001	275139	7.81	7.90	
							RPD = 6.15

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	716258	0.6250	0.5935	
2	2.552	2.553	-0.001	642005	0.6250	0.6078	
							RPD = 2.37

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.898	0.001	791772	1.56	1.53	
2	3.372	3.371	0.001	693328	1.56	1.54	
							RPD = 0.82

Reagents:

504 WS #1_00167 Amount Added: 50.00 Units: uL
 504-DBCM_00131 Amount Added: 50.00 Units: uL

Report Date: 23-Apr-2020 14:08:25

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22009.D

Injection Date: 22-Apr-2020 13:51:17

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv15

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

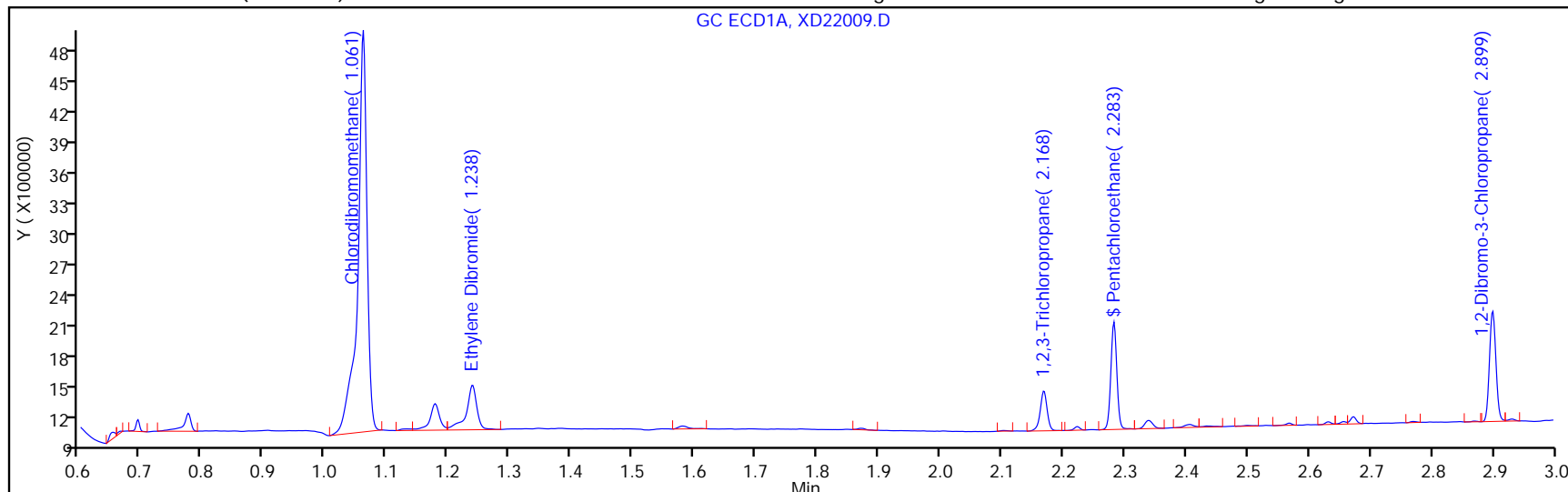
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

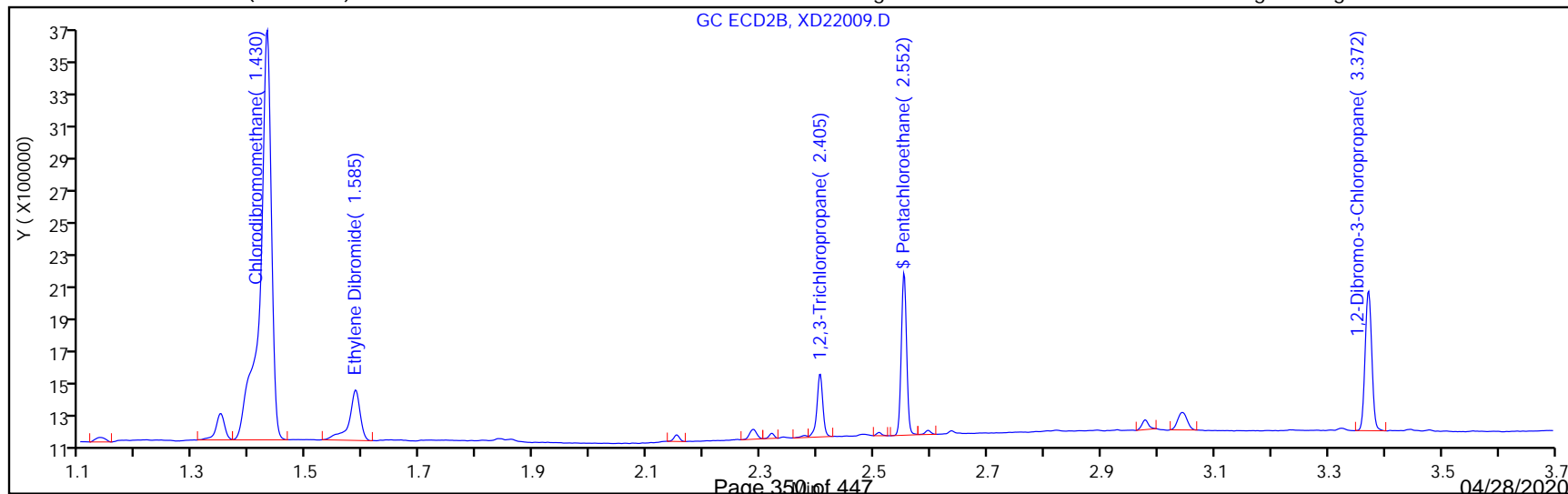
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22010.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-Apr-2020 14:01:08 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-010
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:26 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.239	0.000	353760	1.09	1.10	
2	1.587	1.587	0.000	286813	1.09	1.07	
						RPD = 1.95	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	218846	5.47	5.32	
2	2.405	2.405	0.000	198688	5.47	5.30	
						RPD = 0.46	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	476904	0.4375	0.3952	
2	2.552	2.552	0.000	434259	0.4375	0.4111	
						RPD = 3.95	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	562056	1.09	1.08	
2	3.372	3.372	0.000	491132	1.09	1.09	
						RPD = 0.61	

Reagents:

504 WS #1_00167 Amount Added: 35.00 Units: uL

Report Date: 23-Apr-2020 14:08:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22010.D

Injection Date: 22-Apr-2020 14:01:08

Instrument ID: CSGX

Operator ID:
Worklist Smp#: 10

Lims ID: IC Iv4

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

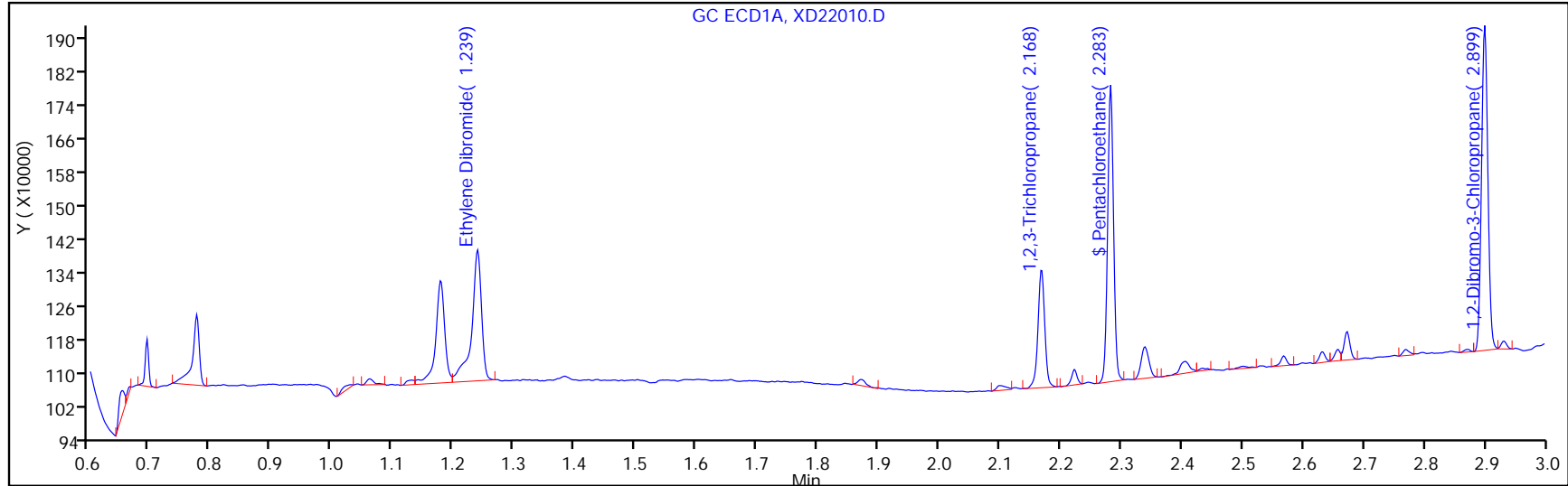
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

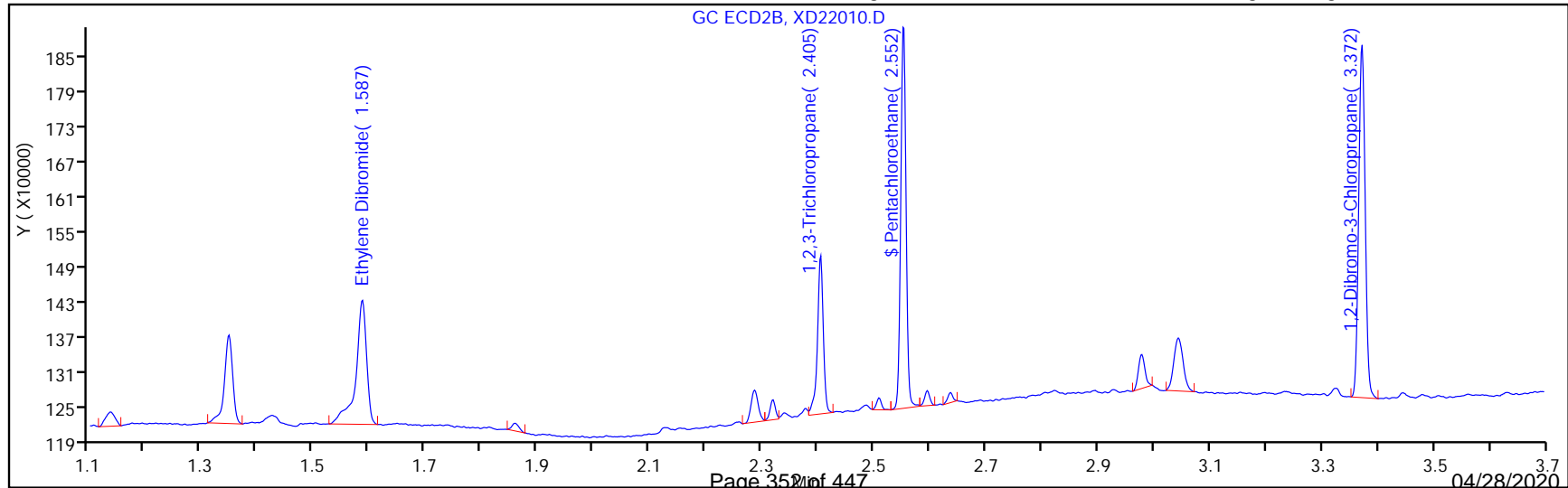
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22011.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-Apr-2020 14:10:59 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:27 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:03:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.239	1.239	0.000	201937	0.6250	0.6255	
2	1.587	1.587	0.000	172251	0.6250	0.6454	M
							RPD = 3.13
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	132663	3.13	3.23	
2	2.405	2.405	0.000	142372	3.13	3.38	
							RPD = 4.62
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	286442	0.2500	0.2374	
2	2.553	2.552	0.001	263912	0.2500	0.2498	
							RPD = 5.13
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	331197	0.6250	0.6387	
2	3.372	3.372	0.000	292359	0.6250	0.6491	
							RPD = 1.63

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 20.00

Units: uL

Report Date: 23-Apr-2020 14:08:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22011.D

Injection Date: 22-Apr-2020 14:10:59

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

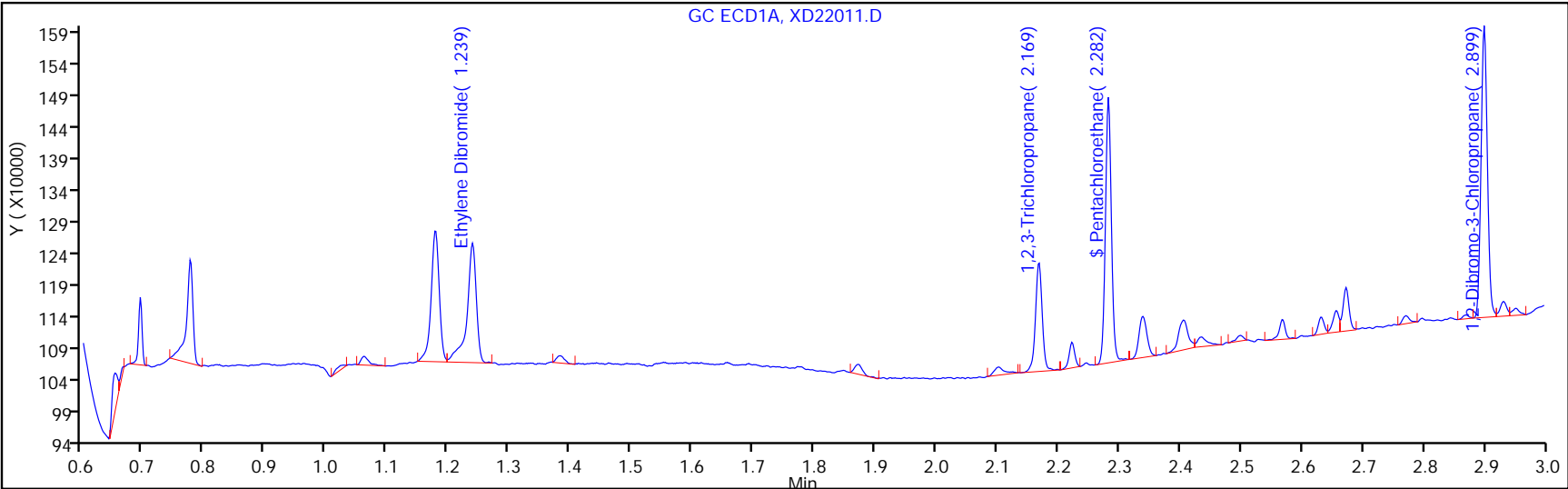
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

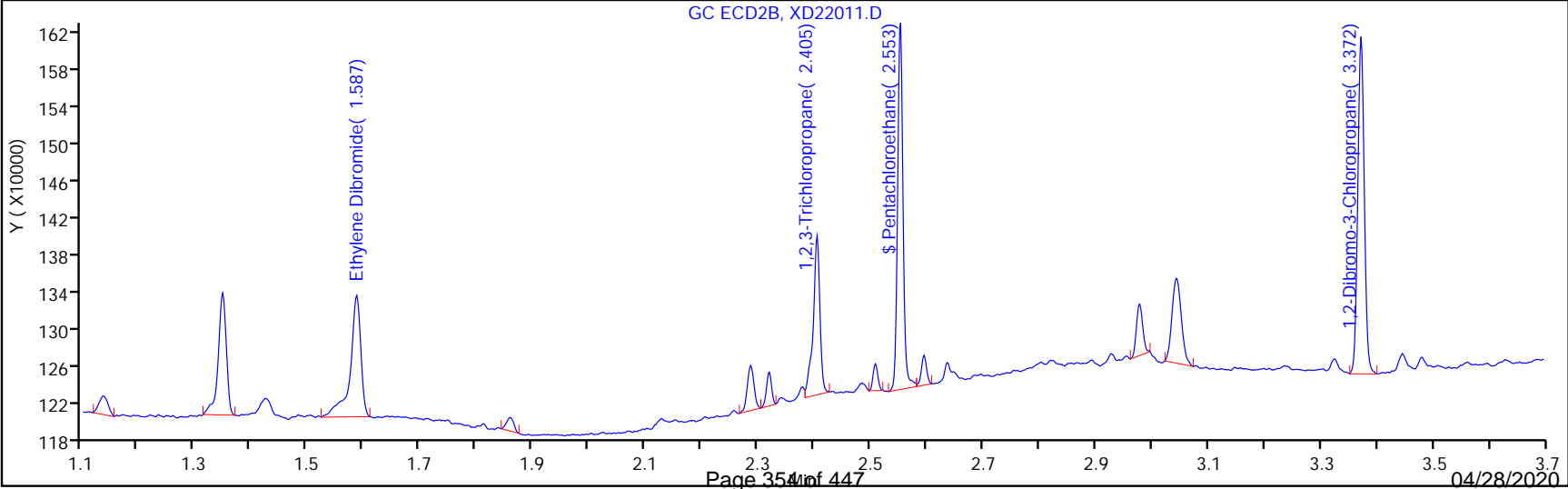
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22012.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-Apr-2020 14:20:52 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:03:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.239	1.239	0.000	99794	0.3125	0.3091	M
2	1.587	1.587	0.000	88146	0.3125	0.3303	M
							RPD = 6.62
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	70846	1.56	1.72	
2	2.405	2.405	0.000	82069	1.56	1.32	
							RPD = 26.17
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	159736	0.1250	0.1324	
2	2.553	2.552	0.001	133378	0.1250	0.1263	
							RPD = 4.71
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	168129	0.3125	0.3242	
2	3.372	3.372	0.000	148152	0.3125	0.3289	
							RPD = 1.45

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 10.00

Units: uL

Report Date: 23-Apr-2020 14:08:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22012.D

Injection Date: 22-Apr-2020 14:20:52

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

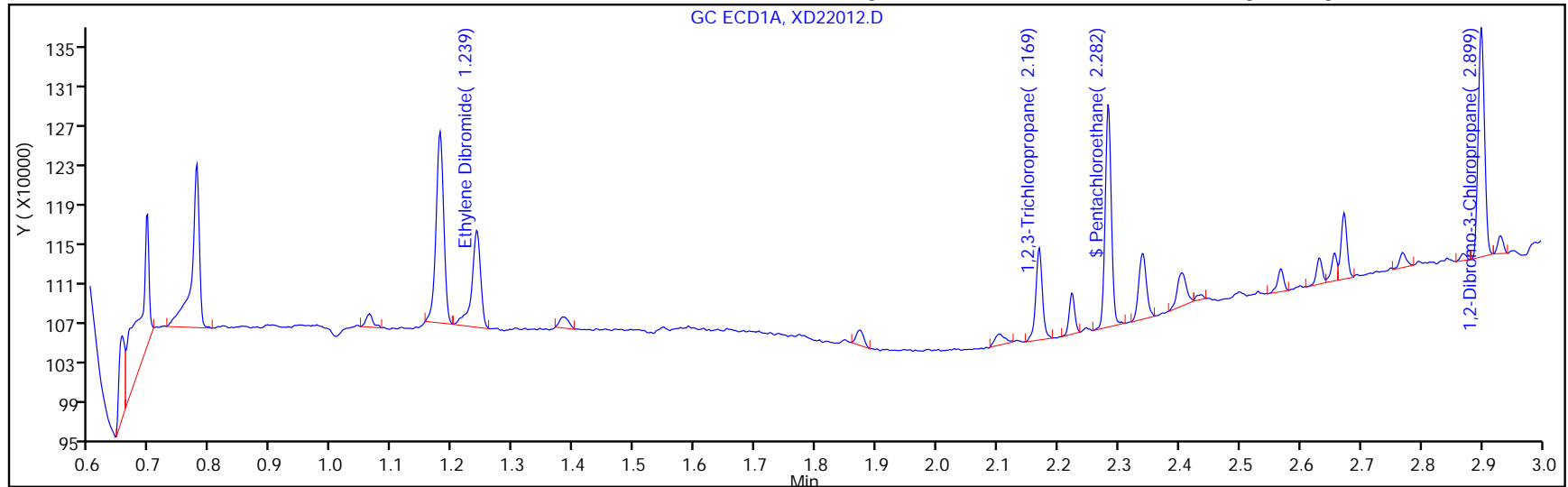
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

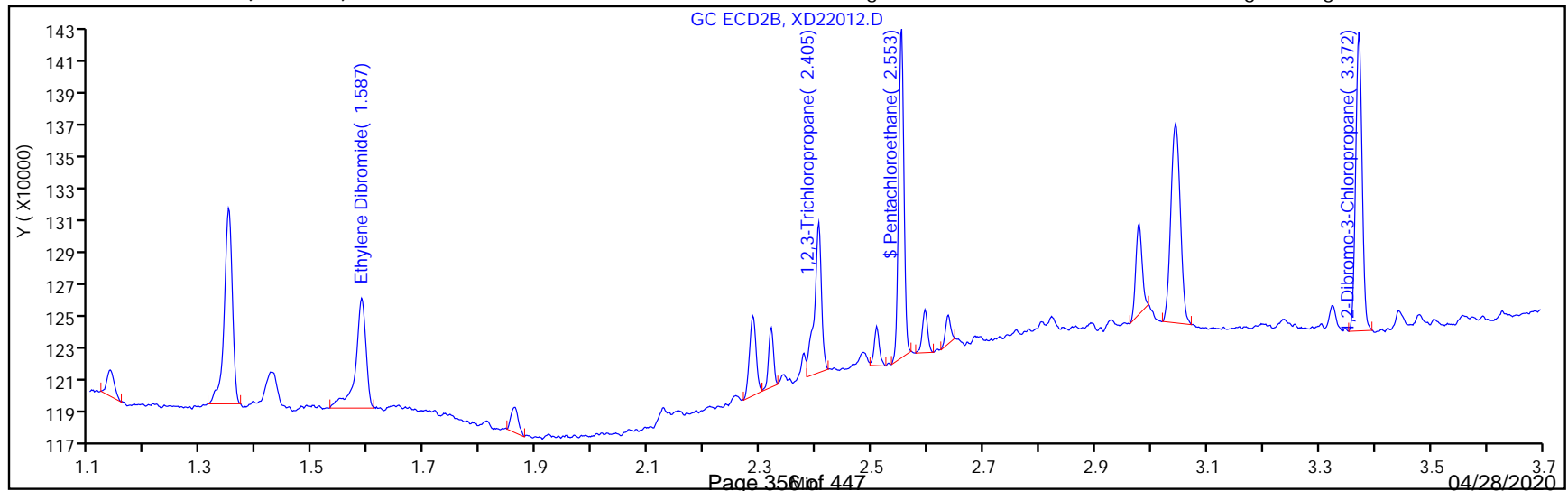
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

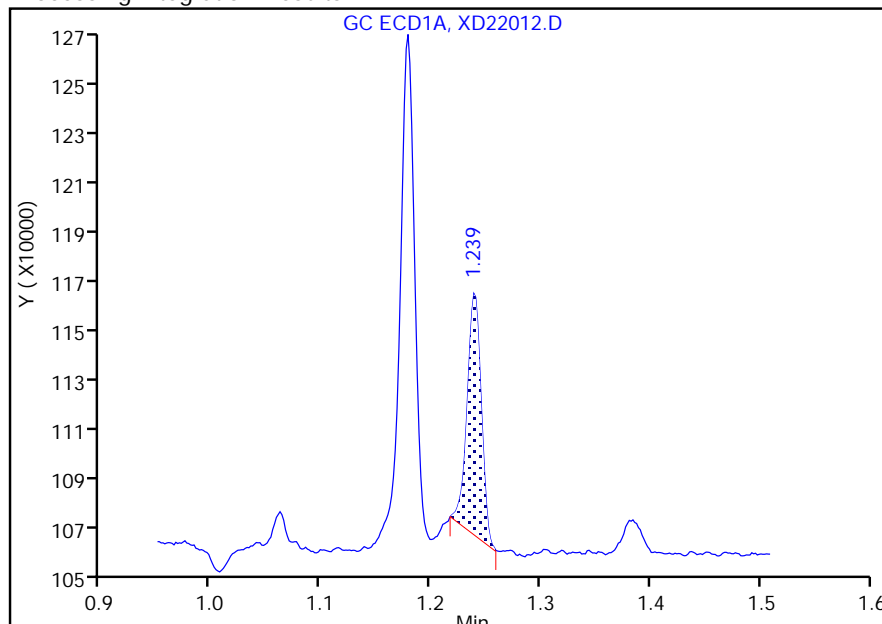
Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22012.D
 Injection Date: 22-Apr-2020 14:20:52 Instrument ID: CSGX
 Lims ID: IC IV2
 Client ID:
 Operator ID: ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

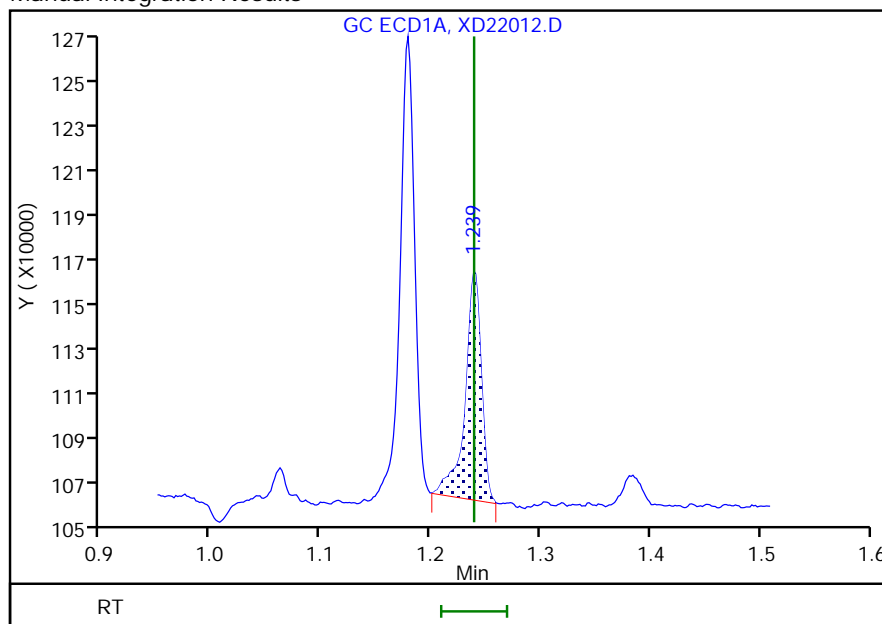
RT: 1.24
 Area: 82426
 Amount: 0.268169
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 99794
 Amount: 0.309122
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 23-Apr-2020 14:03:39
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 23-Apr-2020 14:08:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-Apr-2020 14:30:39 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:30 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:04:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.240	1.239	0.001	52680	0.1563	0.1632	M
2	1.587	1.587	0.000	42141	0.1563	0.1579	M
							RPD = 3.29
3 1,2,3-Trichloropropane							
1	2.170	2.168	0.002	37731	0.7813	0.9174	
2	2.404	2.405	-0.001	67451	0.7813	0.8259	
							RPD = 10.50
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	107413	0.0625	0.0890	
2	2.552	2.552	0.000	86865	0.0625	0.0822	
							RPD = 7.91
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	91273	0.1563	0.1760	
2	3.372	3.372	0.000	79412	0.1563	0.1763	
							RPD = 0.18

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 5.00

Units: uL

Report Date: 23-Apr-2020 14:08:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D

Injection Date: 22-Apr-2020 14:30:39

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 13

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

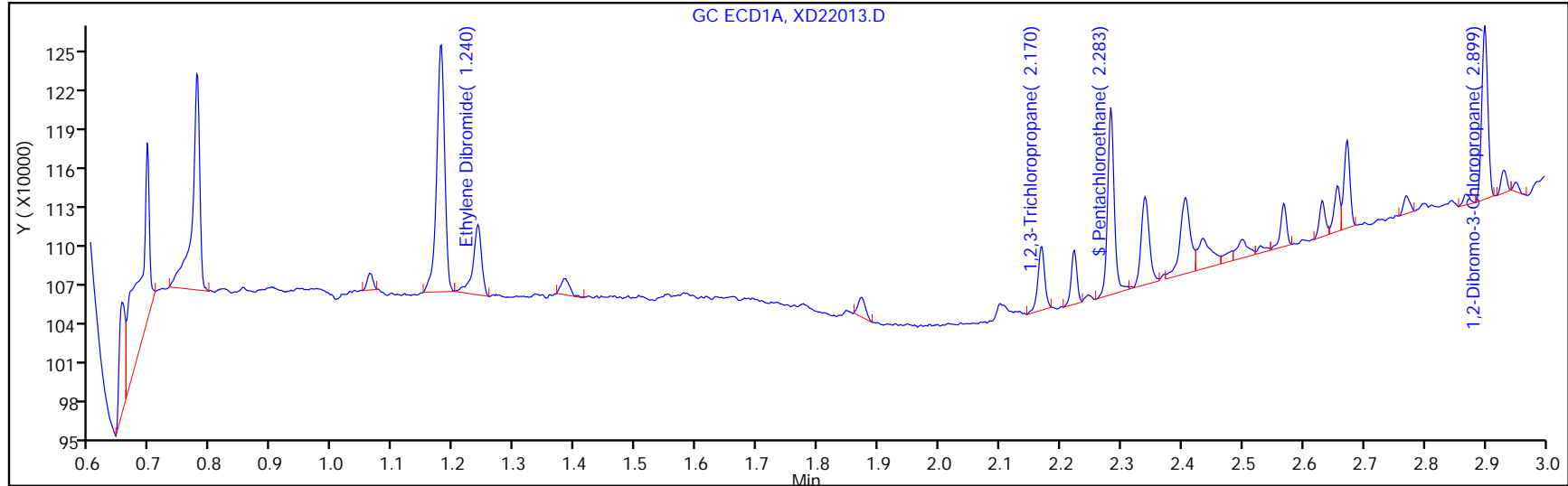
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

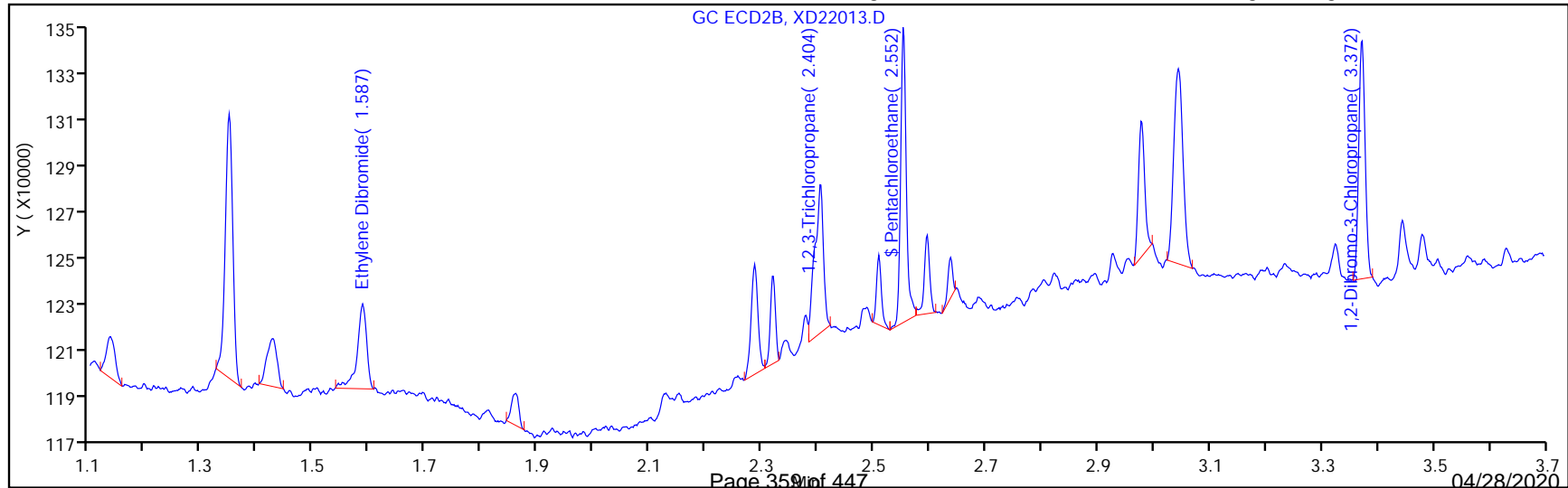
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

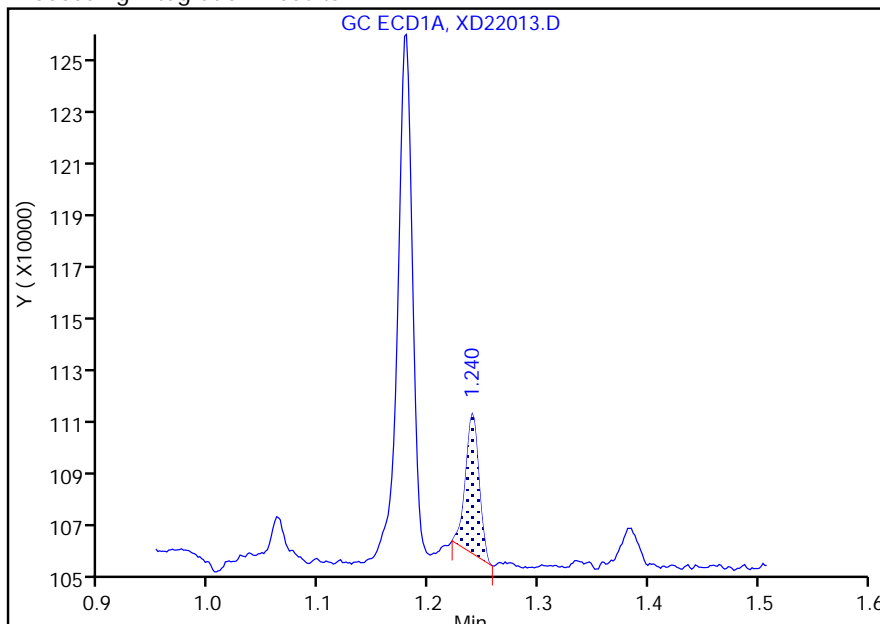
Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Injection Date: 22-Apr-2020 14:30:39 Instrument ID: CSGX
 Lims ID: IC IV1
 Client ID:
 Operator ID: ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

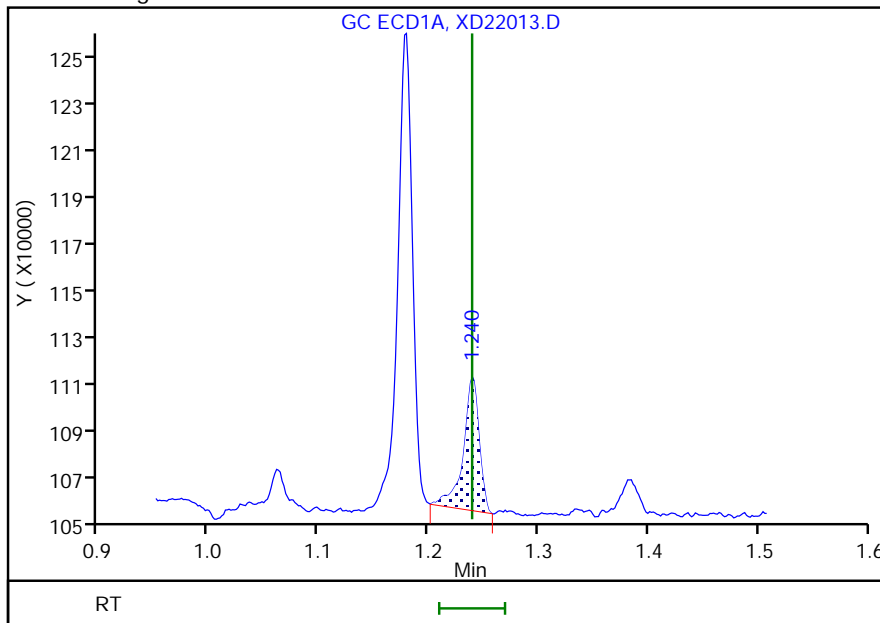
RT: 1.24
 Area: 42033
 Amount: 0.133730
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 52680
 Amount: 0.163182
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 23-Apr-2020 14:04:42
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 616105

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2020 13:21 Calibration End Date: 04/22/2020 14:30 Calibration ID: 75357

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616105/13	XD22013.D
Level 2	IC 680-616105/12	XD22012.D
Level 3	IC 680-616105/11	XD22011.D
Level 4	IC 680-616105/10	XD22010.D
Level 5	IC 680-616105/9	XD22009.D
Level 6	IC 680-616105/8	XD22008.D
Level 7	IC 680-616105/7	XD22007.D
Level 8	IC 680-616105/6	XD22006.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.430						1.399 - 1.459	1.430
Ethylene Dibromide	1.587	1.587	1.587	1.587	1.585	1.586	1.586	1.585			1.556 - 1.616	1.586
1,2,3-Trichloropropane	2.404	2.405	2.405	2.405	2.405	2.404	2.404	2.405			2.374 - 2.434	2.405
1,2-Dibromo-3-Chloropropane	3.372	3.372	3.372	3.372	3.372	3.371	3.371	3.372			3.341 - 3.401	3.372
Pentachloroethane	2.552	2.553	2.553	2.552	2.552	2.552	2.552	2.552			2.523 - 2.583	2.552

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 616105

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2020 13:21 Calibration End Date: 04/22/2020 14:30 Calibration ID: 75357

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616105/13	XD22013.D
Level 2	IC 680-616105/12	XD22012.D
Level 3	IC 680-616105/11	XD22011.D
Level 4	IC 680-616105/10	XD22010.D
Level 5	IC 680-616105/9	XD22009.D
Level 6	IC 680-616105/8	XD22008.D
Level 7	IC 680-616105/7	XD22007.D
Level 8	IC 680-616105/6	XD22006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	495422				Ave		495421.571						20.0			
Ethylene Dibromide	269702 266771	282067 262154	275602 260247	262229 256283	Ave		266881.941			3.2			20.0			
1,2,3-Trichloropropane	86337 35218	52524 34073	45559 32977	36332 32492	Lin2	43208.2173	29352.1555							0.9920		0.9900
1,2-Dibromo-3-Chloropropane	508237 443730	474086 435054	467774 417372	449035 407818	Ave		450388.326			7.2			20.0			
Pentachloroethane	1389840 1027208	1067024 1009435	1055648 957586	992592 951350	Ave		1056335.43			13.4			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1 Analy Batch No.: 616105

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/22/2020 13:21 Calibration End Date: 04/22/2020 14:30 Calibration ID: 75357

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616105/13	XD22013.D
Level 2	IC 680-616105/12	XD22012.D
Level 3	IC 680-616105/11	XD22011.D
Level 4	IC 680-616105/10	XD22010.D
Level 5	IC 680-616105/9	XD22009.D
Level 6	IC 680-616105/8	XD22008.D
Level 7	IC 680-616105/7	XD22007.D
Level 8	IC 680-616105/6	XD22006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3467951					7.00
Ethylene Dibromide	Ave	42141 532501	88146 650618	172251 800885	286813	416829	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
1,2,3-Trichloropropane	Lin2	67451 346052	82069 412218	142372 507680	198688	275139	0.781 10.2	1.56 12.5	3.13 15.6	5.47	7.81
1,2-Dibromo-3-Chloropropane	Ave	79412 883704	148152 1043429	292359 1274432	491132	693328	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
Pentachloroethane	Ave	86865 820166	133378 957586	263912 1189188	434259	642005	0.0625 0.813	0.125 1.00	0.250 1.25	0.438	0.625

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Report Date: 23-Apr-2020 14:08:21

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22006.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 22-Apr-2020 13:21:48 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:21 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.238	0.000	951124	3.13	2.95	
2	1.585	1.586	-0.001	800885	3.13	3.00	
						RPD = 1.84	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	581146	15.6	14.1	
2	2.405	2.404	0.001	507680	15.6	15.8	
						RPD = 11.31	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	1343167	1.25	1.11	
2	2.552	2.553	-0.001	1189188	1.25	1.13	
						RPD = 1.14	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.898	0.001	1501623	3.13	2.90	
2	3.372	3.371	0.001	1274432	3.13	2.83	
						RPD = 2.31	

Reagents:

504 WS #1_00167 Amount Added: 100.00 Units: uL

Report Date: 23-Apr-2020 14:08:21

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22006.D

Injection Date: 22-Apr-2020 13:21:48

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

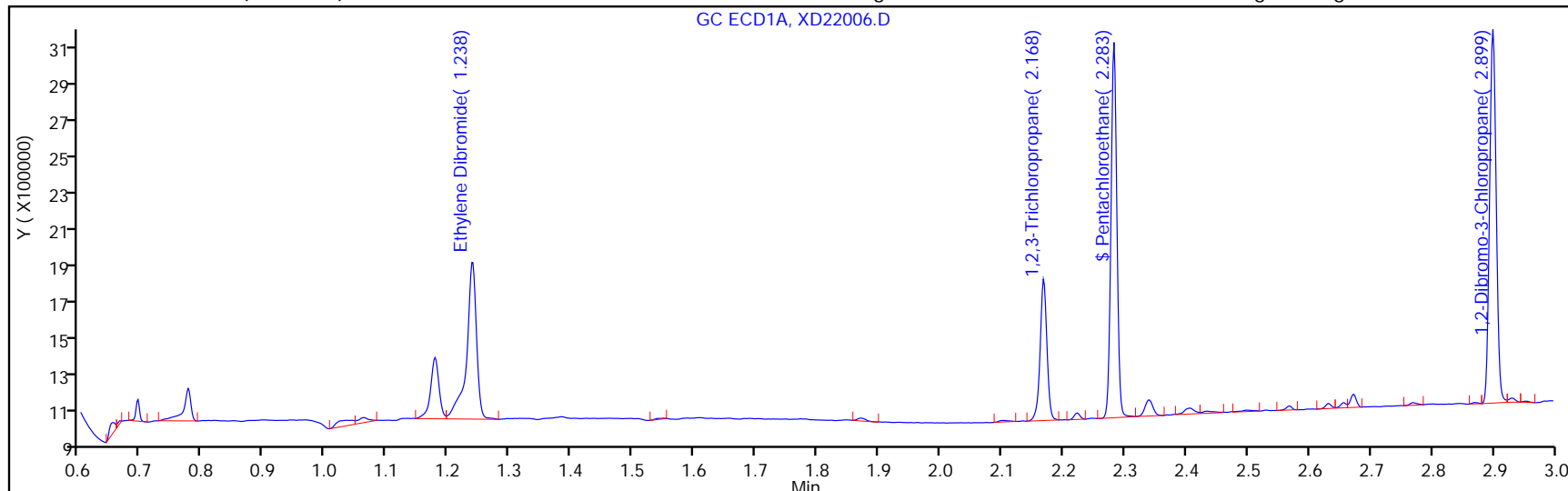
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

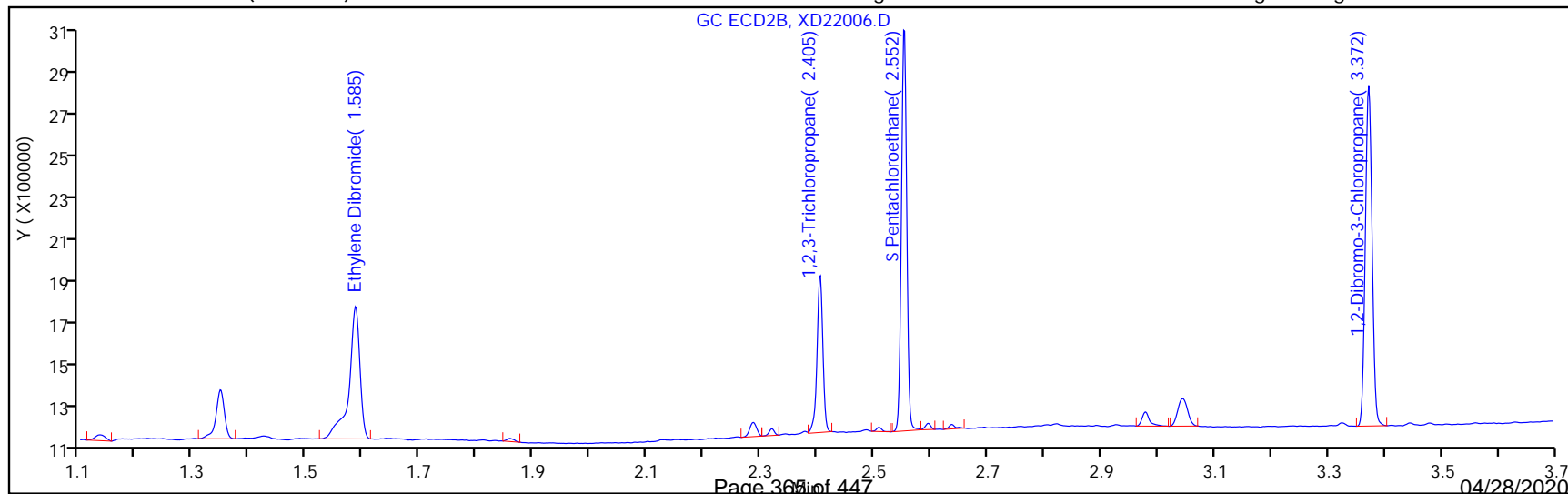
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:22

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22007.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-Apr-2020 13:31:37 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-007
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:22 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.238	0.002	775330	2.50	2.40	
2	1.586	1.586	0.000	650618	2.50	2.44	
						RPD = 1.50	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	474373	12.5	11.5	
2	2.404	2.404	0.000	412218	12.5	12.6	
						RPD = 8.61	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	1076344	1.00	0.8919	
2	2.552	2.553	-0.001	957586	1.00	0.9065	
						RPD = 1.63	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.898	0.002	1228349	2.50	2.37	
2	3.371	3.371	0.000	1043429	2.50	2.32	
						RPD = 2.22	

Reagents:

504 WS #1_00167 Amount Added: 80.00 Units: uL

Report Date: 23-Apr-2020 14:08:22

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22007.D

Injection Date: 22-Apr-2020 13:31:37

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

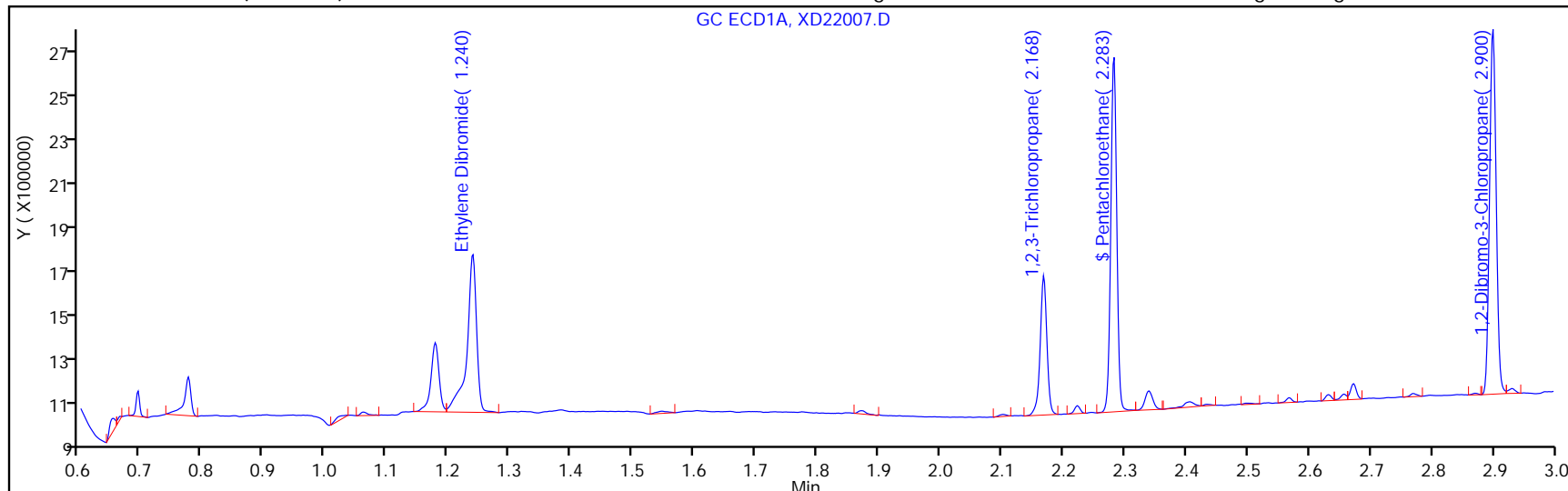
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

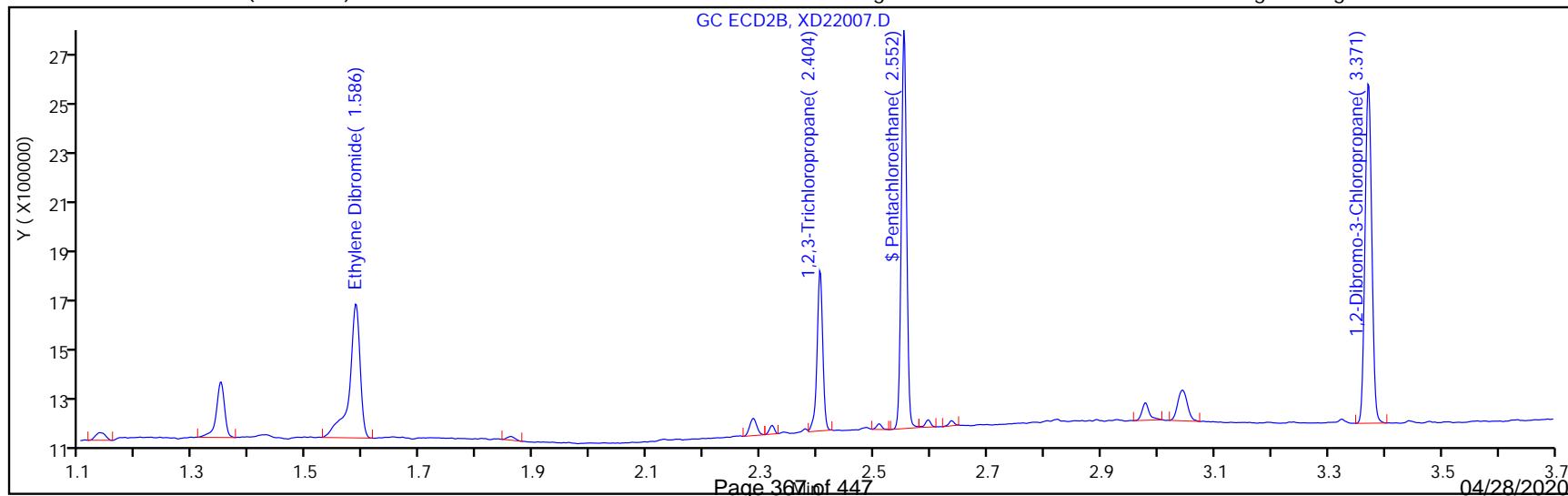
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:24

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22008.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-Apr-2020 13:41:26 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-008
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:23 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.238	0.000	664659	2.03	2.06	
2	1.586	1.586	0.000	532501	2.03	2.00	
						RPD = 3.14	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	392515	10.2	9.54	
2	2.404	2.404	0.000	346052	10.2	10.3	
						RPD = 7.79	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	914427	0.8125	0.7577	
2	2.552	2.553	-0.001	820166	0.8125	0.7764	
						RPD = 2.44	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.898	0.002	1023938	2.03	1.97	
2	3.371	3.371	0.000	883704	2.03	1.96	
						RPD = 0.63	

Reagents:

504 WS #1_00167 Amount Added: 65.00 Units: uL

Report Date: 23-Apr-2020 14:08:24

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22008.D

Injection Date: 22-Apr-2020 13:41:26

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

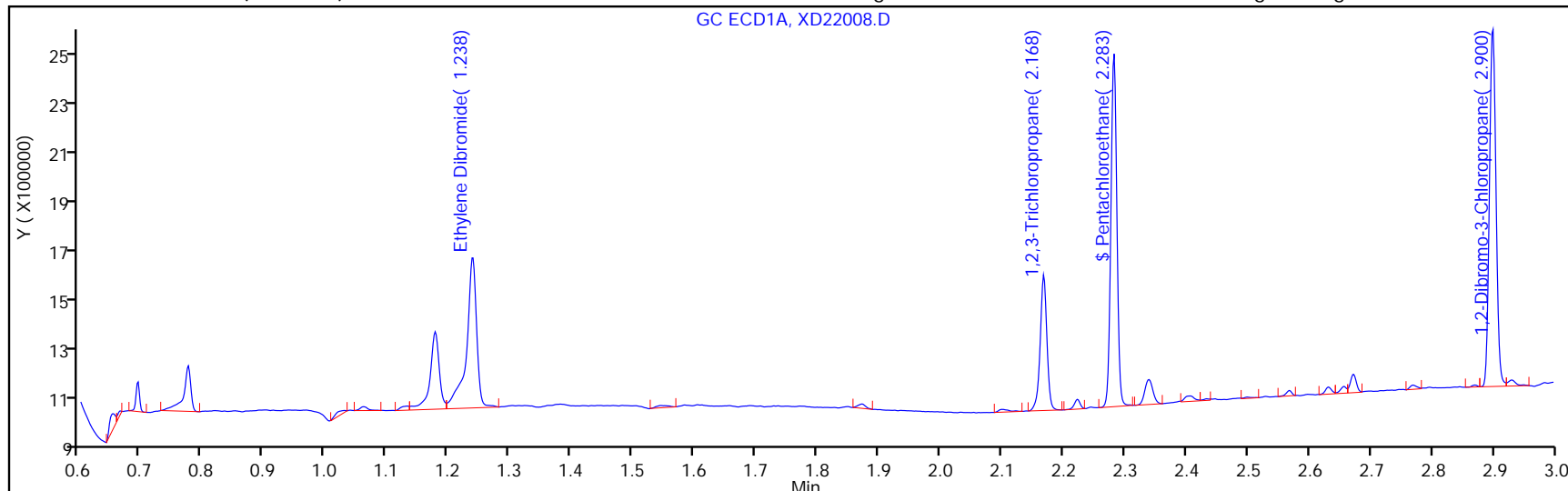
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

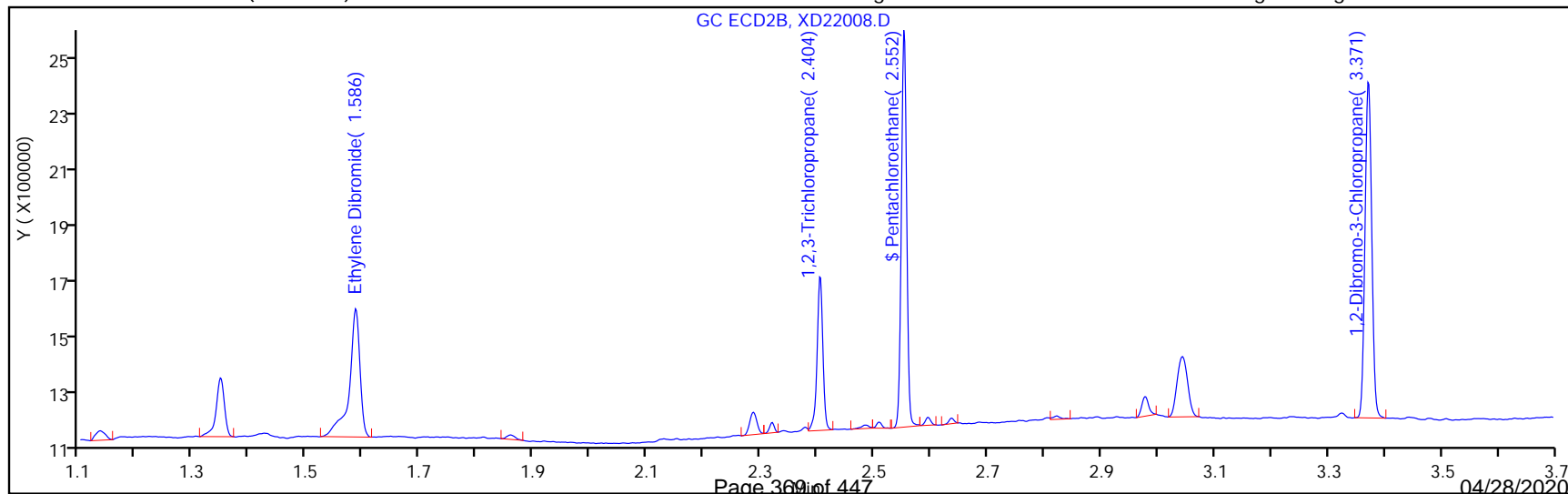
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:25

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22009.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-Apr-2020 13:51:17 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-009
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:25 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	----------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.061	1.062	-0.001	4100879	7.00	7.00	
2	1.430	1.429	0.001	3467951	7.00	7.00	
						RPD = 0.00	
2 Ethylene Dibromide							
1	1.238	1.238	0.000	527974	1.56	1.64	
2	1.585	1.586	-0.001	416829	1.56	1.56	
						RPD = 4.60	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	305574	7.81	7.43	
2	2.405	2.404	0.001	275139	7.81	7.90	
						RPD = 6.15	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	716258	0.6250	0.5935	
2	2.552	2.553	-0.001	642005	0.6250	0.6078	
						RPD = 2.37	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.898	0.001	791772	1.56	1.53	
2	3.372	3.371	0.001	693328	1.56	1.54	
						RPD = 0.82	

Reagents:

504 WS #1_00167 Amount Added: 50.00 Units: uL
 504-DBCM_00131 Amount Added: 50.00 Units: uL

Report Date: 23-Apr-2020 14:08:25

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22009.D

Injection Date: 22-Apr-2020 13:51:17

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv15

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

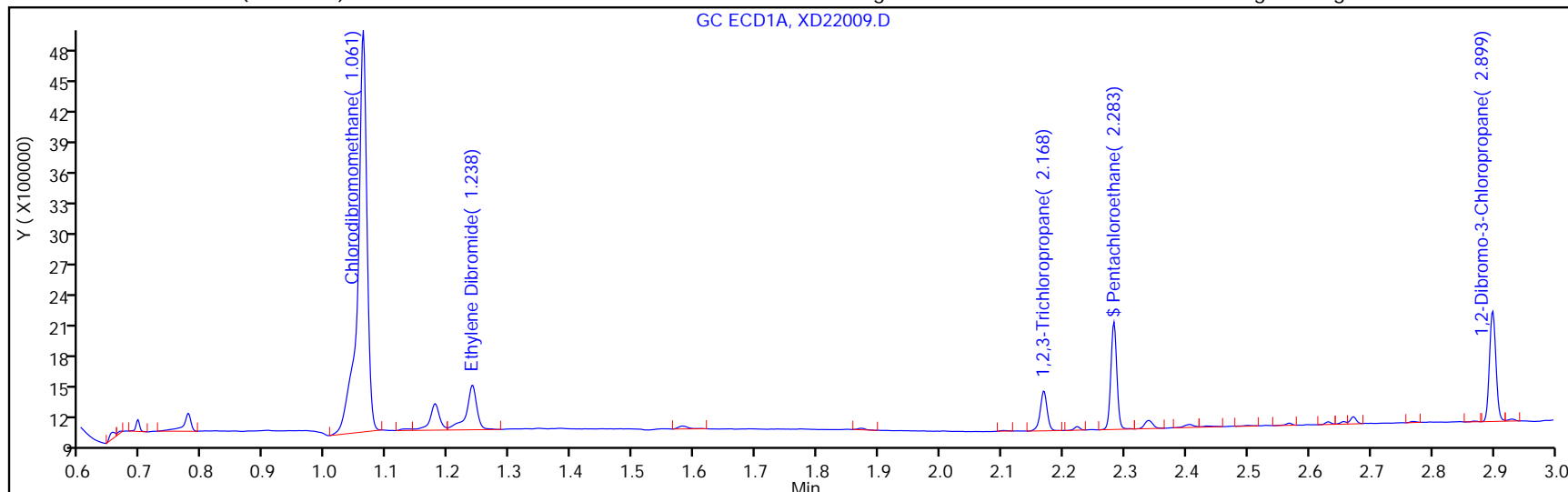
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

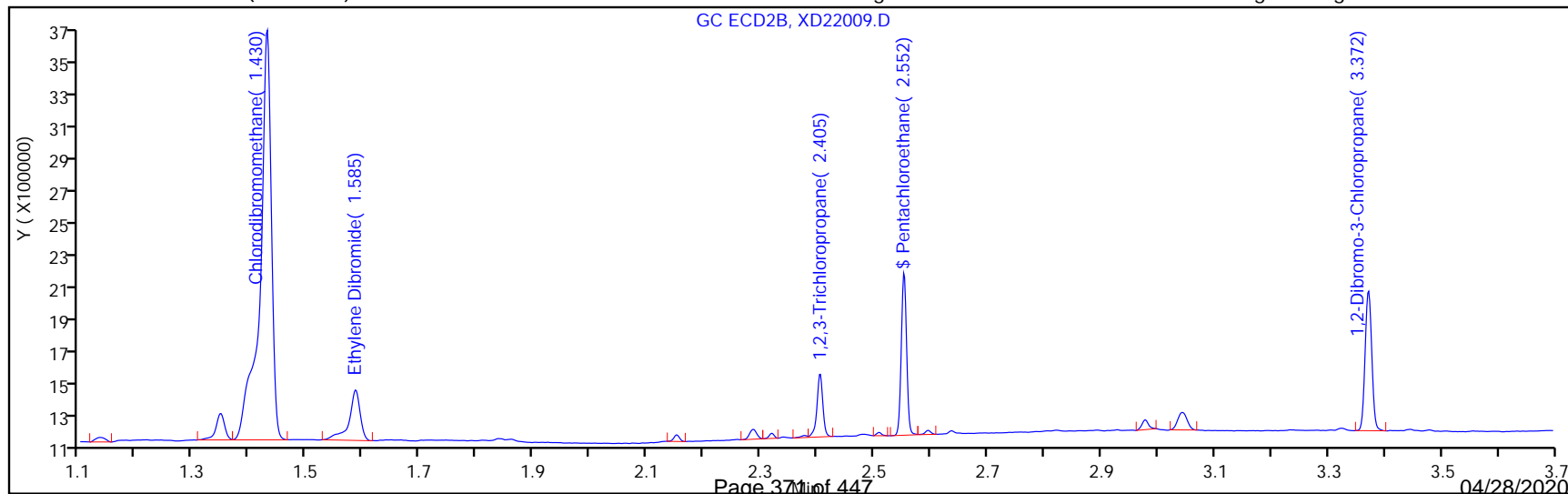
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22010.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-Apr-2020 14:01:08 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-010
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:26 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.239	0.000	353760	1.09	1.10	
2	1.587	1.587	0.000	286813	1.09	1.07	
						RPD = 1.95	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	218846	5.47	5.32	
2	2.405	2.405	0.000	198688	5.47	5.30	
						RPD = 0.46	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	476904	0.4375	0.3952	
2	2.552	2.552	0.000	434259	0.4375	0.4111	
						RPD = 3.95	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	562056	1.09	1.08	
2	3.372	3.372	0.000	491132	1.09	1.09	
						RPD = 0.61	

Reagents:

504 WS #1_00167 Amount Added: 35.00 Units: uL

Report Date: 23-Apr-2020 14:08:26

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22010.D

Injection Date: 22-Apr-2020 14:01:08

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

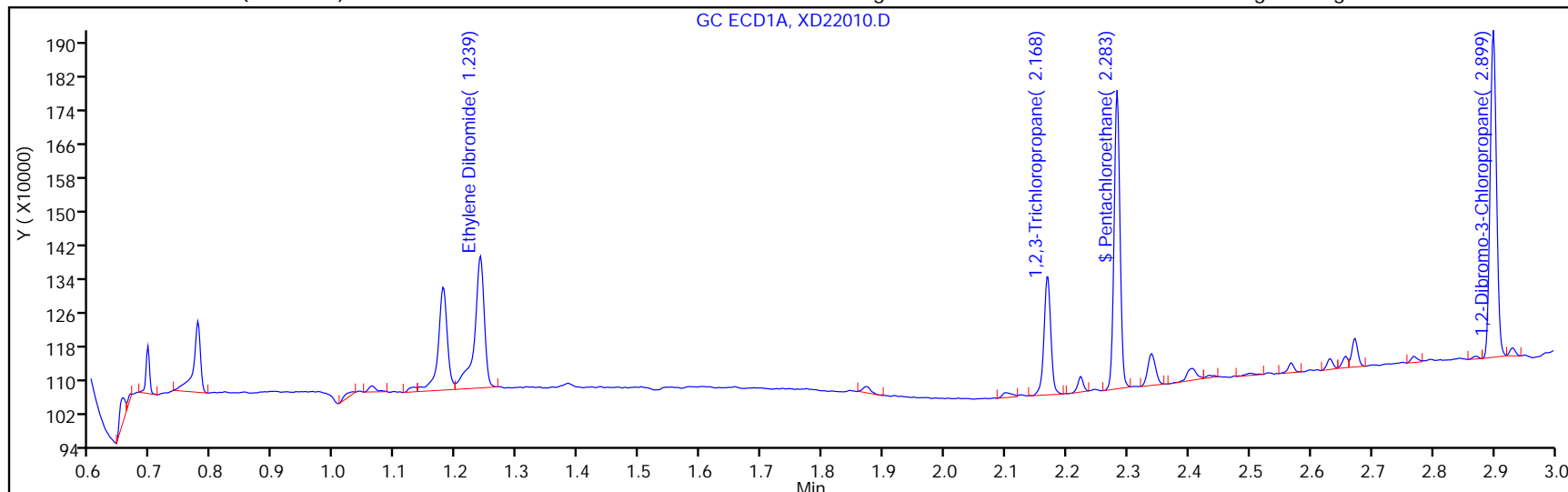
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

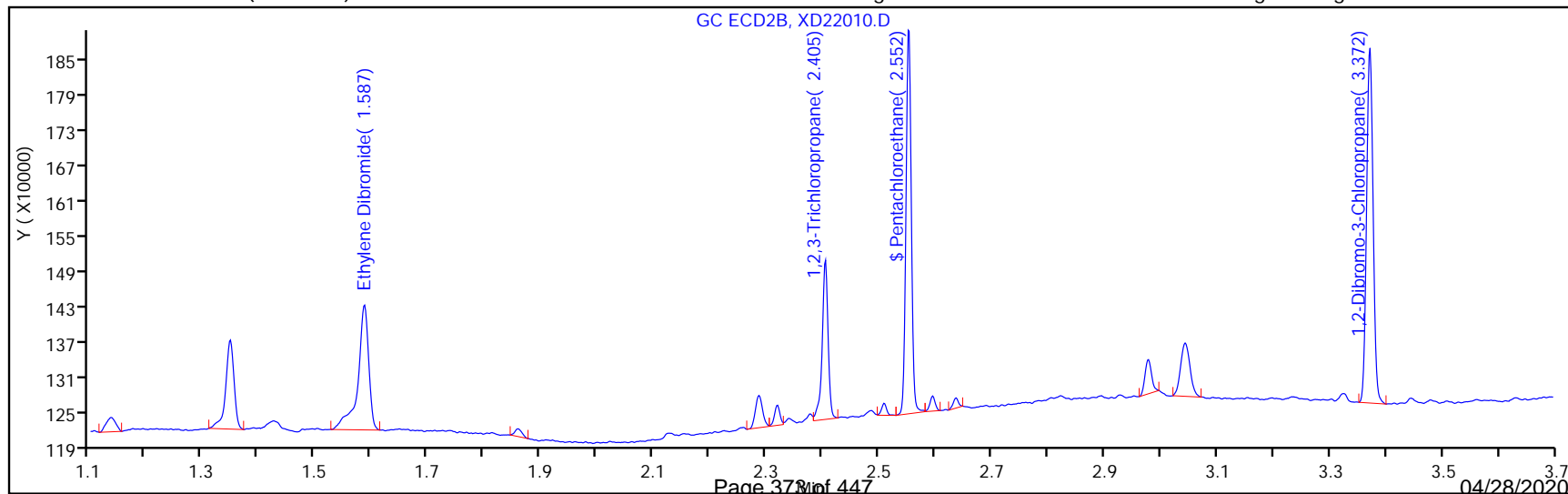
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22011.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-Apr-2020 14:10:59 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:27 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:03:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.239	1.239	0.000	201937	0.6250	0.6255	
2	1.587	1.587	0.000	172251	0.6250	0.6454	M
							RPD = 3.13
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	132663	3.13	3.23	
2	2.405	2.405	0.000	142372	3.13	3.38	
							RPD = 4.62
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	286442	0.2500	0.2374	
2	2.553	2.552	0.001	263912	0.2500	0.2498	
							RPD = 5.13
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	331197	0.6250	0.6387	
2	3.372	3.372	0.000	292359	0.6250	0.6491	
							RPD = 1.63

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 20.00

Units: uL

Report Date: 23-Apr-2020 14:08:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22011.D

Injection Date: 22-Apr-2020 14:10:59

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

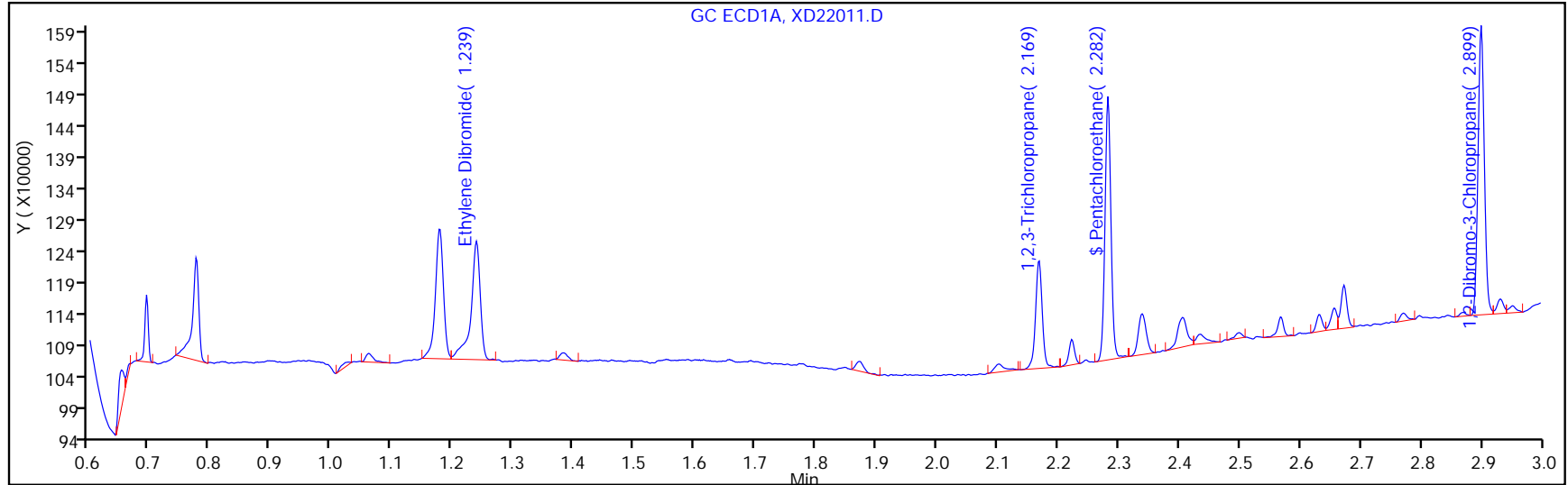
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

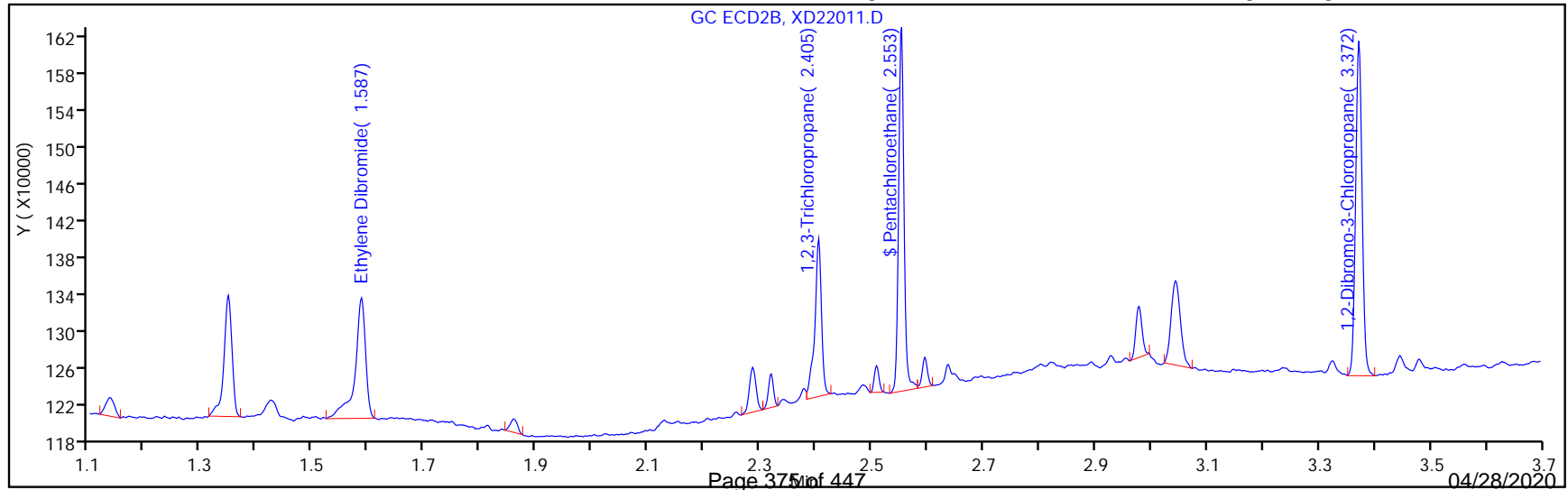
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:28

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

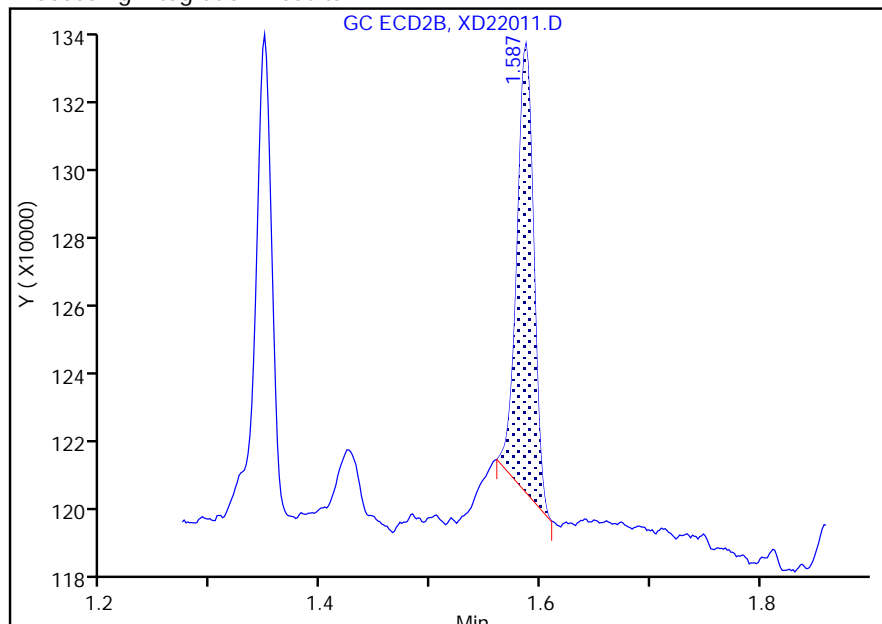
Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22011.D
 Injection Date: 22-Apr-2020 14:10:59 Instrument ID: CSGX
 Lims ID: IC IV3
 Client ID:
 Operator ID: ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides II (0.25 mm) Detector: GC ECD2B

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

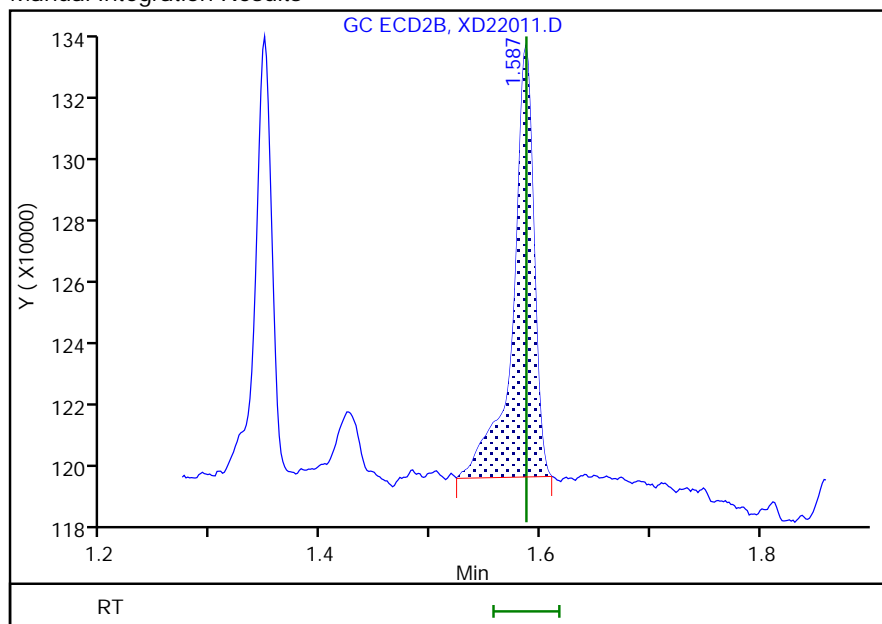
RT: 1.59
 Area: 128603
 Amount: 0.532182
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 172251
 Amount: 0.645420
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 23-Apr-2020 14:02:47
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 23-Apr-2020 14:08:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22012.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-Apr-2020 14:20:52 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:03:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.239	1.239	0.000	99794	0.3125	0.3091	M
2	1.587	1.587	0.000	88146	0.3125	0.3303	M
RPD = 6.62							
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	70846	1.56	1.72	
2	2.405	2.405	0.000	82069	1.56	1.32	
RPD = 26.17							
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	159736	0.1250	0.1324	
2	2.553	2.552	0.001	133378	0.1250	0.1263	
RPD = 4.71							
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	168129	0.3125	0.3242	
2	3.372	3.372	0.000	148152	0.3125	0.3289	
RPD = 1.45							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 10.00

Units: uL

Report Date: 23-Apr-2020 14:08:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22012.D

Injection Date: 22-Apr-2020 14:20:52

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

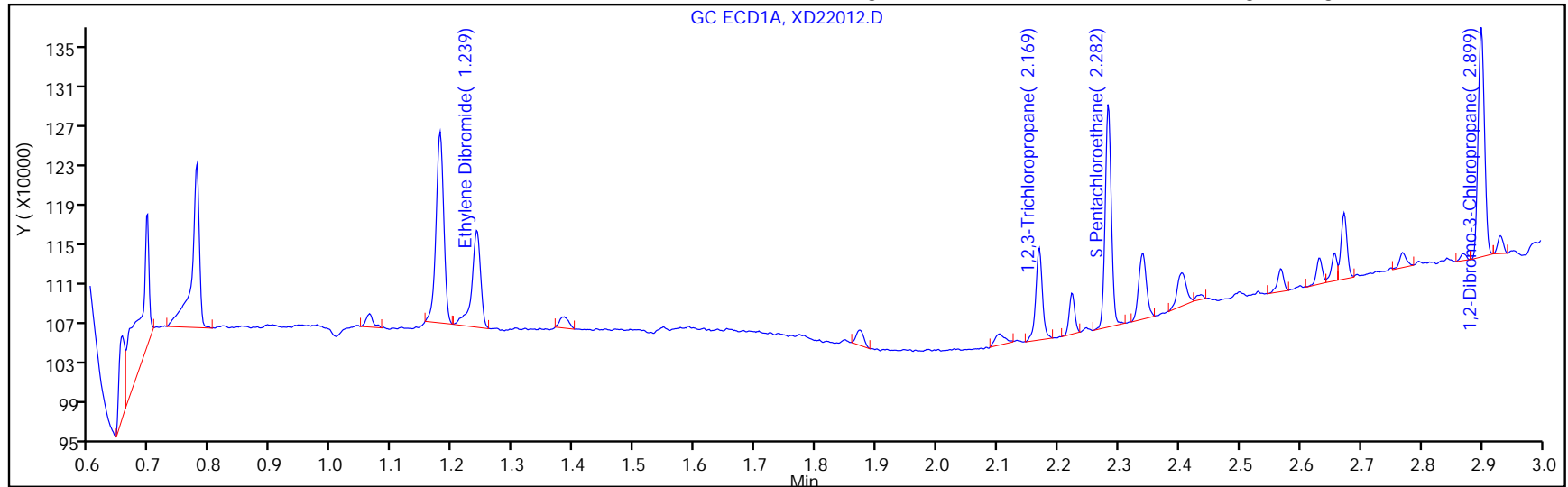
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

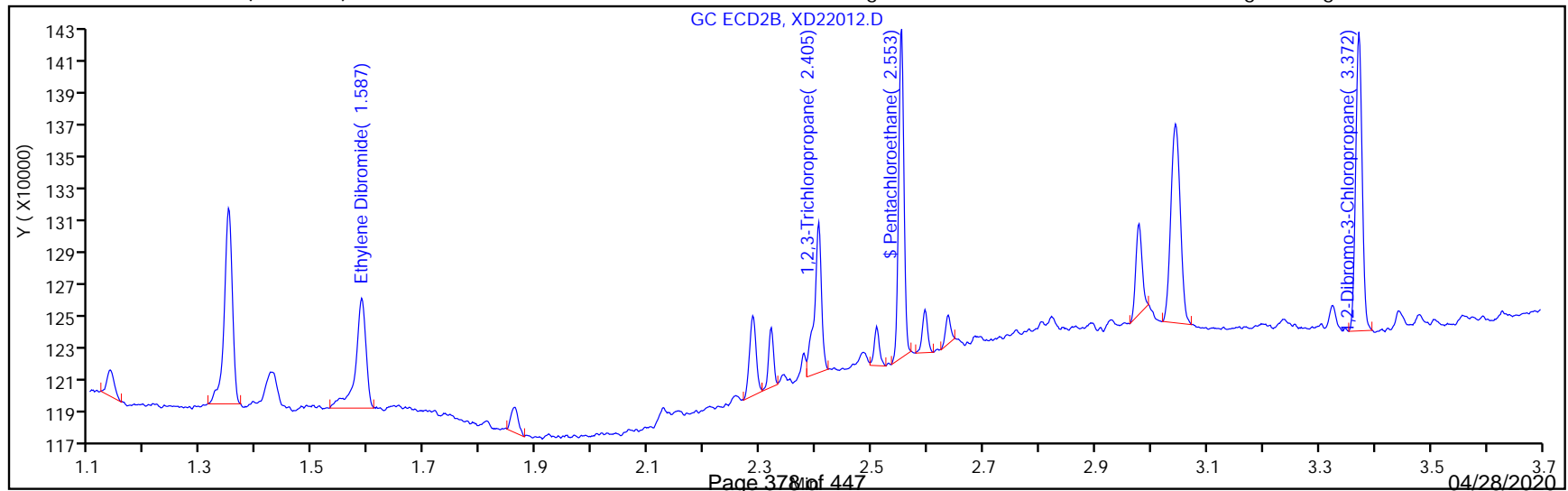
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

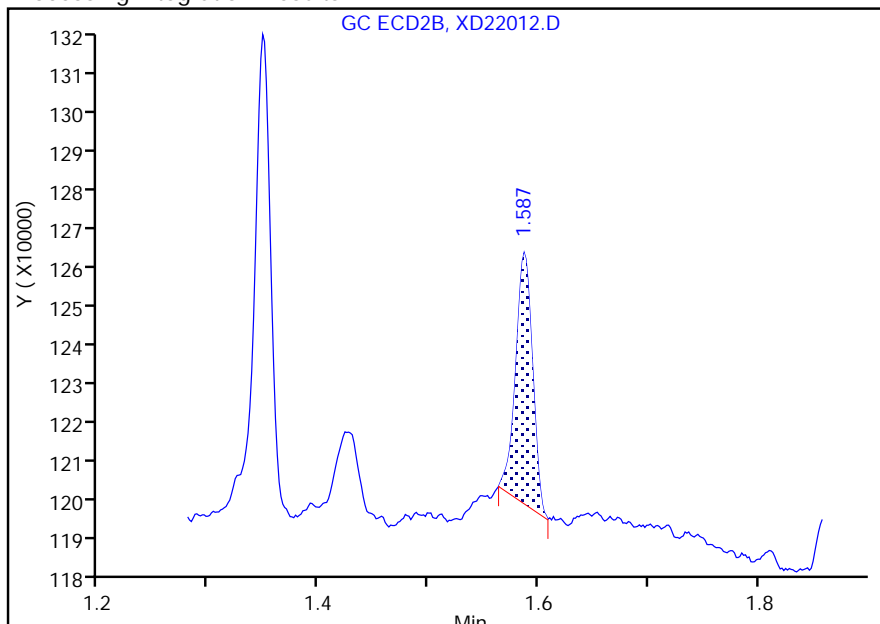
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22012.D		
Injection Date:	22-Apr-2020 14:20:52	Instrument ID:	CSGX
Lims ID:	IC IV2		
Client ID:			
Operator ID:		ALS Bottle#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	EDBDBCP_CSGX	Limit Group:	504.1
Column:	CLPesticides II (0.25 mm)	Detector:	GC ECD2B
		Worklist Smp#:	12

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

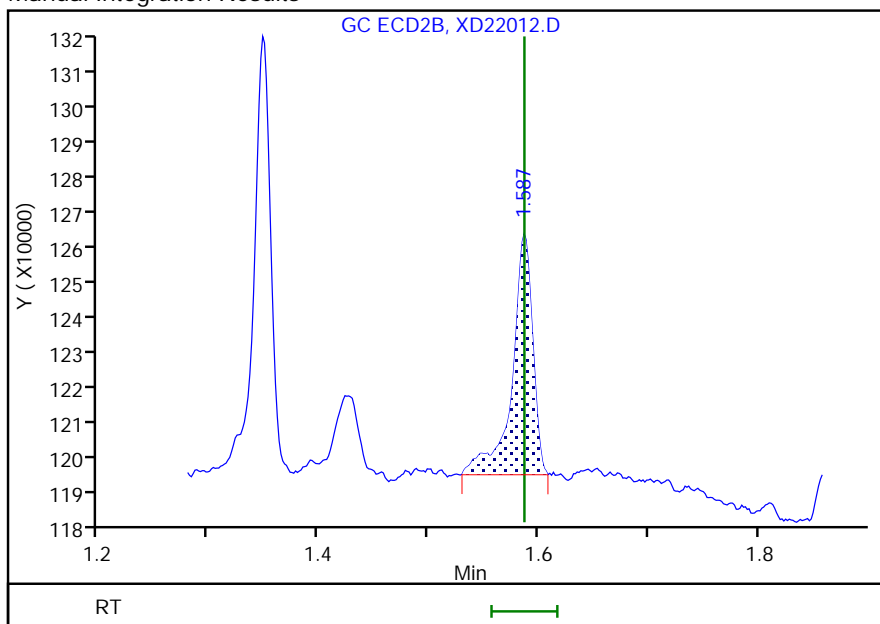
RT: 1.59
 Area: 67504
 Amount: 0.269604
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 88146
 Amount: 0.330281
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 23-Apr-2020 14:03:26
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 23-Apr-2020 14:08:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-Apr-2020 14:30:39 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:08:30 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:04:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.240	1.239	0.001	52680	0.1563	0.1632	M
2	1.587	1.587	0.000	42141	0.1563	0.1579	M
RPD = 3.29							
3 1,2,3-Trichloropropane							
1	2.170	2.168	0.002	37731	0.7813	0.9174	
2	2.404	2.405	-0.001	67451	0.7813	0.8259	
RPD = 10.50							
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	107413	0.0625	0.0890	
2	2.552	2.552	0.000	86865	0.0625	0.0822	
RPD = 7.91							
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	91273	0.1563	0.1760	
2	3.372	3.372	0.000	79412	0.1563	0.1763	
RPD = 0.18							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 5.00

Units: uL

Report Date: 23-Apr-2020 14:08:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D

Injection Date: 22-Apr-2020 14:30:39

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 13

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

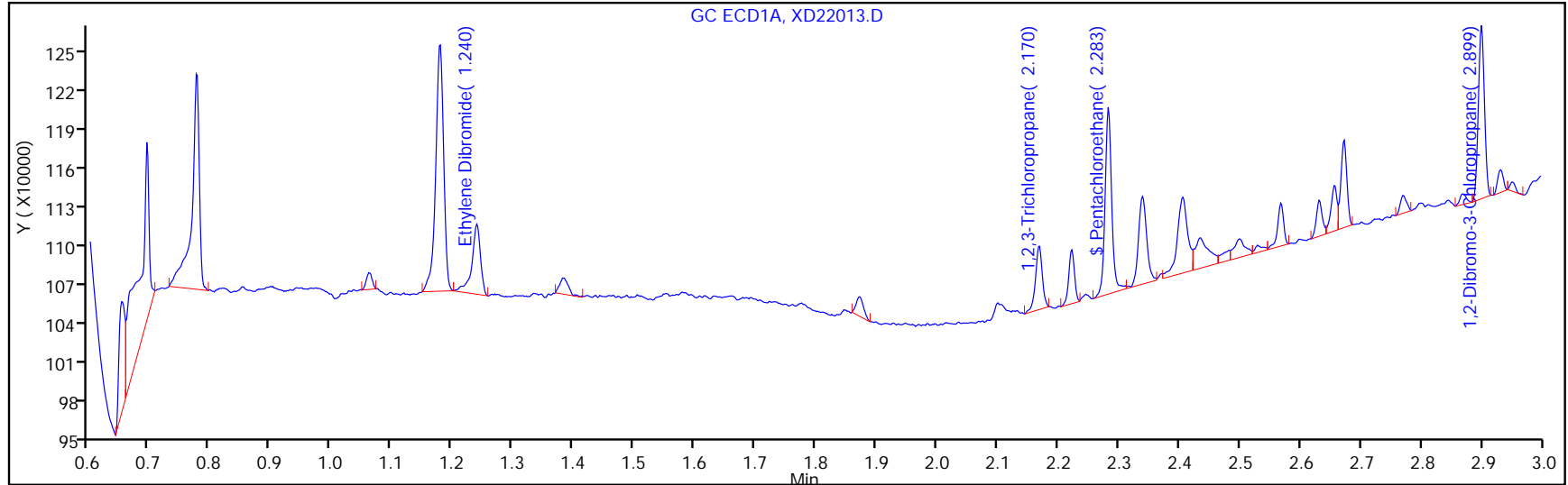
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

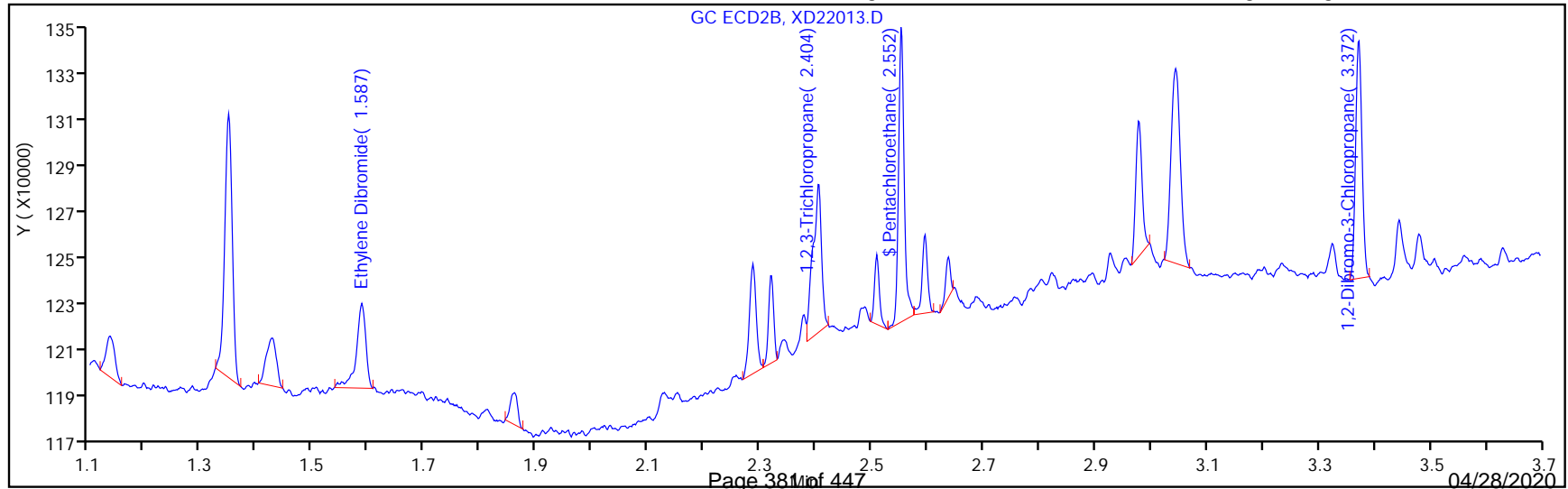
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:08:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

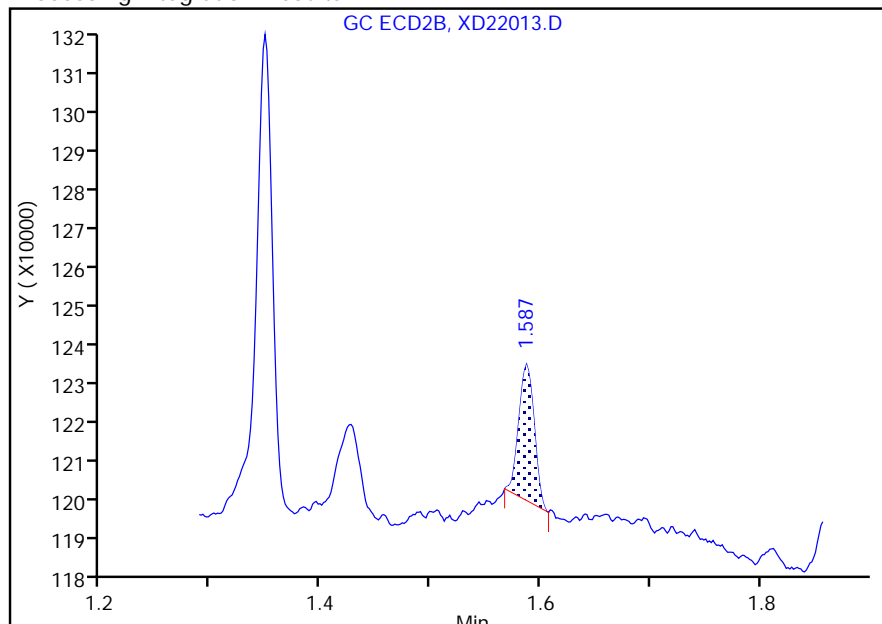
Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Injection Date: 22-Apr-2020 14:30:39 Instrument ID: CSGX
 Lims ID: IC IV1
 Client ID:
 Operator ID: ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides II (0.25 mm) Detector: GC ECD2B

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

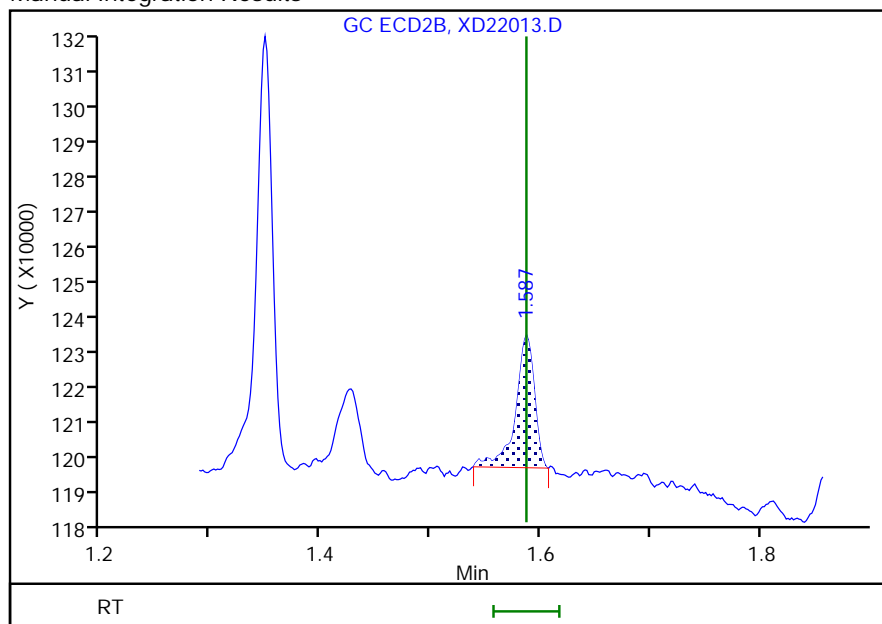
RT: 1.59
 Area: 31837
 Amount: 0.123094
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 42141
 Amount: 0.157901
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 23-Apr-2020 14:04:24
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616105/14 Calibration Date: 04/22/2020 14:40
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22014.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322830	310570		1.68	1.75	-3.8	30.0
1,2,3-Trichloropropane	Ave	41126	36673		7.80	8.75	-10.8	30.0
1,2-Dibromo-3-Chloropropane	Ave	518580	514724		1.74	1.75	-0.7	30.0
Pentachloroethane	Ave	1206834	997195		0.362	0.438	-17.4	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616105/14 Calibration Date: 04/22/2020 14:40
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22014.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 23-Apr-2020 14:28:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22014.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-Apr-2020 14:40:39 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:08:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.238	1.238	0.000	543498	1.75	1.68	
2	1.585	1.585	0.000	455138	1.75	1.71	
							RPD = 1.29

3 1,2,3-Trichloropropane

1	2.168	2.168	0.000	320890	8.75	7.80	
2	2.404	2.404	0.000	291907	8.75	8.47	
							RPD = 8.24

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	436273	0.4375	0.3615	
2	2.552	2.552	0.000	398765	0.4375	0.3775	
							RPD = 4.33

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	900767	1.75	1.74	
2	3.372	3.372	0.000	776561	1.75	1.72	
							RPD = 0.74

Reagents:

504 Spike_00155 Amount Added: 35.00 Units: uL
 504_NewSurr_00125 Amount Added: 35.00 Units: uL

Report Date: 23-Apr-2020 14:28:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22014.D

Injection Date: 22-Apr-2020 14:40:39

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

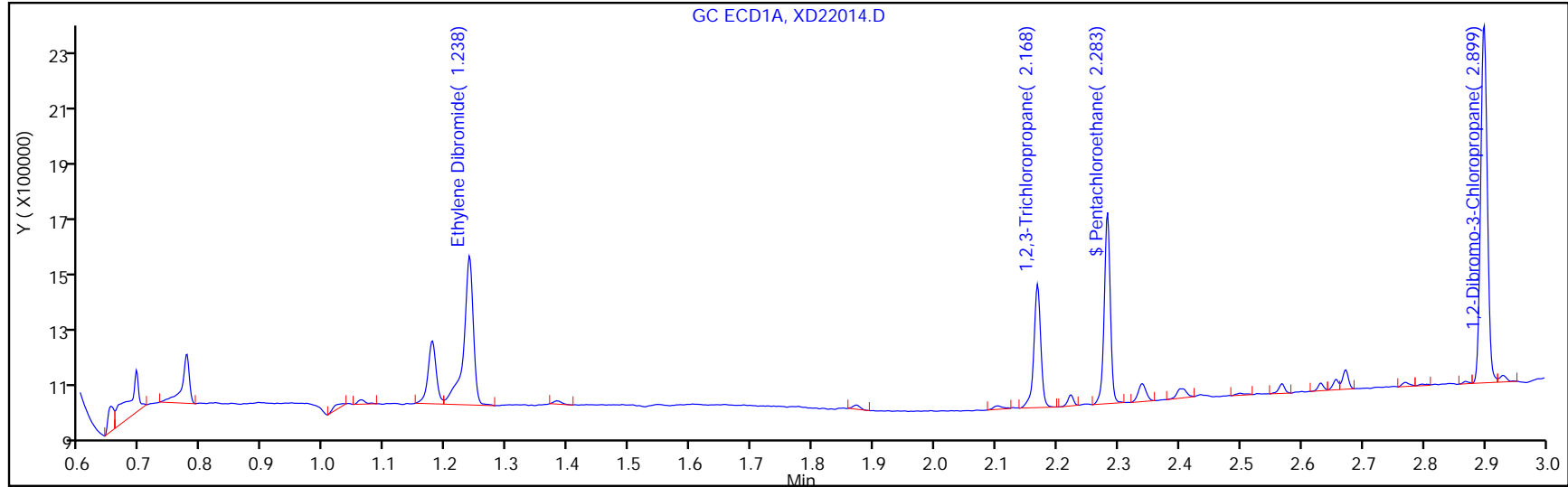
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

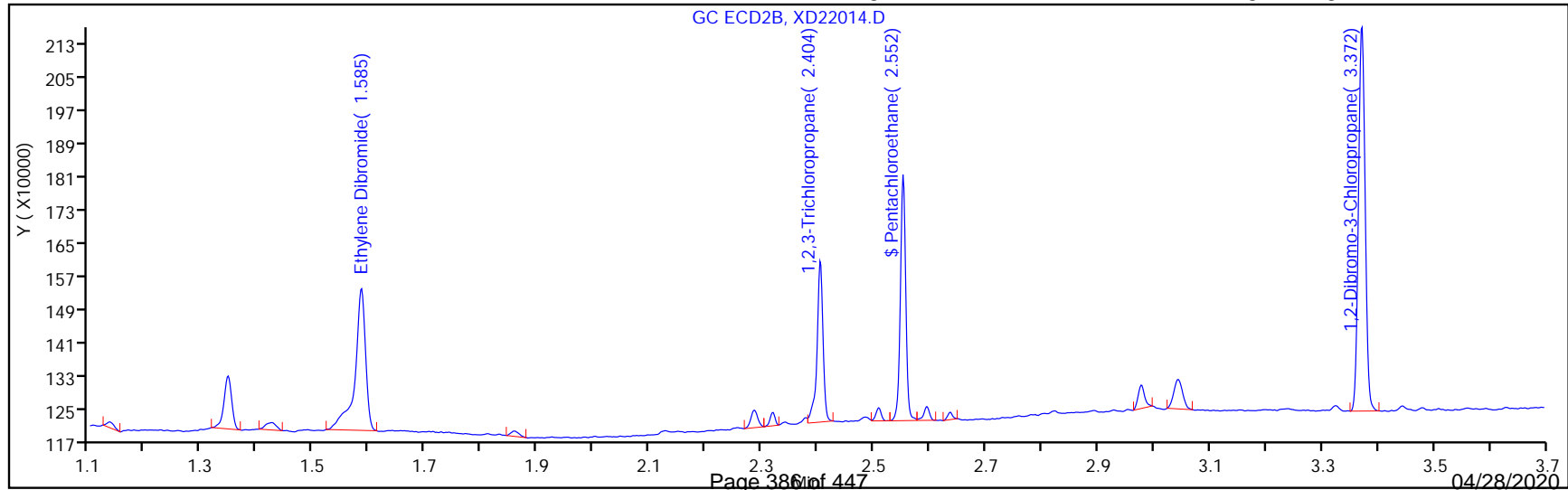
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616105/14 Calibration Date: 04/22/2020 14:40
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22014.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	266882	260079		1.71	1.75	-2.5	30.0
1,2,3-Trichloropropane	Lin2		33361		8.47	8.75	-3.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	450388	443749		1.72	1.75	-1.5	30.0
Pentachloroethane	Ave	1056335	911463		0.377	0.438	-13.7	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616105/14 Calibration Date: 04/22/2020 14:40
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22014.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.40	2.37	2.43
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 23-Apr-2020 14:28:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22014.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-Apr-2020 14:40:39 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

First Level Reviewer: canadyd Date: 23-Apr-2020 14:08:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.238	1.238	0.000	543498	1.75	1.68	
2	1.585	1.585	0.000	455138	1.75	1.71	
							RPD = 1.29

3 1,2,3-Trichloropropane

1	2.168	2.168	0.000	320890	8.75	7.80	
2	2.404	2.404	0.000	291907	8.75	8.47	
							RPD = 8.24

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	436273	0.4375	0.3615	
2	2.552	2.552	0.000	398765	0.4375	0.3775	
							RPD = 4.33

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	900767	1.75	1.74	
2	3.372	3.372	0.000	776561	1.75	1.72	
							RPD = 0.74

Reagents:

504 Spike_00155 Amount Added: 35.00 Units: uL
 504_NewSurr_00125 Amount Added: 35.00 Units: uL

Report Date: 23-Apr-2020 14:28:29

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22014.D

Injection Date: 22-Apr-2020 14:40:39

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

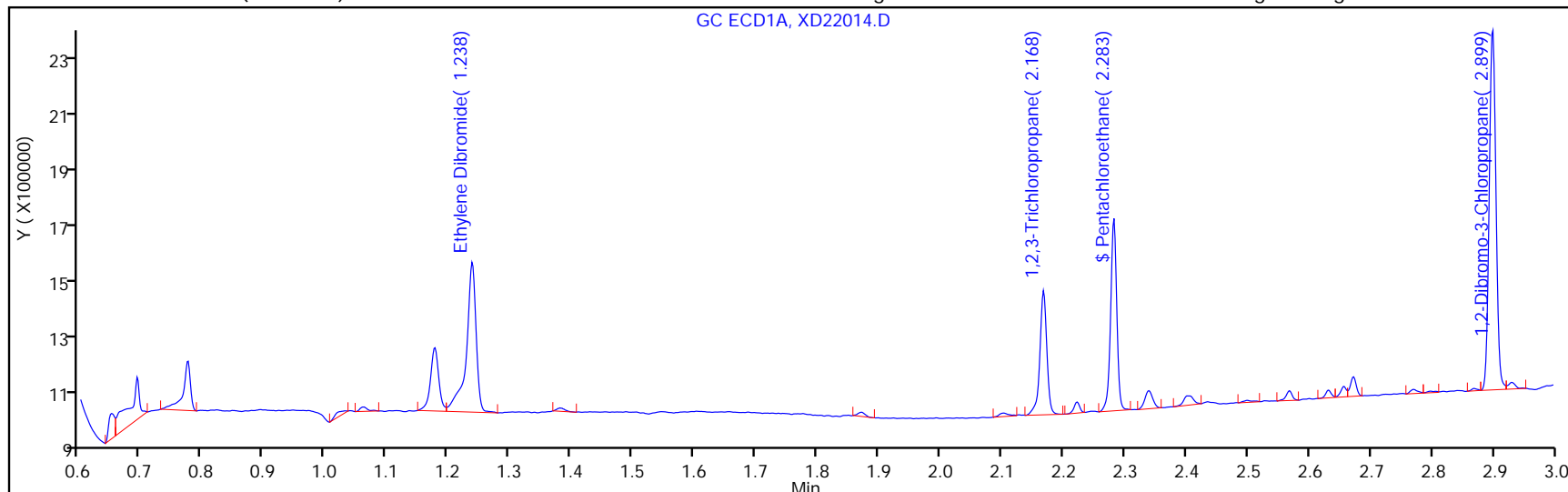
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

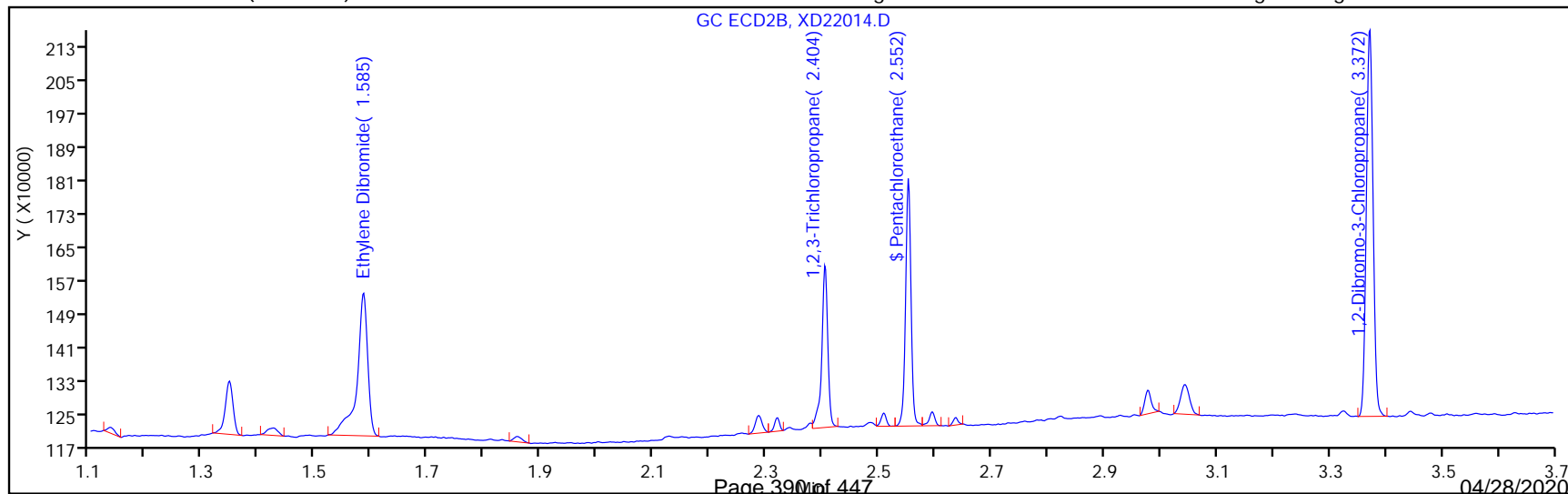
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCV 680-616105/43 Calibration Date: 04/22/2020 19:25
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22043.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322830	313738		1.52	1.56	-2.8	30.0
1,2,3-Trichloropropane	Ave	41126	39276		7.46	7.81	-4.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	518580	482670		1.45	1.56	-6.9	30.0
Pentachloroethane	Ave	1206834	1130731		0.586	0.625	-6.3	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCV 680-616105/43 Calibration Date: 04/22/2020 19:25
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22043.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 23-Apr-2020 14:28:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22043.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-Apr-2020 19:25:46 ALS Bottle#: 43 Worklist Smp#: 43
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-043
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:52 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.062	1.062	0.000	3901704	7.00	6.66	
2	1.429	1.429	0.000	3372046	7.00	6.81	
						RPD = 2.17	
2 Ethylene Dibromide							
1	1.238	1.238	0.000	490215	1.56	1.52	
2	1.586	1.586	0.000	408466	1.56	1.53	
						RPD = 0.79	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	306847	7.81	7.46	
2	2.404	2.404	0.000	271101	7.81	7.76	
						RPD = 3.98	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	706707	0.6250	0.5856	
2	2.553	2.553	0.000	593261	0.6250	0.5616	
						RPD = 4.18	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.898	0.000	754172	1.56	1.45	
2	3.371	3.371	0.000	669971	1.56	1.49	
						RPD = 2.26	

Reagents:

504 WS #1_00167 Amount Added: 50.00 Units: uL
 504-DBCM_00131 Amount Added: 50.00 Units: uL

Report Date: 23-Apr-2020 14:28:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22043.D

Injection Date: 22-Apr-2020 19:25:46

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 43

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

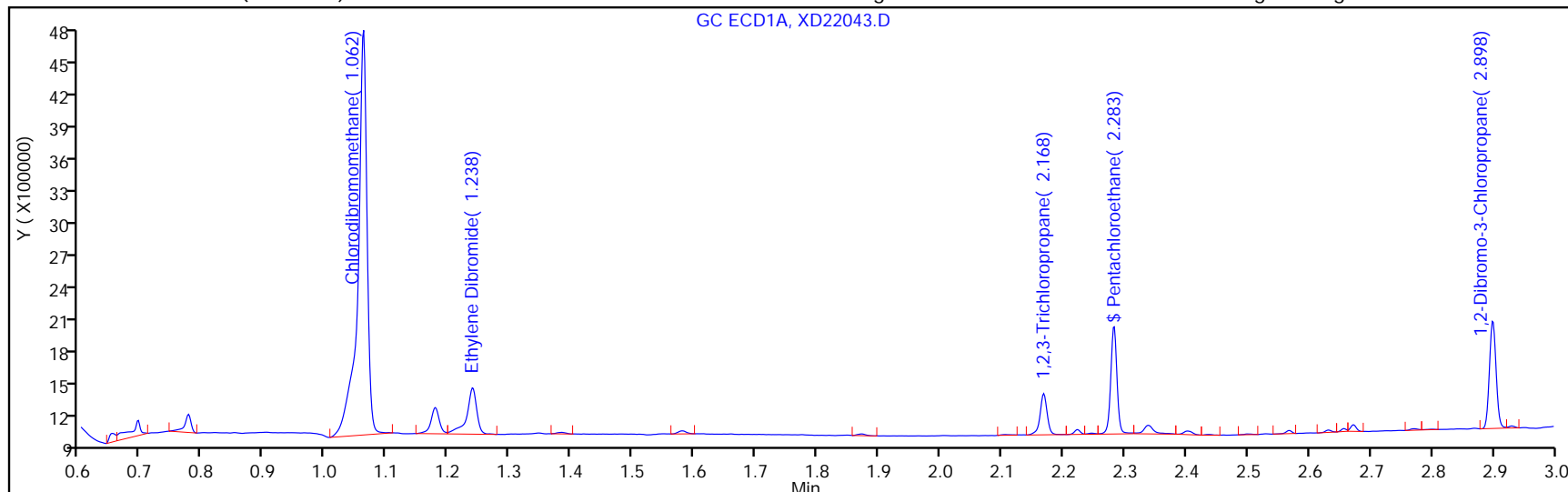
ALS Bottle#: 43

Method: EDBDBCP_CSGX

Limit Group: 504.1

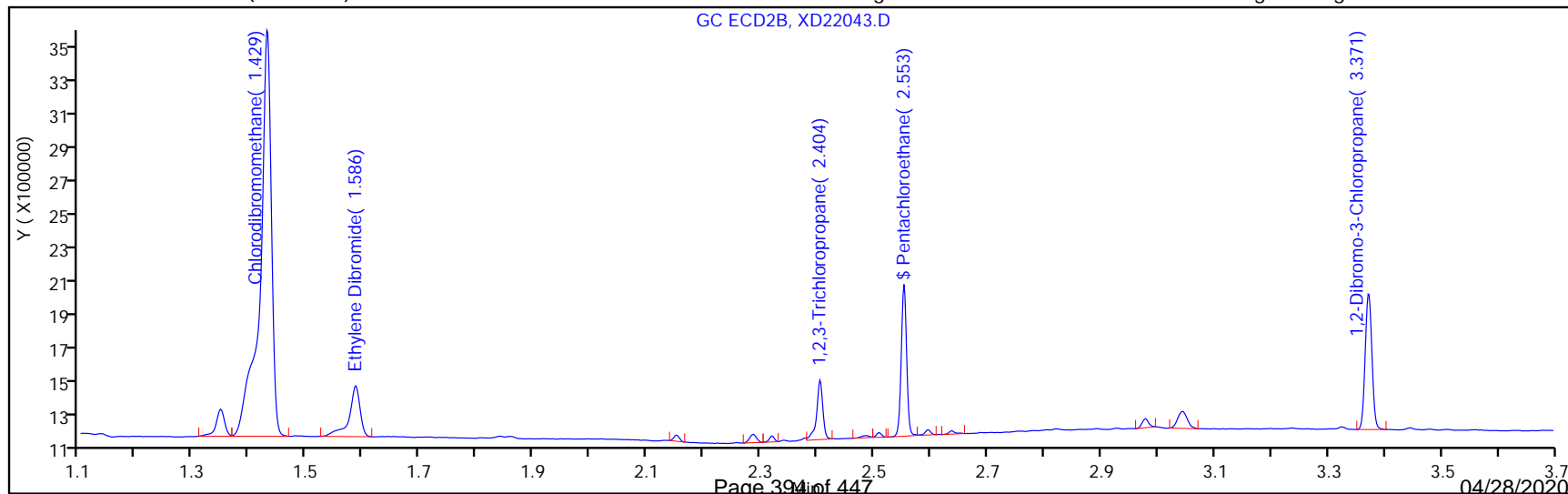
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCV 680-616105/43 Calibration Date: 04/22/2020 19:25
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22043.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	266882	261418		1.53	1.56	-2.0	30.0
1,2,3-Trichloropropane	Lin2		34701		7.76	7.81	-0.6	30.0
1,2-Dibromo-3-Chloropropane	Ave	450388	428781		1.49	1.56	-4.8	30.0
Pentachloroethane	Ave	1056335	949218		0.562	0.625	-10.1	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Lab Sample ID: CCV 680-616105/43 Calibration Date: 04/22/2020 19:25
 Instrument ID: CSGX Calib Start Date: 04/22/2020 13:21
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/22/2020 14:30
 Lab File ID: XD22043.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.40	2.37	2.43
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 23-Apr-2020 14:28:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22043.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-Apr-2020 19:25:46 ALS Bottle#: 43 Worklist Smp#: 43
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-043
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:52 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.062	1.062	0.000	3901704	7.00	6.66	
2	1.429	1.429	0.000	3372046	7.00	6.81	
						RPD = 2.17	
2 Ethylene Dibromide							
1	1.238	1.238	0.000	490215	1.56	1.52	
2	1.586	1.586	0.000	408466	1.56	1.53	
						RPD = 0.79	
3 1,2,3-Trichloropropane							
1	2.168	2.168	0.000	306847	7.81	7.46	
2	2.404	2.404	0.000	271101	7.81	7.76	
						RPD = 3.98	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	706707	0.6250	0.5856	
2	2.553	2.553	0.000	593261	0.6250	0.5616	
						RPD = 4.18	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.898	0.000	754172	1.56	1.45	
2	3.371	3.371	0.000	669971	1.56	1.49	
						RPD = 2.26	

Reagents:

504 WS #1_00167 Amount Added: 50.00 Units: uL
 504-DBCM_00131 Amount Added: 50.00 Units: uL

Report Date: 23-Apr-2020 14:28:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22043.D

Injection Date: 22-Apr-2020 19:25:46

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 43

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

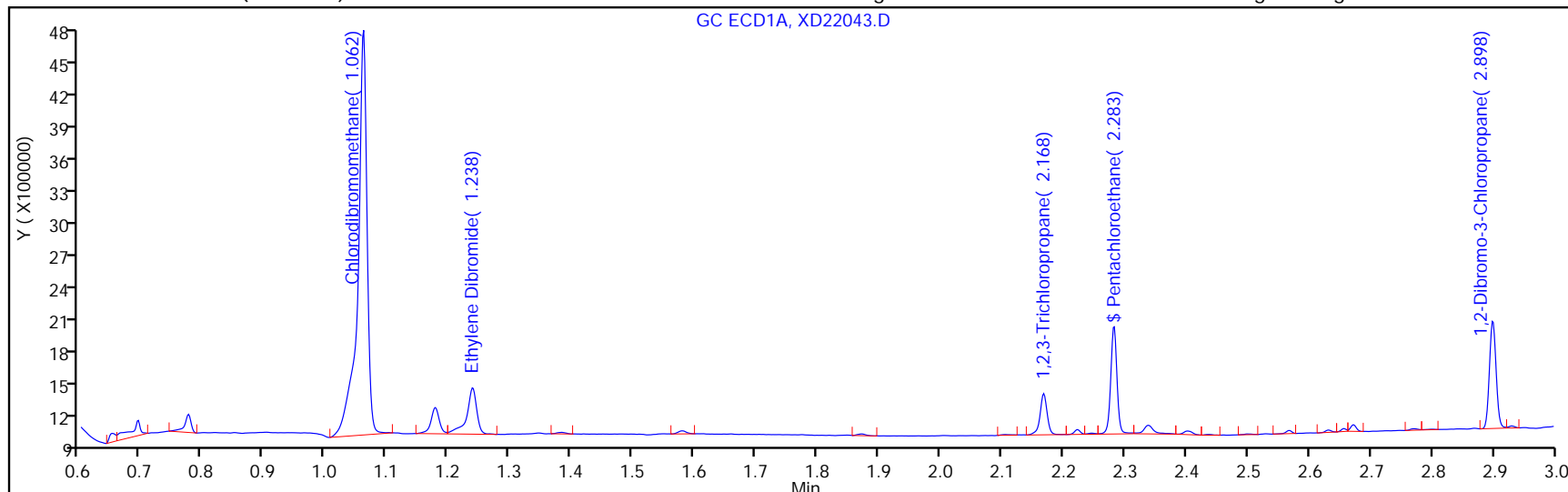
ALS Bottle#: 43

Method: EDBDBCP_CSGX

Limit Group: 504.1

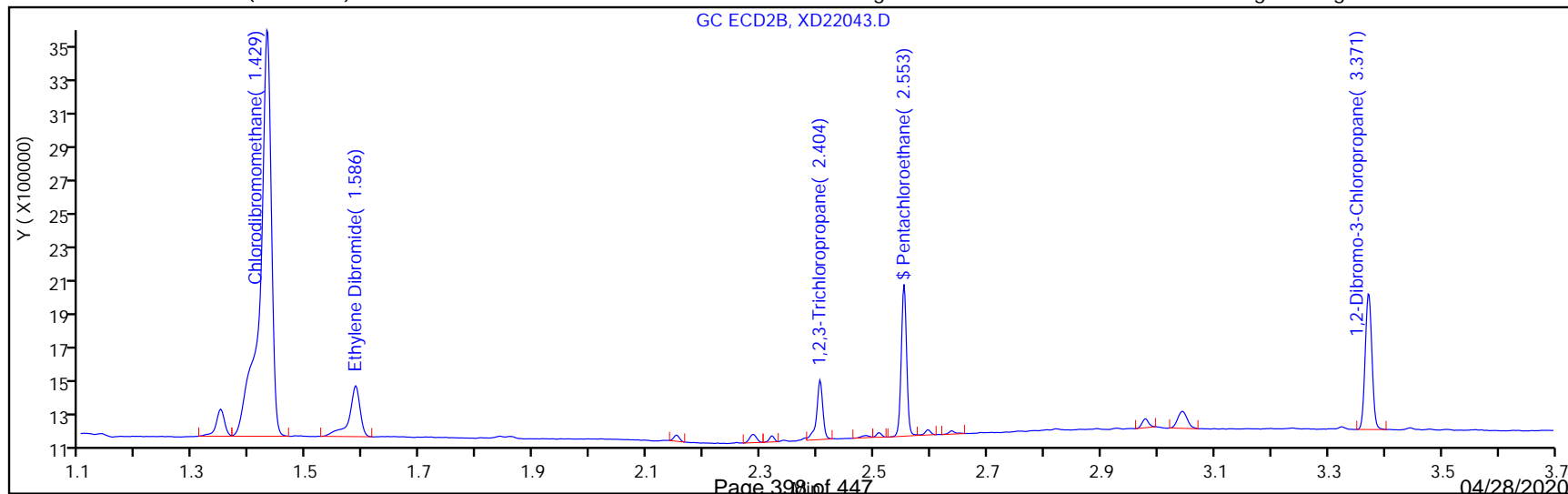
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-616089/3-A
 Matrix: Water Lab File ID: XD22016.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35 (mL) Date Analyzed: 04/22/2020 15:00
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 23-Apr-2020 14:28:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22016.D
 Lims ID: MB 680-616089/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Apr-2020 15:00:16 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	------------------	--------------------	-------

1 Chlorodibromomethane

1	1.061	1.062	-0.001	10592		0.0181	
2	1.427	1.429	-0.002	23149		0.0467	
						RPD = 88.41	

\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	420275	0.4375	0.3482	
2	2.553	2.552	0.001	369185	0.4375	0.3495	
						RPD = 0.36	

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22016.D

Injection Date: 22-Apr-2020 15:00:16

Instrument ID: CSGX

Operator ID:

Lims ID: MB 680-616089/3-A

Worklist Smp#: 16

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

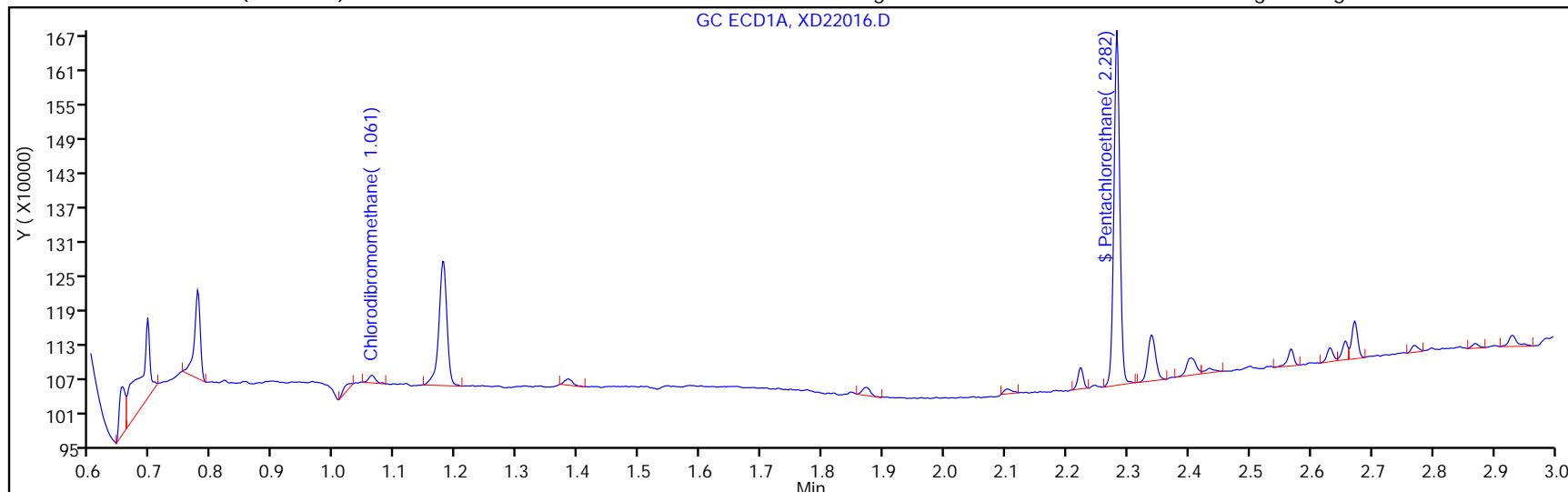
ALS Bottle#: 16

Method: EDBDBCP_CSGX

Limit Group: 504.1

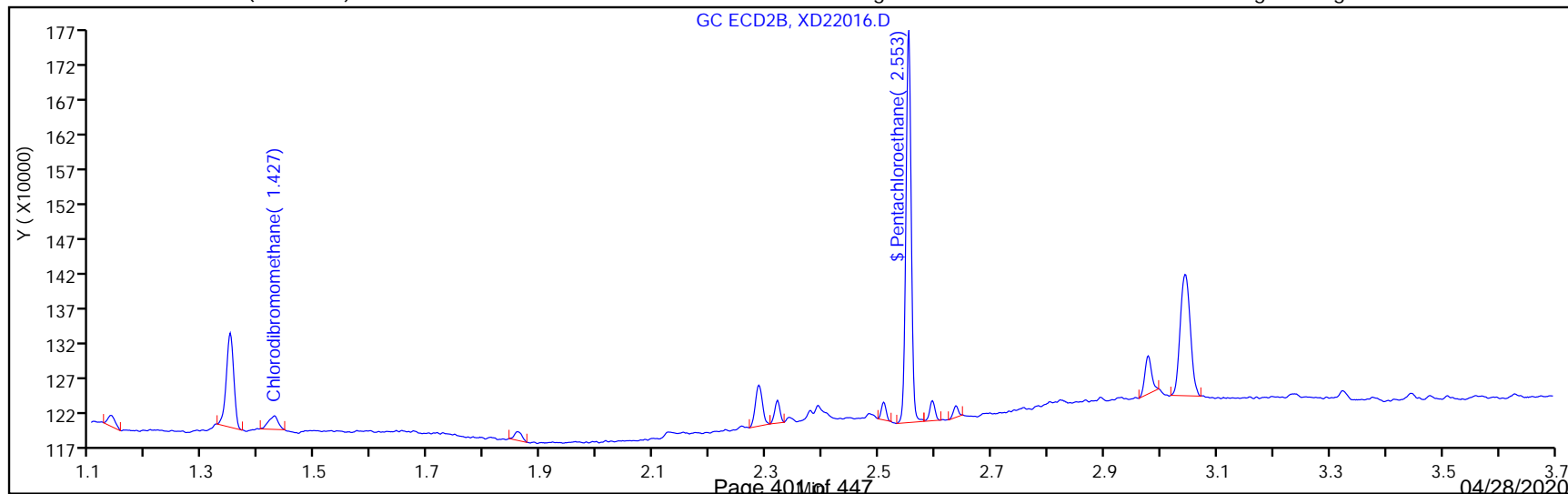
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22016.D
 Lims ID: MB 680-616089/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Apr-2020 15:00:16 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3482	79.60

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3495	79.88

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-616089/3-A
 Matrix: Water Lab File ID: XD22016.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35 (mL) Date Analyzed: 04/22/2020 15:00
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	80		70-130

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22016.D
 Lims ID: MB 680-616089/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Apr-2020 15:00:16 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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1 Chlorodibromomethane

1	1.061	1.062	-0.001	10592		0.0181	
2	1.427	1.429	-0.002	23149		0.0467	
						RPD = 88.41	

\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	420275	0.4375	0.3482	
2	2.553	2.552	0.001	369185	0.4375	0.3495	
						RPD = 0.36	

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22016.D

Injection Date: 22-Apr-2020 15:00:16

Instrument ID: CSGX

Operator ID:

Lims ID: MB 680-616089/3-A

Worklist Smp#: 16

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

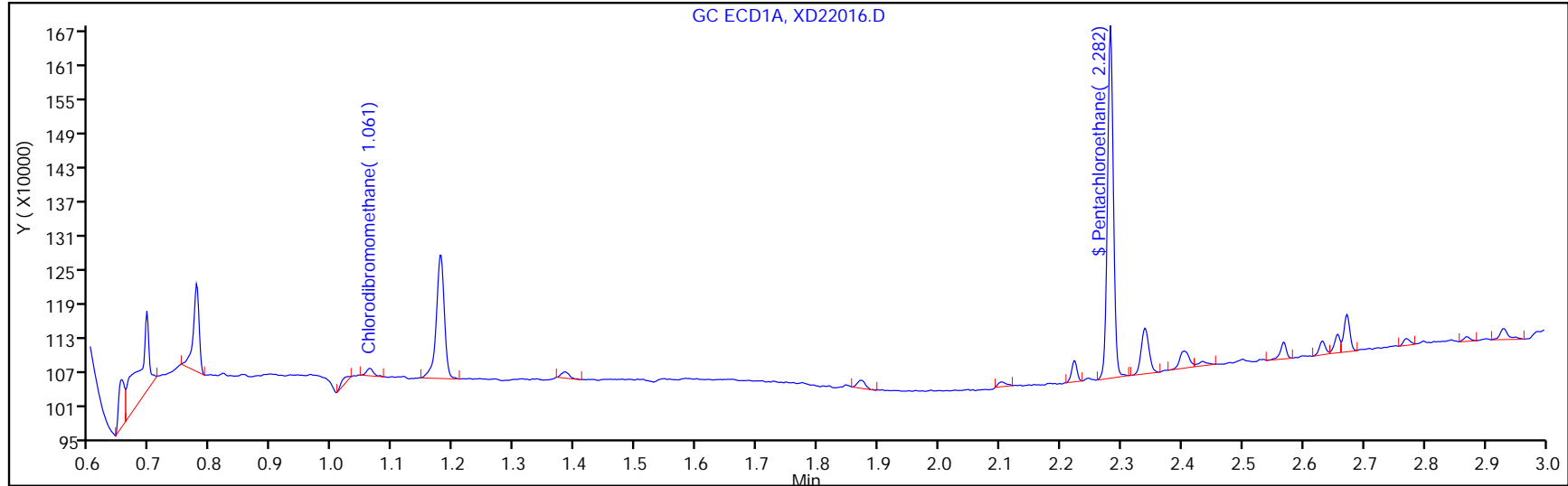
ALS Bottle#: 16

Method: EDBDBCP_CSGX

Limit Group: 504.1

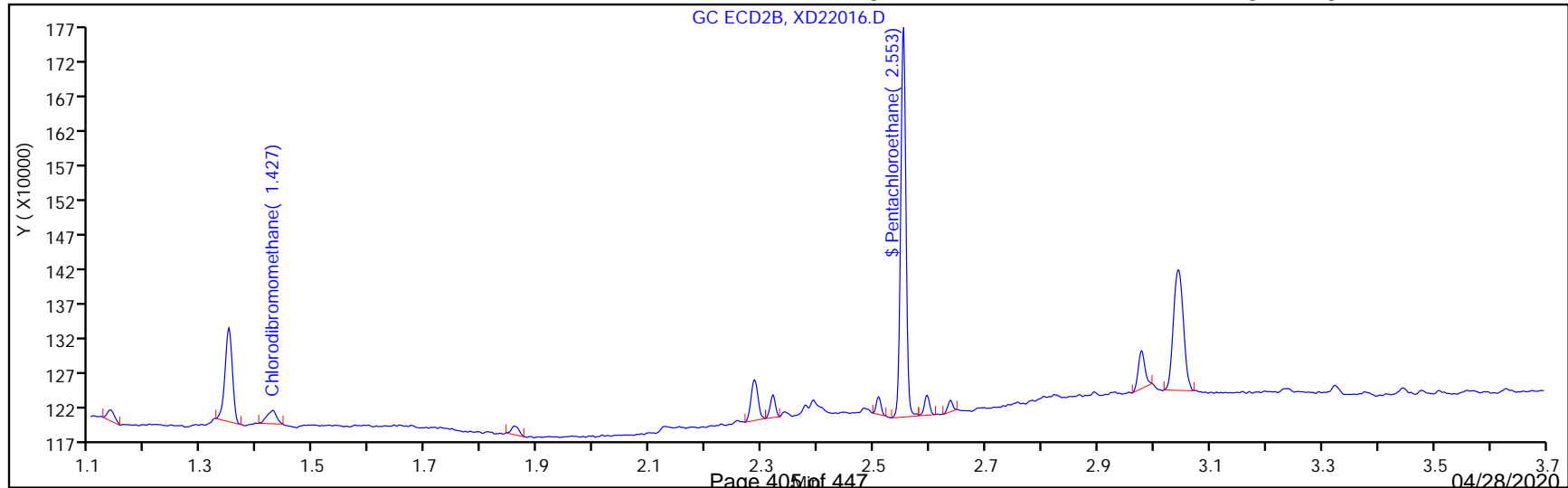
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22016.D
 Lims ID: MB 680-616089/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 22-Apr-2020 15:00:16 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3482	79.60

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3495	79.88

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-616105/15
 Matrix: Water Lab File ID: XD22015.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/22/2020 14:50
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 23-Apr-2020 14:28:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22015.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 22-Apr-2020 14:50:31 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-015
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 23-Apr-2020 14:28:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22015.D

Injection Date: 22-Apr-2020 14:50:31

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 15

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

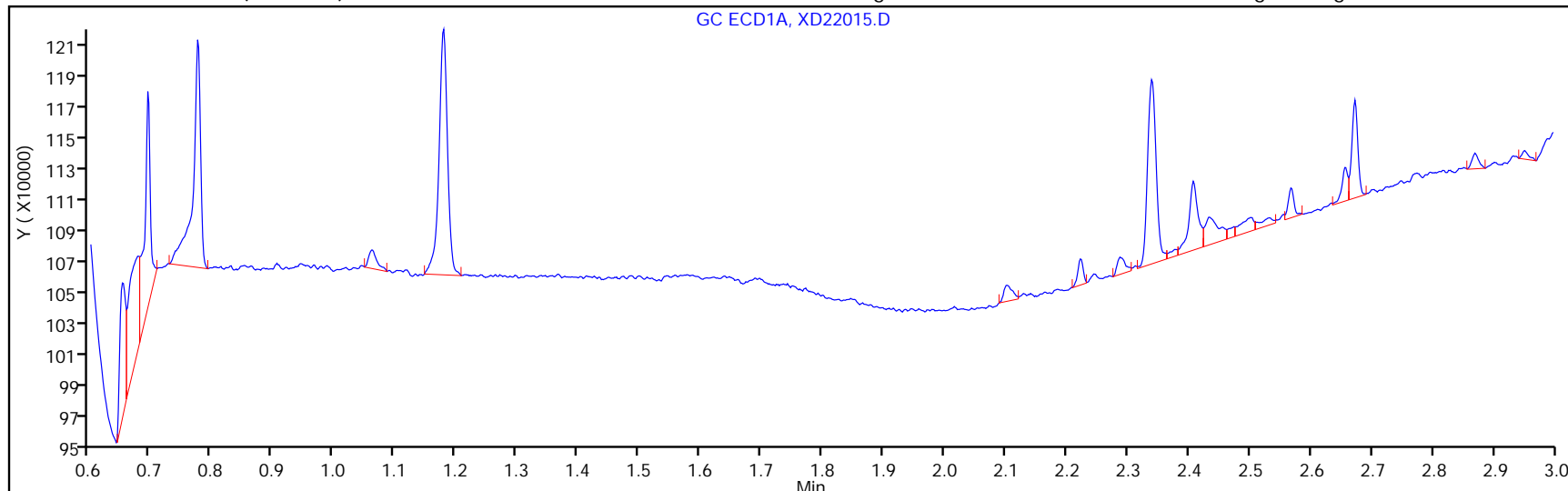
ALS Bottle#: 15

Method: EDBDBCP_CSGX

Limit Group: 504.1

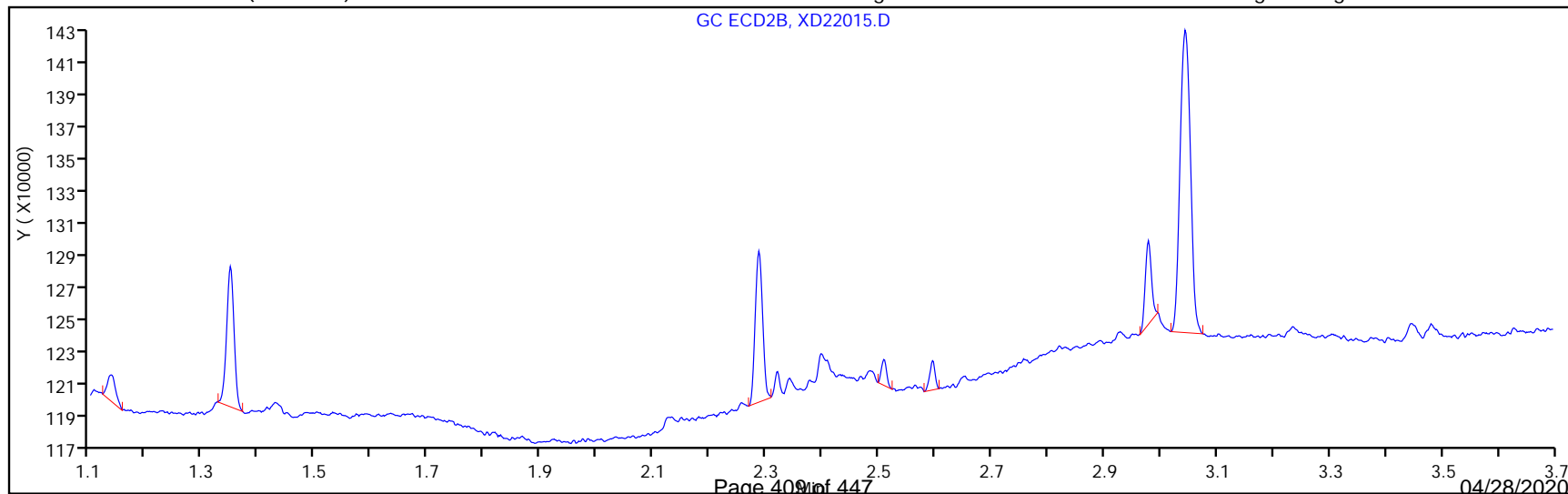
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-616105/15
 Matrix: Water Lab File ID: XD22015.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/22/2020 14:50
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 23-Apr-2020 14:28:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22015.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 22-Apr-2020 14:50:31 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-015
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 23-Apr-2020 14:28:31

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22015.D

Injection Date: 22-Apr-2020 14:50:31

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 15

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

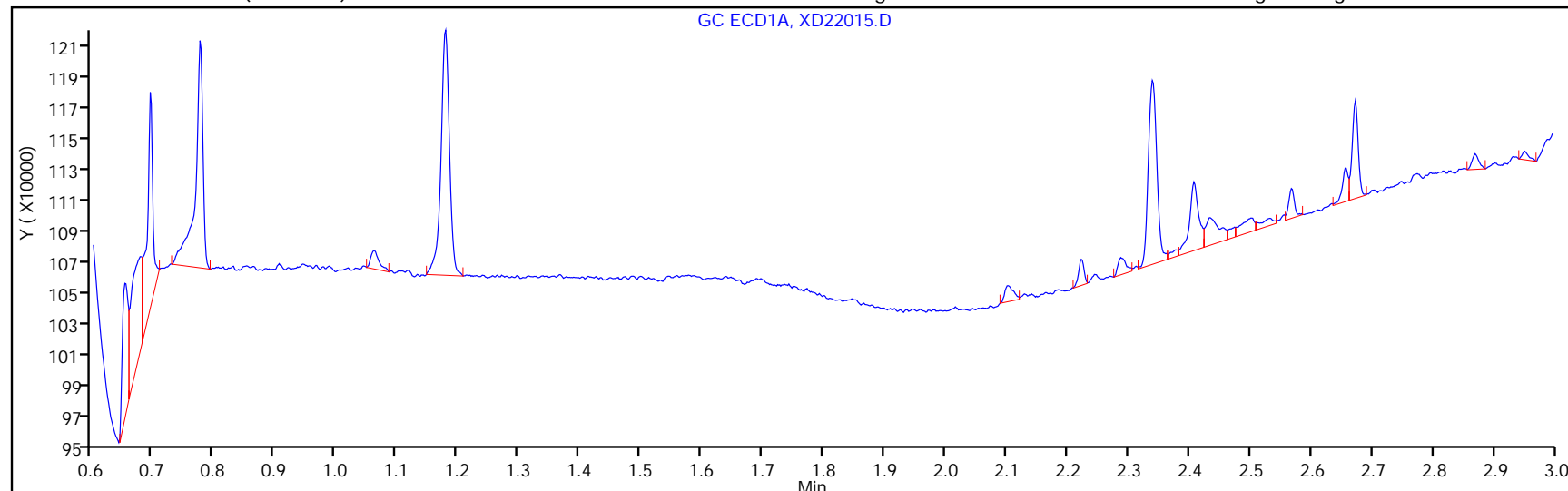
ALS Bottle#: 15

Method: EDBDBCP_CSGX

Limit Group: 504.1

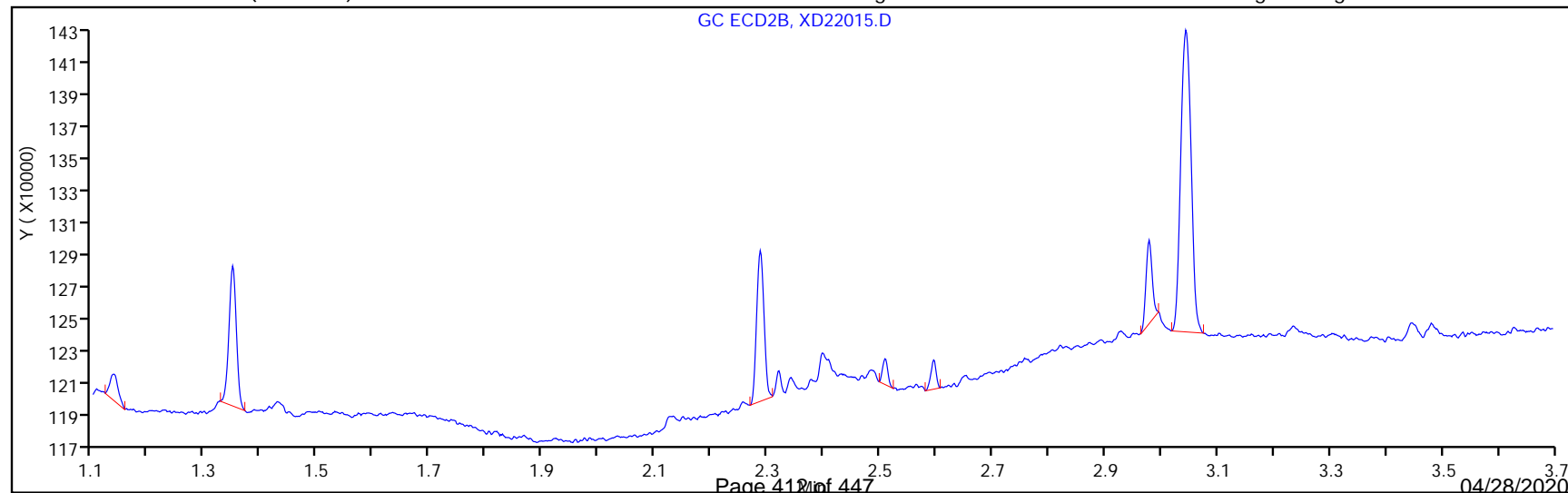
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-616105/44
 Matrix: Water Lab File ID: XD22044.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/22/2020 19:35
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 23-Apr-2020 14:28:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22044.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 22-Apr-2020 19:35:33 ALS Bottle#: 44 Worklist Smp#: 44
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-044
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:52 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 23-Apr-2020 14:28:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22044.D

Injection Date: 22-Apr-2020 19:35:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 44

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

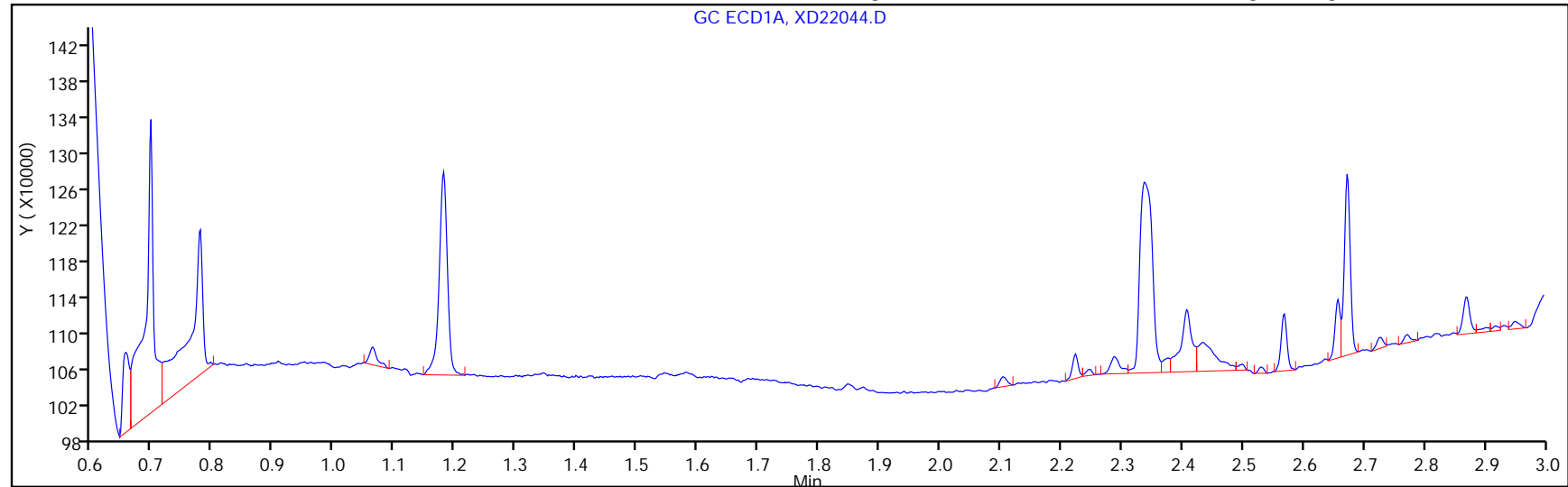
ALS Bottle#: 44

Method: EDBDBCP_CSGX

Limit Group: 504.1

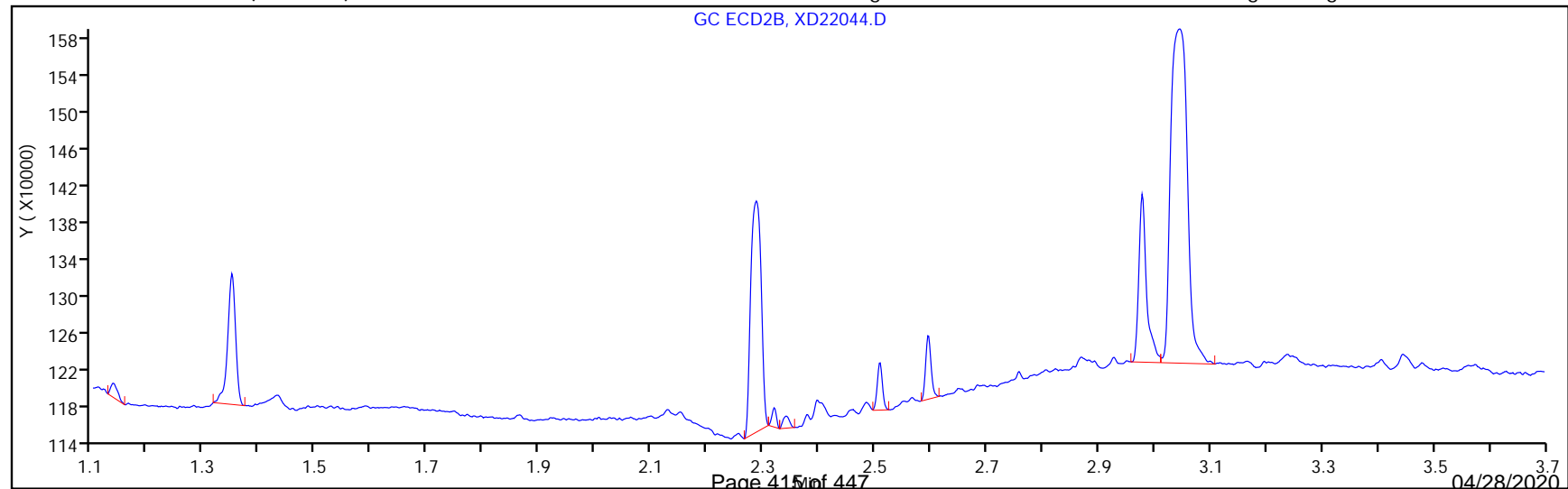
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-616105/44
 Matrix: Water Lab File ID: XD22044.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/22/2020 19:35
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 23-Apr-2020 14:28:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22044.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 22-Apr-2020 19:35:33 ALS Bottle#: 44 Worklist Smp#: 44
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-044
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:52 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 23-Apr-2020 14:28:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22044.D

Injection Date: 22-Apr-2020 19:35:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 44

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

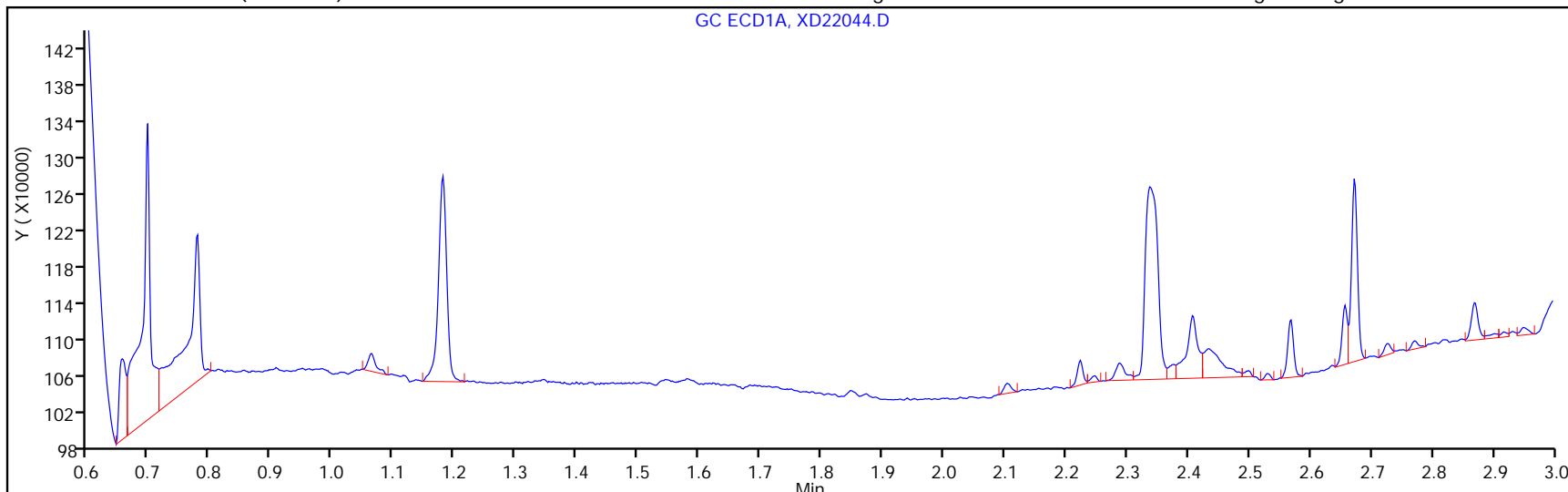
ALS Bottle#: 44

Method: EDBDBCP_CSGX

Limit Group: 504.1

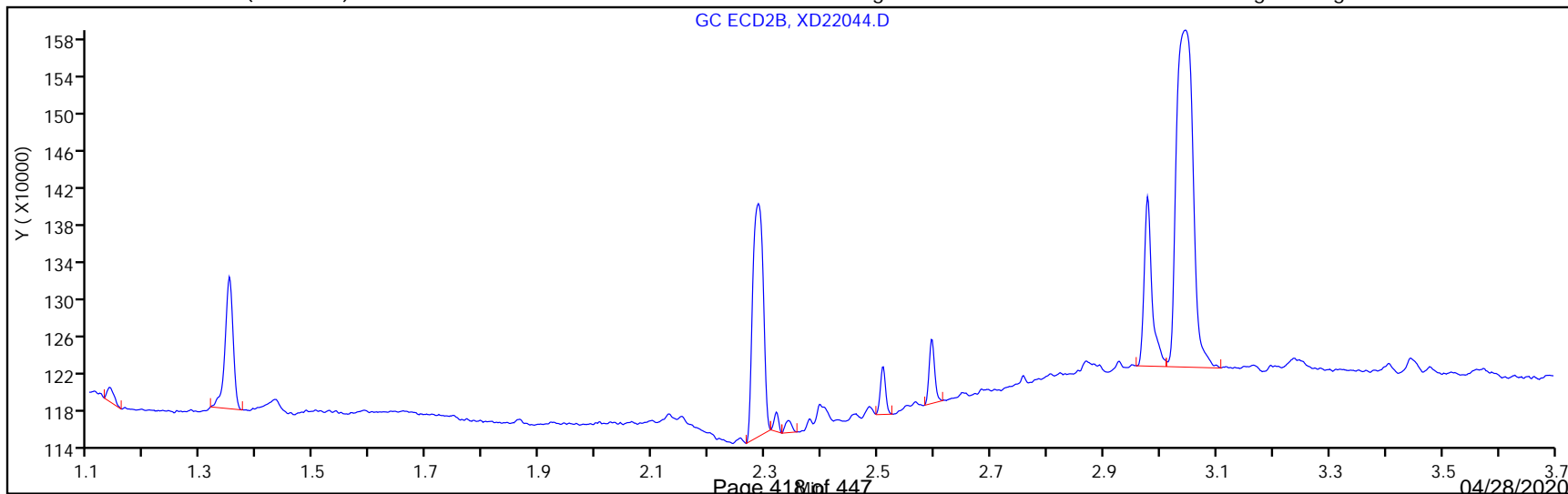
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-616089/4-A
 Matrix: Water Lab File ID: XD22017.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35 (mL) Date Analyzed: 04/22/2020 15:10
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	77		70-130

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22017.D
 Lims ID: LCS 680-616089/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Apr-2020 15:10:08 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.238	0.001	555087	1.75	1.72	
2	1.586	1.585	0.001	472051	1.75	1.77	
						RPD = 2.83	
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	315666	8.75	7.68	
2	2.405	2.404	0.001	289840	8.75	8.40	
						RPD = 9.04	
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	407331	0.4375	0.3375	
2	2.553	2.552	0.001	351617	0.4375	0.3329	
						RPD = 1.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	908008	1.75	1.75	
2	3.371	3.372	-0.001	776556	1.75	1.72	
						RPD = 1.54	

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22017.D

Injection Date: 22-Apr-2020 15:10:08

Instrument ID: CSGX

Operator ID:

Lims ID: LCS 680-616089/4-A

Worklist Smp#: 17

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

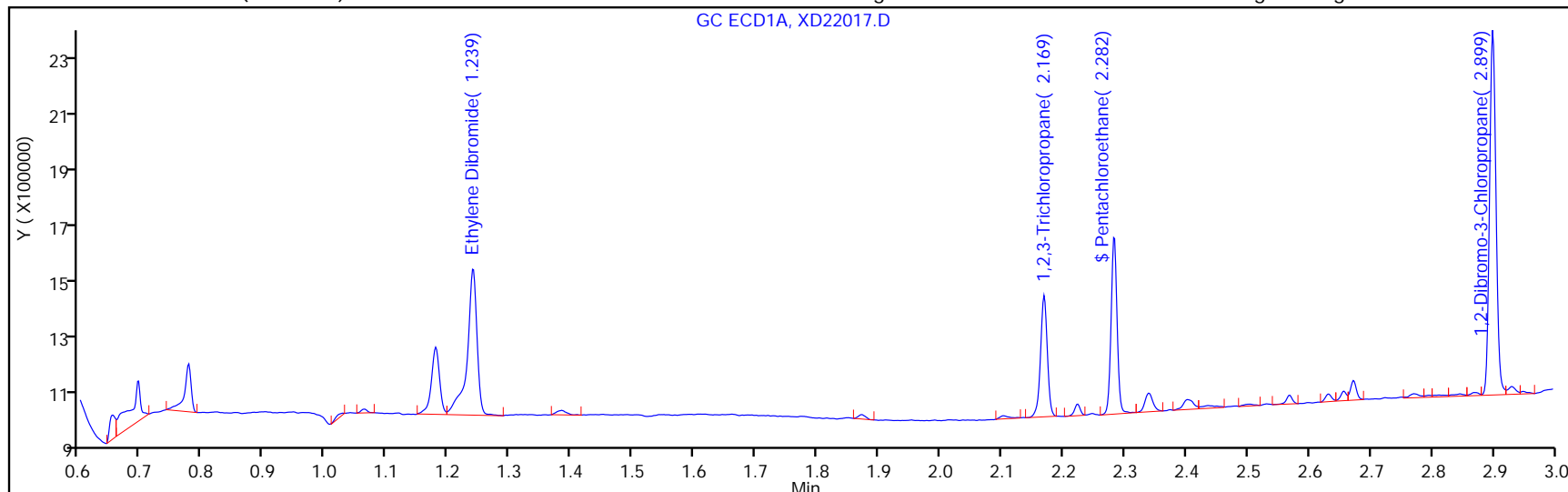
ALS Bottle#: 17

Method: EDBDBCP_CSGX

Limit Group: 504.1

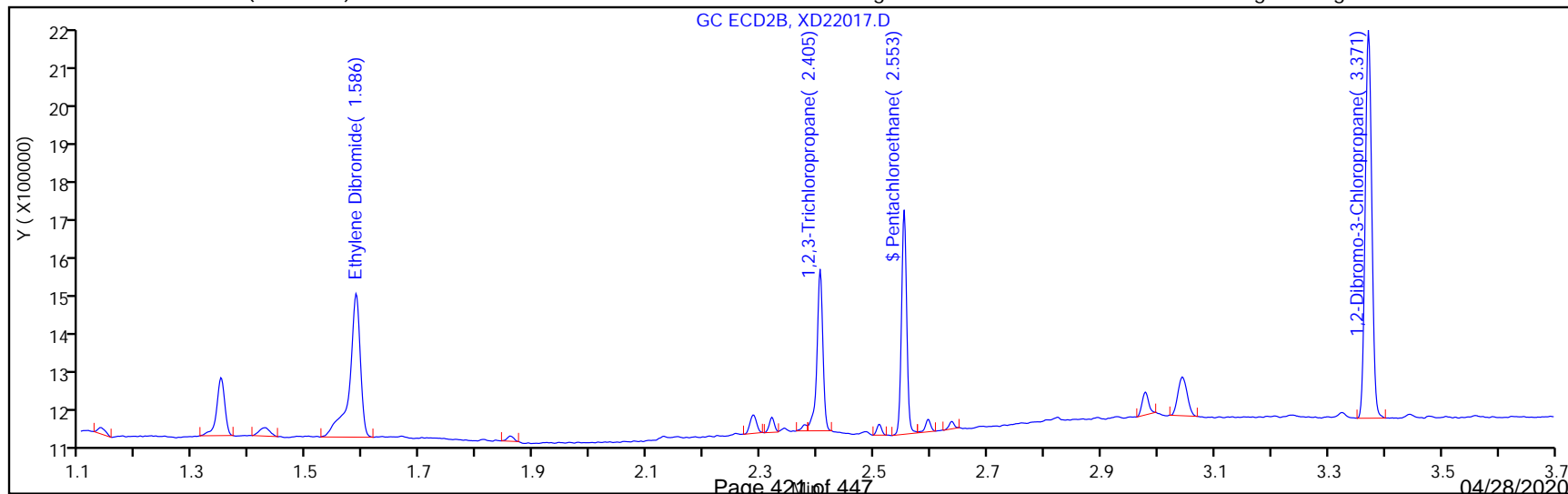
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22017.D
 Lims ID: LCS 680-616089/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Apr-2020 15:10:08 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3375	77.15

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3329	76.08

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-616089/4-A
 Matrix: Water Lab File ID: XD22017.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35 (mL) Date Analyzed: 04/22/2020 15:10
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.101		0.018	0.0025

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22017.D
 Lims ID: LCS 680-616089/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Apr-2020 15:10:08 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.238	0.001	555087	1.75	1.72	
2	1.586	1.585	0.001	472051	1.75	1.77	
						RPD = 2.83	
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	315666	8.75	7.68	
2	2.405	2.404	0.001	289840	8.75	8.40	
						RPD = 9.04	
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	407331	0.4375	0.3375	
2	2.553	2.552	0.001	351617	0.4375	0.3329	
						RPD = 1.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	908008	1.75	1.75	
2	3.371	3.372	-0.001	776556	1.75	1.72	
						RPD = 1.54	

Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22017.D

Injection Date: 22-Apr-2020 15:10:08

Instrument ID: CSGX

Operator ID:

Lims ID: LCS 680-616089/4-A

Worklist Smp#: 17

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

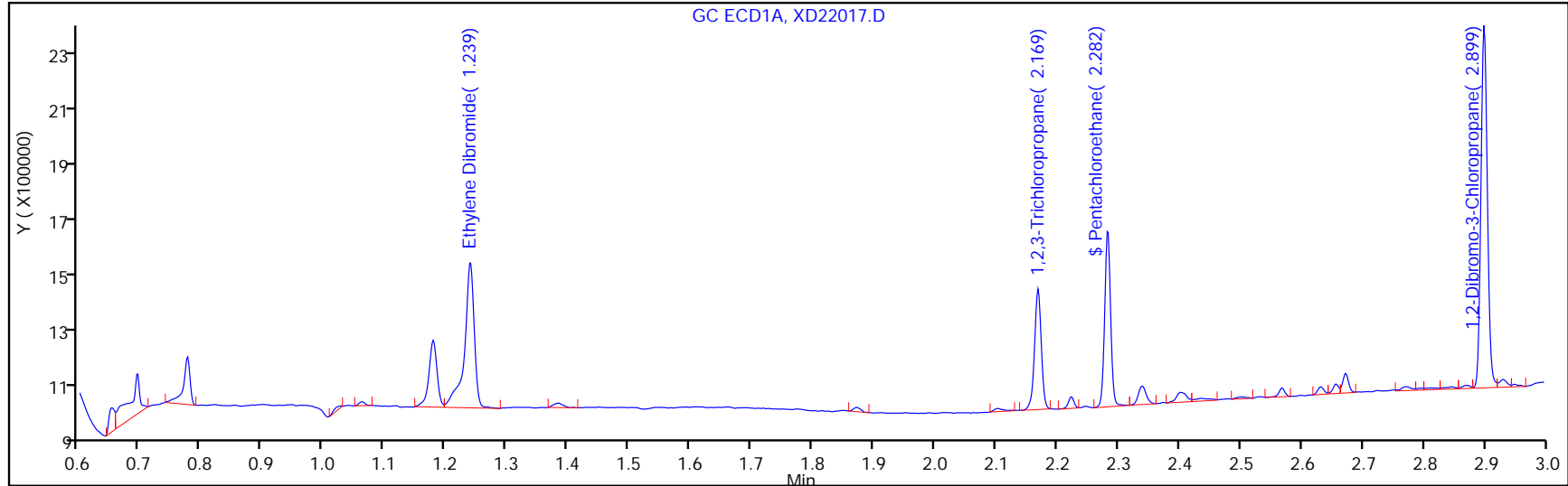
ALS Bottle#: 17

Method: EDBDBCP_CSGX

Limit Group: 504.1

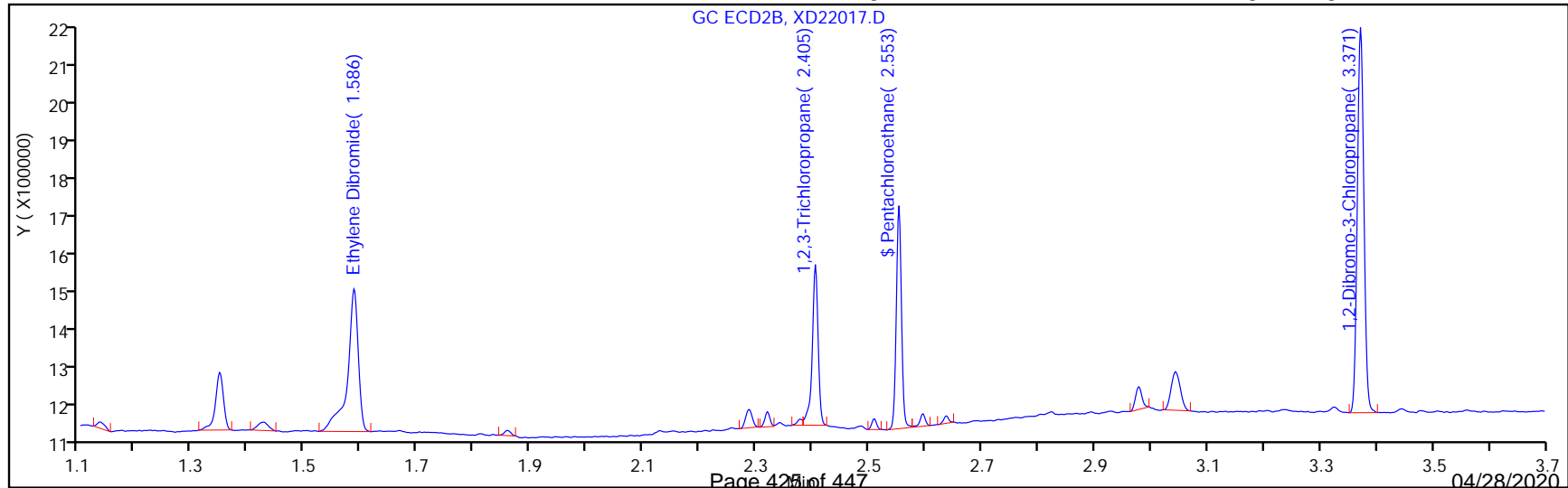
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:32

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22017.D
 Lims ID: LCS 680-616089/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 22-Apr-2020 15:10:08 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3375	77.15

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3329	76.08

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-616089/5-A
 Matrix: Water Lab File ID: XD22018.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35 (mL) Date Analyzed: 04/22/2020 15:19
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	80		70-130

Report Date: 23-Apr-2020 14:28:33

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22018.D
 Lims ID: LCSD 680-616089/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 22-Apr-2020 15:19:59 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.238	0.001	558279	1.75	1.73	
2	1.585	1.585	0.000	462614	1.75	1.73	
						RPD = 0.24	
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	322141	8.75	7.83	
2	2.405	2.404	0.001	282183	8.75	8.14	
						RPD = 3.86	
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	420511	0.4375	0.3484	
2	2.552	2.552	0.000	361431	0.4375	0.3422	
						RPD = 1.82	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	902698	1.75	1.74	
2	3.372	3.372	0.000	776014	1.75	1.72	
						RPD = 1.02	

Report Date: 23-Apr-2020 14:28:33

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22018.D

Injection Date: 22-Apr-2020 15:19:59

Instrument ID: CSGX

Operator ID:

Lims ID: LCSD 680-616089/5-A

Worklist Smp#: 18

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

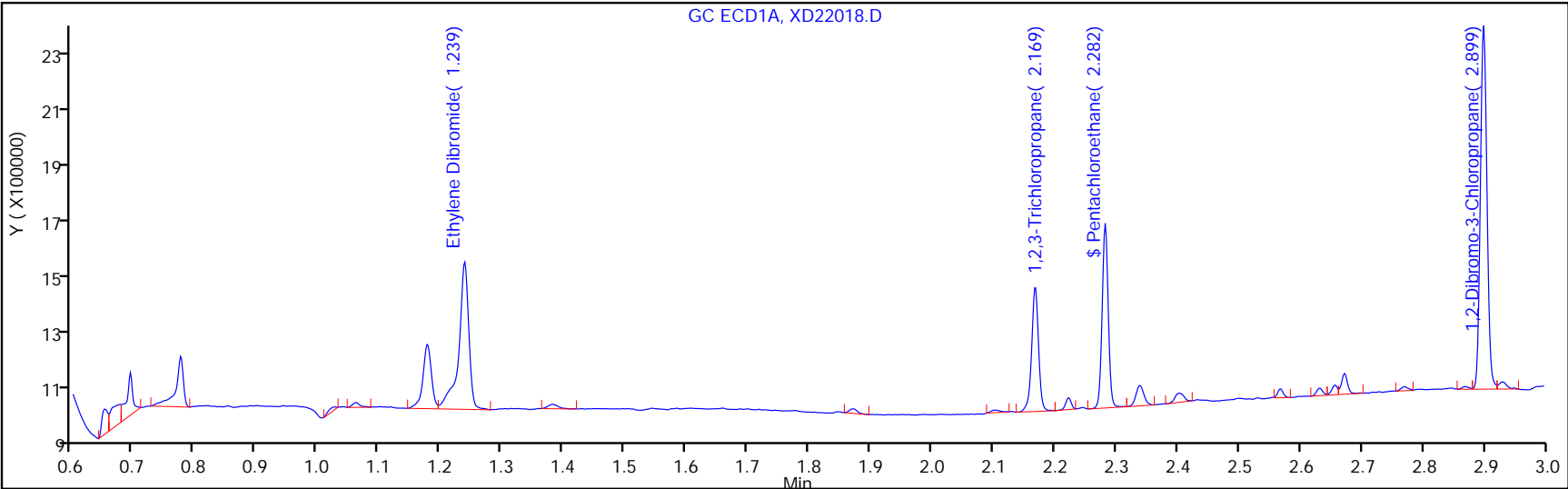
ALS Bottle#: 18

Method: EDBDBCP_CSGX

Limit Group: 504.1

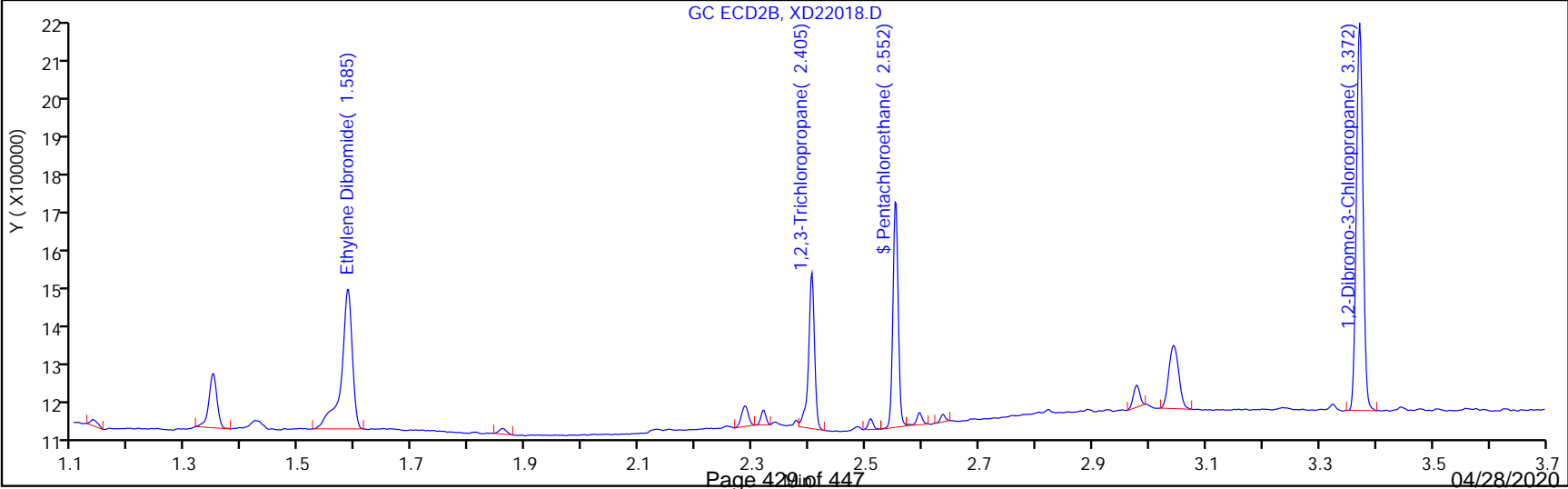
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:33

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22018.D
 Lims ID: LCSD 680-616089/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 22-Apr-2020 15:19:59 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3484	79.64

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3422	78.21

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-616089/5-A
 Matrix: Water Lab File ID: XD22018.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 04/22/2020 11:00
 Sample wt/vol: 35 (mL) Date Analyzed: 04/22/2020 15:19
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 616105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.0991		0.018	0.0025

Report Date: 23-Apr-2020 14:28:33

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22018.D
 Lims ID: LCSD 680-616089/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 22-Apr-2020 15:19:59 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.238	0.001	558279	1.75	1.73	
2	1.585	1.585	0.000	462614	1.75	1.73	
						RPD = 0.24	
3 1,2,3-Trichloropropane							
1	2.169	2.168	0.001	322141	8.75	7.83	
2	2.405	2.404	0.001	282183	8.75	8.14	
						RPD = 3.86	
\$ 4 Pentachloroethane							
1	2.282	2.283	-0.001	420511	0.4375	0.3484	
2	2.552	2.552	0.000	361431	0.4375	0.3422	
						RPD = 1.82	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	902698	1.75	1.74	
2	3.372	3.372	0.000	776014	1.75	1.72	
						RPD = 1.02	

Report Date: 23-Apr-2020 14:28:33

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22018.D

Injection Date: 22-Apr-2020 15:19:59

Instrument ID: CSGX

Operator ID:

Lims ID: LCSD 680-616089/5-A

Worklist Smp#: 18

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

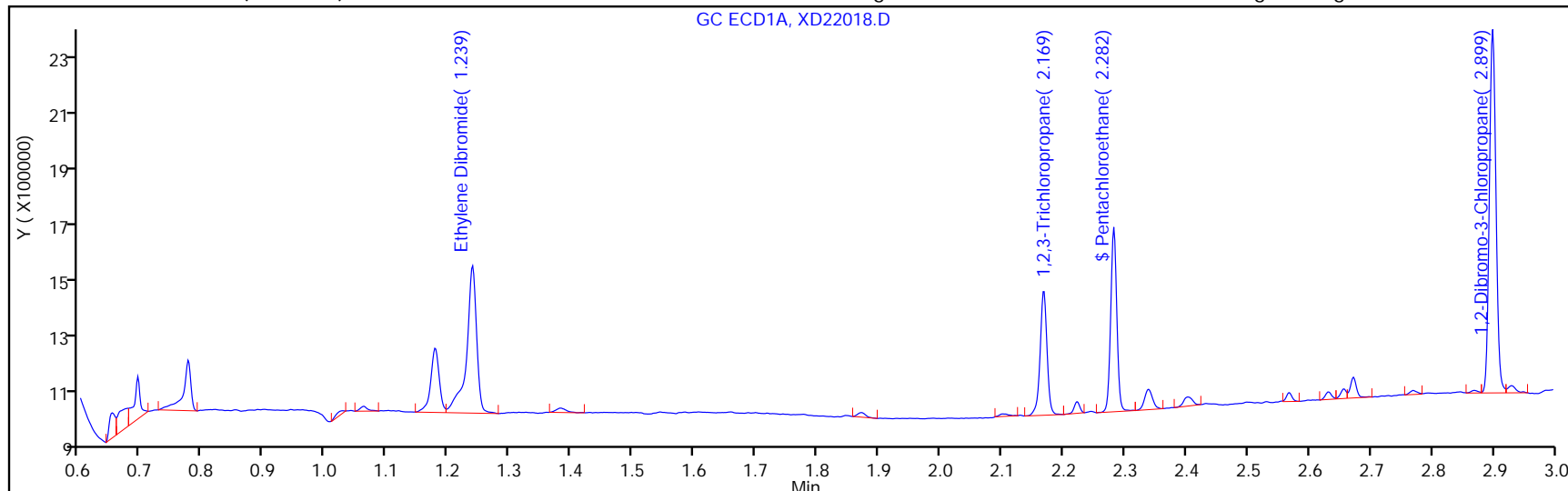
ALS Bottle#: 18

Method: EDBDBCP_CSGX

Limit Group: 504.1

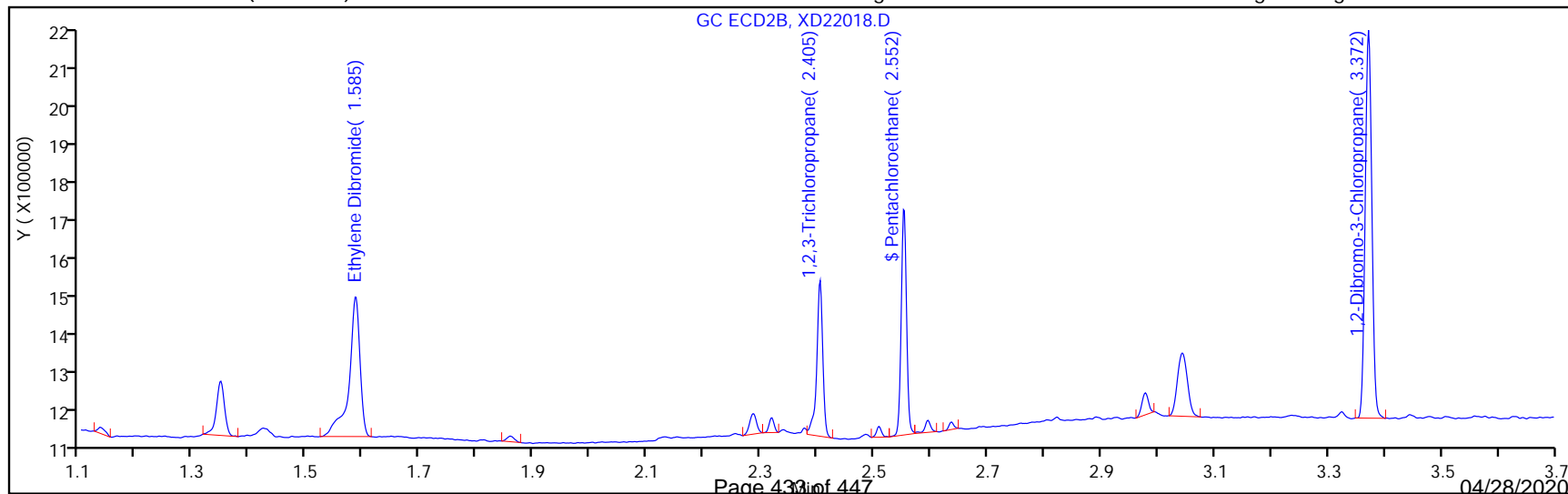
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 23-Apr-2020 14:28:33

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22018.D
 Lims ID: LCSD 680-616089/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 22-Apr-2020 15:19:59 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063333-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 23-Apr-2020 14:28:29 Calib Date: 22-Apr-2020 14:30:39
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200422-63333.b\XD22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0309

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3484	79.64

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3422	78.21

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Instrument ID: CSGX Start Date: 04/22/2020 13:21
 Analysis Batch Number: 616105 End Date: 04/22/2020 19:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-616105/6		04/22/2020 13:21	1	XD22006.D	CLP I 0.25 0.25 (mm)
IC 680-616105/6		04/22/2020 13:21	1	XD22006.D	CLP II 0.25 0.25 (mm)
IC 680-616105/7		04/22/2020 13:31	1	XD22007.D	CLP I 0.25 0.25 (mm)
IC 680-616105/7		04/22/2020 13:31	1	XD22007.D	CLP II 0.25 0.25 (mm)
IC 680-616105/8		04/22/2020 13:41	1	XD22008.D	CLP I 0.25 0.25 (mm)
IC 680-616105/8		04/22/2020 13:41	1	XD22008.D	CLP II 0.25 0.25 (mm)
IC 680-616105/9		04/22/2020 13:51	1	XD22009.D	CLP I 0.25 0.25 (mm)
IC 680-616105/9		04/22/2020 13:51	1	XD22009.D	CLP II 0.25 0.25 (mm)
IC 680-616105/10		04/22/2020 14:01	1	XD22010.D	CLP I 0.25 0.25 (mm)
IC 680-616105/10		04/22/2020 14:01	1	XD22010.D	CLP II 0.25 0.25 (mm)
IC 680-616105/11		04/22/2020 14:10	1	XD22011.D	CLP I 0.25 0.25 (mm)
IC 680-616105/11		04/22/2020 14:10	1	XD22011.D	CLP II 0.25 0.25 (mm)
IC 680-616105/12		04/22/2020 14:20	1	XD22012.D	CLP I 0.25 0.25 (mm)
IC 680-616105/12		04/22/2020 14:20	1	XD22012.D	CLP II 0.25 0.25 (mm)
IC 680-616105/13		04/22/2020 14:30	1	XD22013.D	CLP I 0.25 0.25 (mm)
IC 680-616105/13		04/22/2020 14:30	1	XD22013.D	CLP II 0.25 0.25 (mm)
ICV 680-616105/14 CCV		04/22/2020 14:40	1	XD22014.D	CLP I 0.25 0.25 (mm)
ICV 680-616105/14 CCV		04/22/2020 14:40	1	XD22014.D	CLP II 0.25 0.25 (mm)
PIBLK 680-616105/15		04/22/2020 14:50	1	XD22015.D	CLP I 0.25 0.25 (mm)
PIBLK 680-616105/15		04/22/2020 14:50	1	XD22015.D	CLP II 0.25 0.25 (mm)
MB 680-616089/3-A		04/22/2020 15:00	1	XD22016.D	CLP I 0.25 0.25 (mm)
MB 680-616089/3-A		04/22/2020 15:00	1	XD22016.D	CLP II 0.25 0.25 (mm)
LCS 680-616089/4-A		04/22/2020 15:10	1	XD22017.D	CLP I 0.25 0.25 (mm)
LCS 680-616089/4-A		04/22/2020 15:10	1	XD22017.D	CLP II 0.25 0.25 (mm)
LCS 680-616089/5-A		04/22/2020 15:19	1	XD22018.D	CLP I 0.25 0.25 (mm)
LCS 680-616089/5-A		04/22/2020 15:19	1	XD22018.D	CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:29	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:29	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:39	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:39	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:49	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:49	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:59	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 15:59	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:09	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:09	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:18	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:18	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:28	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:28	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:38	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:38	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:48	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:48	1		CLP II 0.25 0.25 (mm)

504.1

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1
 SDG No.: _____
 Instrument ID: CSGX Start Date: 04/22/2020 13:21
 Analysis Batch Number: 616105 End Date: 04/22/2020 19:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/22/2020 16:58	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 16:58	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:08	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:08	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:17	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:17	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:27	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:27	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:37	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:37	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:47	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 17:47	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:07	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:07	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:16	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:16	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:26	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:26	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:36	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/22/2020 18:36	1		CLP II 0.25 0.25 (mm)
680-182910-1		04/22/2020 18:46	1	XD22039.D	CLP I 0.25 0.25 (mm)
680-182910-1		04/22/2020 18:46	1	XD22039.D	CLP II 0.25 0.25 (mm)
680-182910-2		04/22/2020 18:56	1	XD22040.D	CLP I 0.25 0.25 (mm)
680-182910-2		04/22/2020 18:56	1	XD22040.D	CLP II 0.25 0.25 (mm)
680-182910-3		04/22/2020 19:06	1	XD22041.D	CLP I 0.25 0.25 (mm)
680-182910-3		04/22/2020 19:06	1	XD22041.D	CLP II 0.25 0.25 (mm)
680-182910-4		04/22/2020 19:15	1	XD22042.D	CLP I 0.25 0.25 (mm)
680-182910-4		04/22/2020 19:15	1	XD22042.D	CLP II 0.25 0.25 (mm)
CCV 680-616105/43		04/22/2020 19:25	1	XD22043.D	CLP I 0.25 0.25 (mm)
CCV 680-616105/43		04/22/2020 19:25	1	XD22043.D	CLP II 0.25 0.25 (mm)
PIBLK 680-616105/44		04/22/2020 19:35	1	XD22044.D	CLP I 0.25 0.25 (mm)
PIBLK 680-616105/44		04/22/2020 19:35	1	XD22044.D	CLP II 0.25 0.25 (mm)

504.1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Batch Number: 616089 Batch Start Date: 04/22/20 11:00 Batch Analyst: Canady, Daniel

Batch Method: 504.1 Batch End Date: 04/22/20 12:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ResidualChlorine	504 Spike 00155
MB 680-616089/3		504.1, 504.1				35 mL	2 mL		
LCS 680-616089/4		504.1, 504.1				35 mL	2 mL		35 uL
LCSD 680-616089/5		504.1, 504.1				35 mL	2 mL		35 uL
680-182910-E-1	GWK016-2021-1	504.1, 504.1	T	63.36 g	27.96 g	35.4 mL	2 mL	No	
680-182910-E-2	GWK003-2021-1	504.1, 504.1	T	63.45 g	28.26 g	35.2 mL	2 mL	No	
680-182910-D-3	GWVA2-2021-1	504.1, 504.1	T	63.46 g	27.58 g	35.9 mL	2 mL	No	
680-182910-D-4	TB2021-03	504.1, 504.1	T	63.79 g	27.72 g	36.1 mL	2 mL	No	

Lab Sample ID	Client Sample ID	Method Chain	Basis	504 NewSurr 00125	AnalysisComment				
MB 680-616089/3		504.1, 504.1		35 uL					
LCS 680-616089/4		504.1, 504.1		35 uL					
LCSD 680-616089/5		504.1, 504.1		35 uL					
680-182910-E-1	GWK016-2021-1	504.1, 504.1	T	35 uL	Na2S2O3				
680-182910-E-2	GWK003-2021-1	504.1, 504.1	T	35 uL	Na2S2O3				
680-182910-D-3	GWVA2-2021-1	504.1, 504.1	T	35 uL	Na2S2O3				
680-182910-D-4	TB2021-03	504.1, 504.1	T	35 uL	Na2S2O3				

Batch Notes	
Balance ID	36
Analyst ID - Extraction	CanadyD
NaCl ID	6495298
Pipette/Syringe/Dispenser ID	SG6
Prep Solvent ID	6541515
Residual Chlorine Indicator ID	6541571
Analyst ID - Spike Analyst	CanadyD
Sufficient Volume for Batch QC	Yes

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

504.1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-182910-1

SDG No.: _____

Batch Number: 616089 Batch Start Date: 04/22/20 11:00 Batch Analyst: Canady, Daniel

Batch Method: 504.1 Batch End Date: 04/22/20 12:06

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.


504.1

Shipping and Receiving Documents


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04/28/2020

CHAIN-OF-CUSTODY RECORD

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No. (410) 594-7000 Fax No. (410) 771-1825	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	COC NUMBER: COC-K016-2021-1
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	LAB PO NUMBER: 16665	LAB CONTACT: 1 (912) 354-7888	YEAR: 2020
PROJECT SITE AND PHASE: ST106/SS111	FAX AND MAIL REPORTS/IEDD TO: Pam Moss: pmoss@eaest.com EA	FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA	QUARTER: 2 - April

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS		
				(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(6020A/6010C) Total (As,Pb,Ca,K,Na,Mg)	(6010C) Dissolved Fe, Mn	(300.0A) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	(4500NH3B/C) Ammonia Nitrogen		(4500 S2CF) Sulfide	
1	GWK016-2021-1	4/16/2021	1349	6	3	-	3									
2																
3																
4																
5																
6																


 680-182910-01 Chain of Custody

SAMPLER(S): <i>G. Bracht</i>	RELINQUISHED BY:	RECEIVED BY:	DATE
Printed Name and Signature: <i>Gunny Bracht</i>	Printed Name and Signature: <i>G. Bracht</i>	Printed Name and Signature: <i>CS Branda</i>	DATE 4/16/2020 1330
Printed Name and Signature: _____	Printed Name and Signature: _____	Printed Name and Signature: _____	DATE _____

COURIER AND SHIPPING NUMBER: FedEx 4588 3732 7055	TB2021-03
--	-----------

EA		CHAIN-OF-CUSTODY RECORD		COC NUMBER COC-K003-2021-1
225 Spelling Circle, Suite 400 Hunt Valley, MD 21084 Tel No: (410) 884-7000 Fax No: (410) 771-1625		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020 QUARTER: 2 - April
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	FAX AND MAIL REPORTS/EDD TO: Tara Lamond Amanda Smith Pam Moss	Email: taramond@east.com asmith@east.com pmoss@east.com	EA EA EA
PROJECT SITE AND PHASE: ST-106/SS-111	LAB PO NUMBER: 16065	LAB CONTACT: 1 (912) 354-7858		
		ANALYSIS REQUIRED (Specify number of bottles)		
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS
1	GWK003-2021-1	4/16/2020	1415	(4500 S2CF) Sulfide (4500NH3B/C) Ammonia Nitrogen (2320B) Alkalinity (Total, Carbonate, and Bicarbonate) (353 2) Nitrate-Nitrite (300 0A) Chloride, bromide, sulfate (6010C) Dissolved Fe, Mn (6020A/6010C) Total (As, Pb, Ca, K, Na, Mg) (EPA Method 504.1) EDB (EPA Method 524.2) BTEXN (EPA Method 524.2) BTEX (EPA Method 524.2) VOCs Total Number of Bottles
2				
3				
4				
5				
6				

SAMPLER(S): G. BEACHT		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7855		TB2021-03
RELINQUISHED BY: Printed Name and Signature: Gunn Becht	DATE: 4/16/2020	TIME: 1730	RECEIVED BY: Printed Name and Signature: OSBanda	DATE: 04-17-20
Printed Name and Signature: _____			Printed Name and Signature: _____	TIME: 0910
Printed Name and Signature: _____			Printed Name and Signature: H.9.(CF)5.39	

CHAIN-OF-CUSTODY RECORD

<p>225 Scalling Circle Suite 400 Hunt Valley MD Tel No (410) 584-7000 Fax No (410) 771-1625</p>	<p>PROJECT NUMBER: 62735DM02</p>	<p>LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404</p>	<p>FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA Pam Moss: pmoss@eaest.com EA</p>	<p>COC NUMBER COC-VA2-2021-1</p> <p>YEAR: 2020 QUARTER: 2 - April</p>
<p>PROJECT NAME: Kirtland AFB Bulk Fuels Facility</p>		<p>LAB AND MAIL REPORTS/EDD TO: Pam Moss</p>		
<p>PROJECT SITE AND PHASE: ST106/SS111</p>		<p>LAB PO NUMBER: 16065</p>		
		<p>LAB CONTACT: 1 (912) 354-7859</p>		


ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)				COMMENTS
				(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	EPA Method 504.1 EDB	
1	GWWA2-2021-1	4/16/2020	1505	6	3	3	3	
2								
3								
4								
5								
6								

<p>SAMPLER(S): <i>G. Bacht</i></p>	<p>RELINQUISHED BY: <i>Ginn Beach</i></p>	<p>DATE: 4/16/2020</p>	<p>TIME: 1730</p>
<p>PRINTED NAME AND SIGNATURE: GINN BEACH <i>Ginn Beach</i></p>		<p>DATE: 4/17/2020</p>	
<p>PRINTED NAME AND SIGNATURE: <i>Ginn Beach</i></p>		<p>TIME: 0910</p>	
<p>PRINTED NAME AND SIGNATURE: <i>Ginn Beach</i></p>		<p>RECEIVED BY: <i>Y. A. (CF) S. B.</i></p>	


<p>COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7855</p>	<p>DATE: TB2021-4-03</p>
--	--------------------------

*Please report results for BTEX, TCE, PCE, and VC


CHAIN-OF-CUSTODY RECORD

 <p>225 Schilling Circle, Suite 400 Hunt Valley, MD Tel No: (410) 584-7000 Fax No: (410) 771-1625</p>	<p>PROJECT NAME: Kirtland AFB Bulk Fuels Facility</p>	<p>LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404</p>	<p>FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@east.com EA Amanda Smith: asmith@east.com EA Pam Moss: pmoss@east.com EA</p>	<p>COC NUMBER COC-TB2021-03</p> <p>YEAR: 2020 QUARTER: 2 - April</p>
<p>PROJECT SITE AND PHASE: ST106/SS111</p>		<p>LAB CONTACT: 1 (912) 354-7858</p>		
<p>ANALYSIS REQUIRED (Specify number of bottles)</p>				
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS
	TB2021-03	4/16/2020	1617	<p style="font-size: 2em;">(TB)</p>
<p>Associated with: GWVA7-2021-1 GWK003-2021-1 GWK016-2021-1</p>				
<p>SAMPLER(S): <i>G. Bracht</i></p>		<p>COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7855</p>		
<p>RELINQUISHED BY: <i>Gunn Beach</i></p>		<p>DATE: 4/16/2020</p>	<p>TIME: 1730</p>	<p>RECEIVED BY: <i>Paula</i></p>
<p>Printed Name and Signature: Gunn Beach</p>		<p>DATE: 04-17-20</p>	<p>TIME: 0910</p>	<p>Printed Name and Signature: Paula</p>
<p>Printed Name and Signature: Gunn Beach</p>				<p>Printed Name and Signature: Paula</p>



CHAIN-OF-CUSTODY RECORD

 225 Schling Circle, Suite 400 Hunt Valley, MD Tel No: (410) 584-7000 Fax No: (410) 771-1625	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	COC NUMBER COC-K003-2021-1
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT SITE AND PHASE: ST106/SS111	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@east.com EA Amanda Smith: asmith@east.com EA FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@east.com EA	YEAR: 2020 QUARTER: 2 - April
LAB CONTRACT: 1 (912) 354-7858		LAB PO NUMBER: 16065	


ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)						COMMENTS				
				(EPA Method 504.1) EDB	(EPA Method 524.2) BTEXN	(EPA Method 524.2) BTEX	(EPA Method 524.2) VOCs	Total Number of Bottles	(6010C) Dissolved Fe, Mn		(300 DA) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	(4500NH3B/C) Ammonia Nitrogen
1	GWK003-2021-1	4/16/2020	1415	0	3	3	3	6						
2														
3														
4														
5														
6														



680-182910-02 Chain of Custody

SAMPLER(S): G. BRACHT	RELINQUISHED BY: 	DATE: 4/16/2020	TIME: 1730
PRINTED NAME AND SIGNATURE: Gunn Bracht	RECEIVED BY: 	DATE: 04-17-20	TIME: 0910
PRINTED NAME AND SIGNATURE: _____	PRINTED NAME AND SIGNATURE: O. Banda	DATE: _____	TIME: _____
PRINTED NAME AND SIGNATURE: _____	PRINTED NAME AND SIGNATURE: 4.91(CF)5.35	DATE: _____	TIME: _____

EA 225 Schilling Circle, Suite 400 Hunt Valley MD Tel No. (410) 994-7000 Fax No. (410) 771-1825		CHAIN-OF-CUSTODY RECORD		COC NUMBER COC-VA2-2021-1	
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020	QUARTER: 2 - April
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		FAX AND MAIL REPORTS/IEDD TO: Tara Lamond lamond@eaest.com EA Aminda Smith asmith@eaest.com EA FAX AND MAIL REPORTS/IEDD TO: Pam Moss pmoss@eaest.com EA	
LAB CONTACT: 1 (912) 354-7858		ANALYSIS REQUIRED (Specify number of bottles)			
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS	
1	GWWA2-2021-1	4/16/2020	1505	6 - 3 - 3	(4500 S2CF) Sulfide (4500NH3B/C) Ammonia Nitrogen (2320B) Alkalinity (Total, Carbonate, and Bicarbonate) (353.2) Nitrate-Nitrite (300 DA) Chloride, bromide, sulfate (6010C) Dissolved Fe, Mn (6020A/6010C) Total (As, Pb, Ca, K, Na, Mg) (EPA Method 504.1) EDB (EPA Method 524.2) BTEXN (EPA Method 524.2) BTEX * (EPA Method 524.2) VOCs Total Number of Bottles
2					
3					
4					
5					
6					



680-182910-03 Chain of Custody

*Please report results for BTEX, TCE, PCE, and VC



SAMPLER(S): *G. Bacht* RELINQUISHED BY: *G. Bacht*

Printed Name and Signature: *Gunn Beach* DATE: 4/16/2020 TIME: 1730

RECEIVED BY: *FedEx* COURIER AND SHIPPING NUMBER: *4538 3732 7855* DATE: TB2021-1
TIME: 03

Printed Name and Signature: *Gunn Beach* DATE: 04/17/20 TIME: 0910

Printed Name and Signature: *YQA (CE) S.B.*

 225 Schley Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1625 PROJECT NUMBER: 62735DM02		CHAIN-OF-CUSTODY RECORD				COC NUMBER COC-TB2021-03	
		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		FAX AND MAIL REPORTS/EDD TO: Pam Moss pmoss@east.com EA		YEAR: 2020 QUARTER: 2 - April	
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		LAB PO NUMBER: 16065		FAX AND MAIL REPORTS/EDD TO: Tara Lamond tlamond@east.com EA Amanda Smith asmith@east.com EA pmoss@east.com EA			
PROJECT SITE AND PHASE: ST106/SS111		LAB CONTACT: 1 (912) 354-7858		LABORATORY REPORTS/EDD TO: Pam Moss pmoss@east.com EA			
		ANALYSIS REQUIRED (Specify number of bottles)					
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS	(4500 S2CF) Sulfide	 680-182910-04 Chain of Custody	
	TB2021-03	4/16/2020	1617		(4500NH3B/C) Ammonia Nitrogen		
					(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)		
					(353.2) Nitrate-Nitrite		
					(300.0A) Chloride, bromide, sulfate		
					(6010C) Dissolved Fe, Mn		
					(6020A/6010C) Total (As,Pb,Ca,K,Na,Mg)		
					(EPA Method 504.1) EOB		
					(EPA Method 524.2) BTEXN		
					(EPA Method 524.2) BTEX		
					(EPA Method 524.2) VOCs		
					Total Number of Bottles		
SAMPLER(S): G.Bracht		RELINQUISHED BY:		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7855		RECEIVED BY:	
Printed Name and Signature GUNY BEACH - G. Bracht		DATE 4/16/2020 1730		DATE 04-17-20 0910		TIME 0910	
Printed Name and Signature		DATE		DATE		TIME	
Printed Name and Signature 04/20/2020		DATE		DATE		TIME	
Printed Name and Signature 49 (CF) 5.32		DATE		DATE		TIME	

Associated with:

GWVA7-2021-1
 GWK003-2021-1
 GWK016-2021-1

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 680-182910-1

Login Number: 182910**List Source: Eurofins TestAmerica, Savannah****List Number: 1****Creator: Banda, Christy S**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
America

ANALYTICAL REPORT

Job Number: 680-183527-1

Job Description: Production/Irrigation Well, Kirtland AFB

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
7995 E. Prentice Ave, Suite 206E
Greenwood Village, CO 80111

Attention: Pamela J Moss

Approved for release.
Darlene F Bandy
Project Manager I
5/15/2020 9:54 AM

Darlene F Bandy, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0188
darlene.bandy@testamericainc.com
05/15/2020

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the Eurofins TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Savannah

5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

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Definitions/Glossary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE**Client: EA Engineering, Science, and Technology****Project: Production/Irrigation Well, Kirtland AFB****Report Number: 680-183527-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 5/6/2020 9:50 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperatures of the 2 coolers at receipt time were 1.2°C and 4.3°C

DRINKING WATER VOLATILES (GC-MS)

Samples GWK003-2022 (680-183527-1), GWK016-2022 (680-183527-2), TB2022-02 (680-183527-3), GWVA2-2022 (680-183527-4), GWVA2-6022 (680-183527-5) and TB2022-01 (680-183527-6) were analyzed for drinking water volatiles (GC-MS) in accordance with EPA Method 524.2. The samples were analyzed on 05/13/2020.

Ethylbenzene and Tetrachloroethene exceeded the RPD limit for LCSD 680-618502/5. Refer to the QC report for details. It is noted that the LCS and LCSD each recovered within control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

EDB

Samples GWK003-2022 (680-183527-1), GWK016-2022 (680-183527-2), TB2022-02 (680-183527-3), GWVA2-2022 (680-183527-4), GWVA2-6022 (680-183527-5) and TB2022-01 (680-183527-6) were analyzed for EDB in accordance with EPA Method 504.1. The samples were prepared and analyzed on 05/08/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Client Sample ID: GWK003-2022

Lab Sample ID: 680-183527-1

No Detections.

Client Sample ID: GWK016-2022

Lab Sample ID: 680-183527-2

No Detections.

Client Sample ID: TB2022-02

Lab Sample ID: 680-183527-3

No Detections.

Client Sample ID: GWVA2-2022

Lab Sample ID: 680-183527-4

No Detections.

Client Sample ID: GWVA2-6022

Lab Sample ID: 680-183527-5

No Detections.

Client Sample ID: TB2022-01

Lab Sample ID: 680-183527-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Client Sample ID: GWK003-2022

Lab Sample ID: 680-183527-1

Date Collected: 05/05/20 10:03

Matrix: Water

Date Received: 05/06/20 09:50

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			05/13/20 16:39	1
Ethylbenzene	ND	*1	0.50	0.099	ug/L			05/13/20 16:39	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 16:39	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	104		70 - 130		05/13/20 16:39	1
4-Bromofluorobenzene	94		70 - 130		05/13/20 16:39	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0024	ug/L		05/08/20 13:35	05/08/20 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	86		70 - 130	05/08/20 13:35	05/08/20 17:49	1

Client Sample ID: GWK016-2022

Lab Sample ID: 680-183527-2

Date Collected: 05/05/20 09:33

Matrix: Water

Date Received: 05/06/20 09:50

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			05/13/20 18:40	1
Ethylbenzene	ND	*1	0.50	0.099	ug/L			05/13/20 18:40	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 18:40	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	103		70 - 130		05/13/20 18:40	1
4-Bromofluorobenzene	94		70 - 130		05/13/20 18:40	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		05/08/20 13:35	05/08/20 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	84		70 - 130	05/08/20 13:35	05/08/20 16:40	1

Client Sample ID: TB2022-02

Lab Sample ID: 680-183527-3

Date Collected: 05/05/20 08:00

Matrix: Water

Date Received: 05/06/20 09:50

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			05/13/20 13:38	1
Ethylbenzene	ND	*1	0.50	0.099	ug/L			05/13/20 13:38	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 13:38	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	102		70 - 130		05/13/20 13:38	1
4-Bromofluorobenzene	94		70 - 130		05/13/20 13:38	1

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Client Sample ID: TB2022-02

Lab Sample ID: 680-183527-3

Date Collected: 05/05/20 08:00

Matrix: Water

Date Received: 05/06/20 09:50

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0024	ug/L		05/08/20 13:35	05/08/20 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	85		70 - 130				05/08/20 13:35	05/08/20 17:10	1

Client Sample ID: GWVA2-2022

Lab Sample ID: 680-183527-4

Date Collected: 05/05/20 10:30

Matrix: Water

Date Received: 05/06/20 09:50

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			05/13/20 16:59	1
Ethylbenzene	ND	*1	0.50	0.099	ug/L			05/13/20 16:59	1
Tetrachloroethene	ND	*1	0.50	0.18	ug/L			05/13/20 16:59	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 16:59	1
Trichloroethene	ND		0.50	0.13	ug/L			05/13/20 16:59	1
Vinyl chloride	ND		0.50	0.16	ug/L			05/13/20 16:59	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 16:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	101		70 - 130					05/13/20 16:59	1
4-Bromofluorobenzene	93		70 - 130					05/13/20 16:59	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.017	0.0024	ug/L		05/08/20 13:35	05/08/20 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	87		70 - 130				05/08/20 13:35	05/08/20 17:20	1

Client Sample ID: GWVA2-6022

Lab Sample ID: 680-183527-5

Date Collected: 05/05/20 10:30

Matrix: Water

Date Received: 05/06/20 09:50

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			05/13/20 17:20	1
Ethylbenzene	ND	*1	0.50	0.099	ug/L			05/13/20 17:20	1
Tetrachloroethene	ND	*1	0.50	0.18	ug/L			05/13/20 17:20	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 17:20	1
Trichloroethene	ND		0.50	0.13	ug/L			05/13/20 17:20	1
Vinyl chloride	ND		0.50	0.16	ug/L			05/13/20 17:20	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	102		70 - 130					05/13/20 17:20	1
4-Bromofluorobenzene	95		70 - 130					05/13/20 17:20	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		05/08/20 13:35	05/08/20 17:29	1

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Client Sample ID: GWVA2-6022

Lab Sample ID: 680-183527-5

Date Collected: 05/05/20 10:30

Matrix: Water

Date Received: 05/06/20 09:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	84		70 - 130	05/08/20 13:35	05/08/20 17:29	1

Client Sample ID: TB2022-01

Lab Sample ID: 680-183527-6

Date Collected: 05/05/20 08:00

Matrix: Water

Date Received: 05/06/20 09:50

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			05/13/20 13:58	1
Ethylbenzene	ND	*1	0.50	0.099	ug/L			05/13/20 13:58	1
Tetrachloroethene	ND	*1	0.50	0.18	ug/L			05/13/20 13:58	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 13:58	1
Trichloroethene	ND		0.50	0.13	ug/L			05/13/20 13:58	1
Vinyl chloride	ND		0.50	0.16	ug/L			05/13/20 13:58	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	100		70 - 130		05/13/20 13:58	1
4-Bromofluorobenzene	92		70 - 130		05/13/20 13:58	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		05/08/20 13:35	05/08/20 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	86		70 - 130	05/08/20 13:35	05/08/20 17:39	1

Eurofins TestAmerica, Savannah

Default Detection Limits

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
Benzene	0.50	0.082	ug/L
Ethylbenzene	0.50	0.099	ug/L
Tetrachloroethene	0.50	0.18	ug/L
Toluene	0.50	0.086	ug/L
Trichloroethene	0.50	0.13	ug/L
Vinyl chloride	0.50	0.16	ug/L
Xylenes, Total	0.50	0.086	ug/L

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Prep: 504.1

Analyte	RL	MDL	Units
Ethylene Dibromide	0.018	0.0025	ug/L

Surrogate Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCZ (70-130)	BFB (70-130)
680-183527-1	GWK003-2022	104	94
680-183527-2	GWK016-2022	103	94
680-183527-2 MS	GWK016-2022	99	102
680-183527-2 MSD	GWK016-2022	99	103
680-183527-3	TB2022-02	102	94
680-183527-4	GWVA2-2022	101	93
680-183527-5	GWVA2-6022	102	95
680-183527-6	TB2022-01	100	92
LCS 680-618502/4	Lab Control Sample	101	98
LCSD 680-618502/5	Lab Control Sample Dup	99	103
MB 680-618502/9	Method Blank	101	95

Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4 (Surr)

BFB = 4-Bromofluorobenzene

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		PCA2 (70-130)
680-183527-1	GWK003-2022	86
680-183527-2	GWK016-2022	84
680-183527-2 MS	GWK016-2022	82
680-183527-2 MSD	GWK016-2022	88
680-183527-3	TB2022-02	85
680-183527-4	GWVA2-2022	87
680-183527-5	GWVA2-6022	84
680-183527-6	TB2022-01	86
LCS 680-618071/4-A	Lab Control Sample	87
LCSD 680-618071/5-A	Lab Control Sample Dup	87
MB 680-618071/3-A	Method Blank	85

Surrogate Legend

PCA = Pentachloroethane

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-618502/9

Matrix: Water

Analysis Batch: 618502

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50	0.082	ug/L			05/13/20 12:37	1
Ethylbenzene	ND		0.50	0.099	ug/L			05/13/20 12:37	1
Tetrachloroethene	ND		0.50	0.18	ug/L			05/13/20 12:37	1
Toluene	ND		0.50	0.086	ug/L			05/13/20 12:37	1
Trichloroethene	ND		0.50	0.13	ug/L			05/13/20 12:37	1
Vinyl chloride	ND		0.50	0.16	ug/L			05/13/20 12:37	1
Xylenes, Total	ND		0.50	0.086	ug/L			05/13/20 12:37	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	101		70 - 130					05/13/20 12:37	1
4-Bromofluorobenzene	95		70 - 130					05/13/20 12:37	1

Lab Sample ID: LCS 680-618502/4

Matrix: Water

Analysis Batch: 618502

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	19.8		ug/L		99	70 - 130
Tetrachloroethene	20.0	19.0		ug/L		95	70 - 130
Toluene	20.0	19.5		ug/L		98	70 - 130
Trichloroethene	20.0	18.6		ug/L		93	70 - 130
Vinyl chloride	20.0	18.6		ug/L		93	70 - 130
Xylenes, Total	40.0	39.5		ug/L		99	70 - 130
Surrogate	LCS LCS		Limits				%Rec. Limits
	%Recovery	Qualifier					
1,2-Dichlorobenzene-d4 (Surr)	101		70 - 130				
4-Bromofluorobenzene	98		70 - 130				

Lab Sample ID: LCSD 680-618502/5

Matrix: Water

Analysis Batch: 618502

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Benzene	20.0	16.3		ug/L		82	70 - 130	17	20
Ethylbenzene	20.0	16.1	*1	ug/L		81	70 - 130	21	20
Tetrachloroethene	20.0	15.0	*1	ug/L		75	70 - 130	23	20
Toluene	20.0	16.3		ug/L		82	70 - 130	18	20
Trichloroethene	20.0	15.8		ug/L		79	70 - 130	16	20
Vinyl chloride	20.0	15.8		ug/L		79	70 - 130	16	20
Xylenes, Total	40.0	32.4		ug/L		81	70 - 130	20	20
Surrogate	LCSD LCSD		Limits				%Rec. Limits	RPD	Limit
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	99		70 - 130						
4-Bromofluorobenzene	103		70 - 130						

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QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-183527-2 MS

Matrix: Water

Analysis Batch: 618502

Client Sample ID: GWK016-2022

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		20.0	17.9		ug/L		90	70 - 130
Ethylbenzene	ND	*1	20.0	17.7		ug/L		88	70 - 130
Toluene	ND		20.0	17.8		ug/L		89	70 - 130
Xylenes, Total	ND		40.0	34.8		ug/L		87	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichlorobenzene-d4 (Surr)	99		70 - 130						
4-Bromofluorobenzene	102		70 - 130						

Lab Sample ID: 680-183527-2 MSD

Matrix: Water

Analysis Batch: 618502

Client Sample ID: GWK016-2022

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		20.0	17.5		ug/L		87	70 - 130	2	20
Ethylbenzene	ND	*1	20.0	17.7		ug/L		88	70 - 130	0	20
Toluene	ND		20.0	17.6		ug/L		88	70 - 130	1	20
Xylenes, Total	ND		40.0	34.8		ug/L		87	70 - 130	0	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichlorobenzene-d4 (Surr)	99		70 - 130								
4-Bromofluorobenzene	103		70 - 130								

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Lab Sample ID: MB 680-618071/3-A

Matrix: Water

Analysis Batch: 618077

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 618071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		05/08/20 13:35	05/08/20 15:41	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Pentachloroethane	85		70 - 130	05/08/20 13:35	05/08/20 15:41	1			

Lab Sample ID: LCS 680-618071/4-A

Matrix: Water

Analysis Batch: 618077

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 618071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylene Dibromide	0.100	0.103		ug/L		103	70 - 130
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
Pentachloroethane	87		70 - 130				

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QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)
Lab Sample ID: LCSD 680-618071/5-A
Matrix: Water
Analysis Batch: 618077
Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 618071

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene Dibromide	0.100	0.104		ug/L		104	70 - 130	1	30
		<i>LCSD</i>	<i>LCSD</i>						
<i>Surrogate</i>		<i>%Recovery</i>	<i>Qualifier</i>				<i>Limits</i>		
Pentachloroethane		87					70 - 130		

Lab Sample ID: 680-183527-2 MS
Matrix: Water
Analysis Batch: 618077
Client Sample ID: GWK016-2022
Prep Type: Total/NA
Prep Batch: 618071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene Dibromide	ND		0.0980	0.0966		ug/L		99	70 - 130		
		<i>MS</i>	<i>MS</i>								
<i>Surrogate</i>		<i>%Recovery</i>	<i>Qualifier</i>						<i>Limits</i>		
Pentachloroethane		82							70 - 130		

Lab Sample ID: 680-183527-2 MSD
Matrix: Water
Analysis Batch: 618077
Client Sample ID: GWK016-2022
Prep Type: Total/NA
Prep Batch: 618071

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene Dibromide	ND		0.0964	0.0998		ug/L		104	70 - 130	3	30
		<i>MSD</i>	<i>MSD</i>								
<i>Surrogate</i>		<i>%Recovery</i>	<i>Qualifier</i>						<i>Limits</i>		
Pentachloroethane		88							70 - 130		

QC Association Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

GC/MS VOA

Analysis Batch: 618502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-183527-1	GWK003-2022	Total/NA	Water	524.2	
680-183527-2	GWK016-2022	Total/NA	Water	524.2	
680-183527-3	TB2022-02	Total/NA	Water	524.2	
680-183527-4	GWVA2-2022	Total/NA	Water	524.2	
680-183527-5	GWVA2-6022	Total/NA	Water	524.2	
680-183527-6	TB2022-01	Total/NA	Water	524.2	
MB 680-618502/9	Method Blank	Total/NA	Water	524.2	
LCS 680-618502/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-618502/5	Lab Control Sample Dup	Total/NA	Water	524.2	
680-183527-2 MS	GWK016-2022	Total/NA	Water	524.2	
680-183527-2 MSD	GWK016-2022	Total/NA	Water	524.2	

GC Semi VOA

Prep Batch: 618071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-183527-1	GWK003-2022	Total/NA	Water	504.1	
680-183527-2	GWK016-2022	Total/NA	Water	504.1	
680-183527-3	TB2022-02	Total/NA	Water	504.1	
680-183527-4	GWVA2-2022	Total/NA	Water	504.1	
680-183527-5	GWVA2-6022	Total/NA	Water	504.1	
680-183527-6	TB2022-01	Total/NA	Water	504.1	
MB 680-618071/3-A	Method Blank	Total/NA	Water	504.1	
LCS 680-618071/4-A	Lab Control Sample	Total/NA	Water	504.1	
LCSD 680-618071/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	
680-183527-2 MS	GWK016-2022	Total/NA	Water	504.1	
680-183527-2 MSD	GWK016-2022	Total/NA	Water	504.1	

Analysis Batch: 618077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-183527-1	GWK003-2022	Total/NA	Water	504.1	618071
680-183527-2	GWK016-2022	Total/NA	Water	504.1	618071
680-183527-3	TB2022-02	Total/NA	Water	504.1	618071
680-183527-4	GWVA2-2022	Total/NA	Water	504.1	618071
680-183527-5	GWVA2-6022	Total/NA	Water	504.1	618071
680-183527-6	TB2022-01	Total/NA	Water	504.1	618071
MB 680-618071/3-A	Method Blank	Total/NA	Water	504.1	618071
LCS 680-618071/4-A	Lab Control Sample	Total/NA	Water	504.1	618071
LCSD 680-618071/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	618071
680-183527-2 MS	GWK016-2022	Total/NA	Water	504.1	618071
680-183527-2 MSD	GWK016-2022	Total/NA	Water	504.1	618071

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Client Sample ID: GWK003-2022**Lab Sample ID: 680-183527-1**

Date Collected: 05/05/20 10:03

Matrix: Water

Date Received: 05/06/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	618502	05/13/20 16:39	SMP	TAL SAV
Total/NA	Prep	504.1			618071	05/08/20 13:35	DC	TAL SAV
Total/NA	Analysis	504.1		1	618077	05/08/20 17:49	DC	TAL SAV

Client Sample ID: GWK016-2022**Lab Sample ID: 680-183527-2**

Date Collected: 05/05/20 09:33

Matrix: Water

Date Received: 05/06/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	618502	05/13/20 18:40	SMP	TAL SAV
Total/NA	Prep	504.1			618071	05/08/20 13:35	DC	TAL SAV
Total/NA	Analysis	504.1		1	618077	05/08/20 16:40	DC	TAL SAV

Client Sample ID: TB2022-02**Lab Sample ID: 680-183527-3**

Date Collected: 05/05/20 08:00

Matrix: Water

Date Received: 05/06/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	618502	05/13/20 13:38	SMP	TAL SAV
Total/NA	Prep	504.1			618071	05/08/20 13:35	DC	TAL SAV
Total/NA	Analysis	504.1		1	618077	05/08/20 17:10	DC	TAL SAV

Client Sample ID: GWVA2-2022**Lab Sample ID: 680-183527-4**

Date Collected: 05/05/20 10:30

Matrix: Water

Date Received: 05/06/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	618502	05/13/20 16:59	SMP	TAL SAV
Total/NA	Prep	504.1			618071	05/08/20 13:35	DC	TAL SAV
Total/NA	Analysis	504.1		1	618077	05/08/20 17:20	DC	TAL SAV

Client Sample ID: GWVA2-6022**Lab Sample ID: 680-183527-5**

Date Collected: 05/05/20 10:30

Matrix: Water

Date Received: 05/06/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	618502	05/13/20 17:20	SMP	TAL SAV
Total/NA	Prep	504.1			618071	05/08/20 13:35	DC	TAL SAV
Total/NA	Analysis	504.1		1	618077	05/08/20 17:29	DC	TAL SAV

Client Sample ID: TB2022-01**Lab Sample ID: 680-183527-6**

Date Collected: 05/05/20 08:00

Matrix: Water

Date Received: 05/06/20 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	618502	05/13/20 13:58	SMP	TAL SAV

Eurofins TestAmerica, Savannah

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Client Sample ID: TB2022-01**Lab Sample ID: 680-183527-6****Date Collected: 05/05/20 08:00****Matrix: Water****Date Received: 05/06/20 09:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	504.1			618071	05/08/20 13:35	DC	TAL SAV
Total/NA	Analysis	504.1		1	618077	05/08/20 17:39	DC	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Laboratory: Eurofins TestAmerica, Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	GA00006	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	01-08-20 *
Arizona	State	AZ0713	12-20-20
Arkansas DEQ	State	19-047-0	06-01-20
California	State	2513	01-08-21
Connecticut	State	PH-0686	09-30-20
Florida	NELAP	E87667-57	06-30-20
Georgia	State	4025-011	01-09-21
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-01-20
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-20
Maine	State	2019011 (231)	03-03-21
Minnesota	NELAP	1788752	12-31-20
Nevada	State	CO000262020-1	07-31-20
New Hampshire	NELAP	205319	04-29-21
New Jersey	NELAP	190002	06-30-20
New York	NELAP	59923	04-01-21
North Carolina (WW/SW)	State	358	12-31-20
North Dakota	State	R-034	01-08-21
Oklahoma	State	2018-006	08-31-20
Oregon	NELAP	4025-011	01-08-21
Pennsylvania	NELAP	013	08-01-20
South Carolina	State	72002001	01-08-21
Texas	NELAP	T104704183-19-17	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00099	03-26-21
Utah	NELAP	CO000262019-11	07-31-20
Virginia	NELAP	10490	06-14-20
Washington	State	C583-19	08-05-20
West Virginia DEP	State	354	11-30-20
Wisconsin	State	999615430	08-31-20
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Savannah

Method Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL SAV
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW	TAL SAV
504.1	Microextraction	EPA-DW	TAL SAV

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-183527-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
680-183527-1	GWK003-2022	Water	05/05/20 10:03	05/06/20 09:50	
680-183527-2	GWK016-2022	Water	05/05/20 09:33	05/06/20 09:50	
680-183527-3	TB2022-02	Water	05/05/20 08:00	05/06/20 09:50	
680-183527-4	GWVA2-2022	Water	05/05/20 10:30	05/06/20 09:50	
680-183527-5	GWVA2-6022	Water	05/05/20 10:30	05/06/20 09:50	
680-183527-6	TB2022-01	Water	05/05/20 08:00	05/06/20 09:50	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 618210Lab Sample ID: IC 680-618210/6 Client Sample ID: _____Date Analyzed: 05/11/20 11:58 Lab File ID: UE1106.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 14:58
Methylene Chloride	2.19	Split Peak	proctors	05/11/20 14:58
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 14:58
1,1,2,2-Tetrachloroethane	7.24	Split Peak	proctors	05/11/20 14:59
1,3,5-Trimethylbenzene	7.48	Split Peak	proctors	05/11/20 14:59
1,2-Dichlorobenzene	8.39	Split Peak	proctors	05/11/20 14:59
1,2-Dibromo-3-Chloropropane	9.06	Split Peak	proctors	05/11/20 14:58

Lab Sample ID: IC 680-618210/7 Client Sample ID: _____Date Analyzed: 05/11/20 12:18 Lab File ID: UE1107.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 12:56
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 12:55
1,3,5-Trimethylbenzene	7.47	Peak assignment corrected	proctors	05/11/20 12:56
1,2-Dichlorobenzene	8.39	Peak assignment corrected	proctors	05/11/20 14:20

Lab Sample ID: IC 680-618210/8 Client Sample ID: _____Date Analyzed: 05/11/20 12:38 Lab File ID: UE1108.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 12:57
Acetone	1.90	Peak Tail	proctors	05/11/20 16:47
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 12:57
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	05/11/20 12:57
1,2-Dichlorobenzene	8.39	Peak assignment corrected	proctors	05/11/20 12:57

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.:

Instrument ID: CMSU Analysis Batch Number: 618210

Lab Sample ID: IC 680-618210/9 Client Sample ID:

Date Analyzed: 05/11/20 12:58 Lab File ID: UE1109.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 14:02
Acetone	1.90	Peak Tail	proctors	05/11/20 16:47
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	05/11/20 14:02
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 14:02
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	05/11/20 14:02

Lab Sample ID: IC 680-618210/10 Client Sample ID:

Date Analyzed: 05/11/20 13:18 Lab File ID: UE1110.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 14:01
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	05/11/20 14:01
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 14:01
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	05/11/20 14:01

Lab Sample ID: ICIS 680-618210/11 Client Sample ID:

Date Analyzed: 05/11/20 13:38 Lab File ID: UE1111.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 14:01
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	05/11/20 14:00
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 14:01
1,3,5-Trimethylbenzene	7.47	Peak assignment corrected	proctors	05/11/20 14:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.:

Instrument ID: CMSU Analysis Batch Number: 618210

Lab Sample ID: IC 680-618210/12 Client Sample ID:

Date Analyzed: 05/11/20 13:59 Lab File ID: UE1112.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 14:17
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	05/11/20 14:17
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 14:17
1,3,5-Trimethylbenzene	7.47	Peak assignment corrected	proctors	05/11/20 14:17

Lab Sample ID: IC 680-618210/13 Client Sample ID:

Date Analyzed: 05/11/20 14:19 Lab File ID: UE1113.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	proctors	05/11/20 14:54
1,2-Dichloropropane	4.32	Peak assignment corrected	proctors	05/11/20 14:55
4-Bromofluorobenzene	7.12	Peak assignment corrected	proctors	05/11/20 14:54
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	proctors	05/11/20 14:55
1,4-Dichlorobenzene-d4	8.07	Peak assignment corrected	proctors	05/11/20 14:55

Lab Sample ID: ICV 680-618210/15 Client Sample ID:

Date Analyzed: 05/11/20 14:59 Lab File ID: UE1115.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	bryand	05/11/20 15:23
1,2-Dichloropropane	4.32	Peak assignment corrected	bryand	05/11/20 15:23
4-Bromofluorobenzene	7.12	Peak assignment corrected	bryand	05/11/20 15:23
1,3,5-Trimethylbenzene	7.48	Peak assignment corrected	bryand	05/11/20 15:23

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 618502Lab Sample ID: CCVIS 680-618502/3 Client Sample ID: _____Date Analyzed: 05/13/20 10:36 Lab File ID: UE1303.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.09	Peak assignment corrected	diogor	05/13/20 10:57
Chloroethane	1.46	Incomplete Integration	proctors	05/13/20 15:26
Trichlorofluoromethane	1.59	Incomplete Integration	proctors	05/13/20 15:25
1,1-Dichloroethene	1.88	Incomplete Integration	proctors	05/13/20 15:26
Freon 113	1.88	Incomplete Integration	proctors	05/13/20 15:25
1,2-Dichloropropane	4.32	Incomplete Integration	proctors	05/13/20 15:26
4-Bromofluorobenzene	7.12	Peak assignment corrected	diogor	05/13/20 10:57
1,3,5-Trimethylbenzene	7.48	Incomplete Integration	proctors	05/13/20 15:26

Lab Sample ID: LCS 680-618502/4 Client Sample ID: _____Date Analyzed: 05/13/20 10:57 Lab File ID: UE1304.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	diogor	05/13/20 11:10

Lab Sample ID: LCSD 680-618502/5 Client Sample ID: _____Date Analyzed: 05/13/20 11:17 Lab File ID: UE1305.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	diogor	05/13/20 11:41

Lab Sample ID: MB 680-618502/9 Client Sample ID: _____Date Analyzed: 05/13/20 12:37 Lab File ID: UE1309.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	diogor	05/13/20 12:52

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 618502

Lab Sample ID: 680-183527-3 Client Sample ID: TB2022-02

Date Analyzed: 05/13/20 13:38 Lab File ID: UE1312.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:02

Lab Sample ID: 680-183527-6 Client Sample ID: TB2022-01

Date Analyzed: 05/13/20 13:58 Lab File ID: UE1313.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:02

Lab Sample ID: 680-183527-1 Client Sample ID: GWK003-2022

Date Analyzed: 05/13/20 16:39 Lab File ID: UE1321.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:09

Lab Sample ID: 680-183527-4 Client Sample ID: GWVA2-2022

Date Analyzed: 05/13/20 16:59 Lab File ID: UE1322.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:10

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 618502

Lab Sample ID: 680-183527-5 Client Sample ID: GWVA2-6022

Date Analyzed: 05/13/20 17:20 Lab File ID: UE1323.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:10

Lab Sample ID: 680-183527-2 Client Sample ID: GWK016-2022

Date Analyzed: 05/13/20 18:40 Lab File ID: UE1327.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:18

Lab Sample ID: 680-183527-2 MS Client Sample ID: GWK016-2022 MS

Date Analyzed: 05/13/20 19:01 Lab File ID: UE1328.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:19

Lab Sample ID: 680-183527-2 MSD Client Sample ID: GWK016-2022 MSD

Date Analyzed: 05/13/20 19:21 Lab File ID: UE1329.D GC Column: Rtx-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Bromofluorobenzene	7.12	Peak assignment corrected	intaracha u	05/14/20 10:20

524.2

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 616788

Lab Sample ID: IC 680-616788/14 Client Sample ID: _____

Date Analyzed: 04/28/20 15:55 Lab File ID: XD28014.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,3-Trichloropropane	2.40	Split Peak	canadyd	04/29/20 14:08

Lab Sample ID: IC 680-616788/15 Client Sample ID: _____

Date Analyzed: 04/28/20 16:05 Lab File ID: XD28015.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,3-Trichloropropane	2.41	Split Peak	canadyd	04/29/20 14:07

Lab Sample ID: IC 680-616788/16 Client Sample ID: _____

Date Analyzed: 04/28/20 16:15 Lab File ID: XD28016.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	04/29/20 14:09
1,2,3-Trichloropropane	2.40	Split Peak	canadyd	04/29/20 14:06

Lab Sample ID: IC 680-616788/17 Client Sample ID: _____

Date Analyzed: 04/28/20 16:25 Lab File ID: XD28017.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	04/29/20 14:09
Pentachloroethane	2.28	Split Peak	canadyd	04/29/20 14:12

Lab Sample ID: IC 680-616788/17 Client Sample ID: _____

Date Analyzed: 04/28/20 16:25 Lab File ID: XD28017.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	04/29/20 14:09

504.1

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 616788Lab Sample ID: IC 680-616788/18 Client Sample ID: _____Date Analyzed: 04/28/20 16:35 Lab File ID: XD28018.D GC Column: CLP I 0.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	04/29/20 14:10

Lab Sample ID: IC 680-616788/18 Client Sample ID: _____Date Analyzed: 04/28/20 16:35 Lab File ID: XD28018.D GC Column: CLP II 0.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	04/29/20 14:10

504.1

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
504 Spike_00155	05/13/20	04/13/20	Methanol, Lot 00006479519	25 mL	SG123TCP-2_00005	10 uL	1,2,3-Trichloropropane	0.5 ug/mL
					SG504ICV_00064	12.5 uL	1,2,3-Trichloropropane-(Surr)	0.4 ug/mL
							1,2,3-Trichloropropane	0.5 ug/mL
							1,2-Dibromo-3-Chloropropane	0.1 ug/mL
..SG123TCP-2_00005	07/13/20	Ultra Scientific, Lot CM-2372		(Purchased Reagent)		Ethylene Dibromide	0.1 ug/mL	
..SG504ICV_00064	06/11/20	UltraScientific, Lot CR-2830		(Purchased Reagent)		1,2,3-Trichloropropane	1000 ug/mL	
							1,2,3-Trichloropropane-(Surr)	1000 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							Ethylene Dibromide	200 ug/mL
504 WS #1_00167	05/13/20	04/13/20	Methanol, Lot 00006479519	25 mL	504 INT A_00155	125 uL	1,2,3-Trichloropropane	0.3125 ug/mL
							1,2-Dibromo-3-Chloropropane	0.0625 ug/mL
							Ethylene Dibromide	0.0625 ug/mL
							Pentachloroethane	0.025 ug/mL
..504 INT A_00155	05/13/20	04/13/20	Methanol, Lot 00006479519	2 mL	SG123TCP_00084	125 uL	1,2,3-Trichloropropane	62.5 ug/mL
					SG504CAL_00054	125 uL	1,2-Dibromo-3-Chloropropane	12.5 ug/mL
							Ethylene Dibromide	12.5 ug/mL
..SG123TCP_00084	06/16/20	Ultra Scientific, Lot CM-44822		(Purchased Reagent)		1,2,3-Trichloropropane	1000 ug/mL	
..SG504CAL_00054	10/13/20	AccuStandard, Lot 218111119		(Purchased Reagent)		1,2-Dibromo-3-Chloropropane	200 ug/mL	
							Ethylene Dibromide	200 ug/mL
..504 Penta_00081	05/13/20	04/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL	
504-DBCM_00131	05/13/20	04/13/20	Methanol, Lot 00006479519	2 mL	DBCM (504)_00053	5.6 uL	Chlorodibromomethane	0.28 ug/mL
							..DBCM (504)_00053	09/12/20
504_NewSurr_00125	05/13/20	04/13/20	Methanol, Lot 00006479519	25 mL	504 Penta_00081	1250 uL	Pentachloroethane	0.025 ug/mL
..504 Penta_00081	05/13/20	04/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL	
524 ISSU/2016_00090	05/24/20	04/25/20	Methanol, Lot _00136	50 mL	30241_00529	200 uL	1,4-Dichlorobenzene-d4	10 ug/mL
					31070_00026	250 uL	Chlorobenzene-d5	10 ug/mL
							Fluorobenzene	20 ug/mL
							4-Bromofluorobenzene	10 ug/mL
							Fluorobenzene	20 ug/mL
..30241_00529	01/31/25	Restek, Lot A0156714		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL	
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
..31070_00026	02/28/27	Restek, Lot A0157928		(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL	
							4-Bromofluorobenzene	2000 ug/mL
							Fluorobenzene	2000 ug/mL
524 ISSU/2016_00091	06/06/20	05/07/20	Methanol, Lot _00136	50 mL	30241_00523	200 uL	1,4-Dichlorobenzene-d4	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							Chlorobenzene-d5	10 ug/mL	
							Fluorobenzene	20 ug/mL	
.30241_00523	01/31/25		Restek, Lot A0156714		31070_00023	250 uL	Fluorobenzene	20 ug/mL	
					(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL	
							Chlorobenzene-d5	2500 ug/mL	
							Fluorobenzene	2500 ug/mL	
.31070_00023	02/28/27		Restek, Lot A0157928		(Purchased Reagent)		Fluorobenzene	2000 ug/mL	
524 ISSU/2016_00091	06/06/20	05/07/20	Methanol, Lot _00136	50 mL	31070_00023	250 uL	1,2-Dichlorobenzene-d4 (Surr)	10 ug/mL	
							4-Bromofluorobenzene	10 ug/mL	
.31070_00023	02/28/27		Restek, Lot A0157928		(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL	
							4-Bromofluorobenzene	2000 ug/mL	
524MMix_00168	05/21/20	05/07/20	Methanol, Lot MeOH_124454	25 mL	524_DIPE_00004	500 uL	Isopropyl ether	40 ug/mL	
					524_ETBE_00002	500 uL	Tert-butyl ethyl ether	40 ug/mL	
					524_TAME_00001	500 uL	Tert-amyl methyl ether	40 ug/mL	
					569721_00257	500 uL	2-Butanone (MEK)	250 ug/mL	
								2-Hexanone	250 ug/mL
								4-Methyl-2-pentanone (MIBK)	250 ug/mL
								Acetone	250 ug/mL
								Bromomethane	50 ug/mL
					569722_00239	500 uL	Chloroethane	50 ug/mL	
								Chloromethane	50 ug/mL
								Dichlorodifluoromethane	50 ug/mL
								Trichlorofluoromethane	50 ug/mL
								Vinyl chloride	50 ug/mL
					571992_00134	500 uL	1,1,1,2-Tetrachloroethane	50 ug/mL	
								1,1,1-Trichloroethane	50 ug/mL
								1,1,2,2-Tetrachloroethane	50 ug/mL
								1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
								1,1,2-Trichloroethane	50 ug/mL
								1,1-Dichloroethane	50 ug/mL
								1,1-Dichloroethene	50 ug/mL
								1,1-Dichloropropene	50 ug/mL
								1,2,3-Trichlorobenzene	50 ug/mL
								1,2,3-Trichloropropene	50 ug/mL
								1,2,4-Trichlorobenzene	50 ug/mL
								1,2,4-Trimethylbenzene	50 ug/mL
								1,2-Dibromo-3-Chloropropane	50 ug/mL
								1,2-Dichlorobenzene	50 ug/mL
								1,2-Dichloroethane	50 ug/mL
								1,2-Dichloropropane	50 ug/mL
								1,3,5-Trimethylbenzene	50 ug/mL
								1,3-Dichlorobenzene	50 ug/mL
								1,3-Dichloropropane	50 ug/mL
								1,4-Dichlorobenzene	50 ug/mL
								2,2-Dichloropropane	50 ug/mL
								2-Chlorotoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methyl-2-propanol	500 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
.524 DIPE 00004	02/28/25		Restek, Lot A0157859			(Purchased Reagent)	Isopropyl ether	2000 ug/mL
.524 ETBE 00002	01/31/25		Restek, Lot A0157135			(Purchased Reagent)	Tert-butyl ethyl ether	2000 ug/mL
.524 TAME 00001	12/31/23		Restek, Lot A0143927			(Purchased Reagent)	Tert-amyl methyl ether	2000 ug/mL
.569721_00257	12/01/22		Restek, Lot A0156095			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.569722_00239	11/30/22		Restek, Lot A0154679			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.571992_00134	06/30/21		Restek, Lot A0143774			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
524MMix_00168	05/21/20	05/07/20	Methanol, Lot MeOH 124454	25 mL	571992_00134	500 uL	Xylenes, Total	100 ug/mL
.571992_00134	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
524MMix2nd_00123	05/21/20	05/07/20	Methanol, Lot H45E36	25 mL	569722.sec_00226	500 uL	Vinyl chloride	50 ug/mL
					571992.sec_00099	500 uL	Benzene	50 ug/mL
							Ethylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.569722.sec_00226	04/30/22		Restek, Lot A0148330		(Purchased Reagent)		Vinyl chloride	2500 ug/mL
.571992.sec_00099	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VM_bfb_00217							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
					VMVG_BFB_00385	125 uL	4-Bromofluorobenzene	25 ug/mL
							BFB	25 ug/mL
.VMVG_BFB_00385	05/22/20		RESTEK, Lot A0156625		(Purchased Reagent)		4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL

Reagent

30241_00523

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0156714
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot BCBZ5549)	2,500.2 µg/mL	+/- 14.5364	µg/mL	Gravimetric
			+/- 140.1837	µg/mL	Unstressed
			+/- 143.4639	µg/mL	Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-29571)	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
			+/- 140.1725	µg/mL	Unstressed
			+/- 143.4524	µg/mL	Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	2,500.6 µg/mL	+/- 14.5387	µg/mL	Gravimetric
			+/- 140.2062	µg/mL	Unstressed
			+/- 143.4868	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%



6568907
ID: 30241_00520
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568915
ID: 30241_00524
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568998
ID: 30241_00528
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568909
ID: 30241_00521
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568917
ID: 30241_00525
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6569000
ID: 30241_00529
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568911
ID: 30241_00522
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568994
ID: 30241_00526
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M

DAS
4/25/20



6568913
ID: 30241_00523
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568996
ID: 30241_00527
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M

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Reagent

30241_00529

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0156714
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot BCBZ5549)	2,500.2 µg/mL	+/- 14.5364 µg/mL	+/- 140.1837 µg/mL	+/- 143.4639 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-29571)	2,500.0 µg/mL	+/- 14.5352 µg/mL	+/- 140.1725 µg/mL	+/- 143.4524 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	2,500.6 µg/mL	+/- 14.5387 µg/mL	+/- 140.2062 µg/mL	+/- 143.4868 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%



6568907
ID: 30241_00520
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568915
ID: 30241_00524
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568998
ID: 30241_00528
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568909
ID: 30241_00521
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568917
ID: 30241_00525
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6569000
ID: 30241_00529
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568911
ID: 30241_00522
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568994
ID: 30241_00526
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M

DAS
4/25/20



6568913
ID: 30241_00523
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M



6568996
ID: 30241_00527
Exp: 01/31/25 PpPd: DS
8260A Internal Standard M

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Reagent

31070_00023



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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30201 **Lot No.:** A0157928
Description : 524 Internal Std / Surrogate Mix
524 Internal Std/Surrogate Mix 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 28, 2027 **Storage:** 0°C or colder

PEP / 3113 12020
Philip J. Runkel

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,019.5 µg/mL (Lot BCBZ5549)	+/-	11.8516	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	113.2428	µg/mL	Unstressed
	Purity 99%		+/-	115.8920	µg/mL	Stressed
2	1-Bromo-4-fluorobenzene (BFB)	2,018.0 µg/mL (Lot 20401KO)	+/-	11.8428	µg/mL	Gravimetric
	CAS # 460-00-4		+/-	113.1587	µg/mL	Unstressed
	Purity 99%		+/-	115.8060	µg/mL	Stressed
3	1,2-Dichlorobenzene-d4	2,014.5 µg/mL (Lot BP-1072)	+/-	11.8222	µg/mL	Gravimetric
	CAS # 2199-69-1		+/-	112.9624	µg/mL	Unstressed
	Purity 99%		+/-	115.6051	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%



6517330
 ID: 31070_00020
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517331
 ID: 31070_00021
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517380
 ID: 31070_00022
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517382
 ID: 31070_00023
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517383
 ID: 31070_00024
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517385
 ID: 31070_00025
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517413
 ID: 31070_00026
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517415
 ID: 31070_00027
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517417
 ID: 31070_00028
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517420
 ID: 31070_00029
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

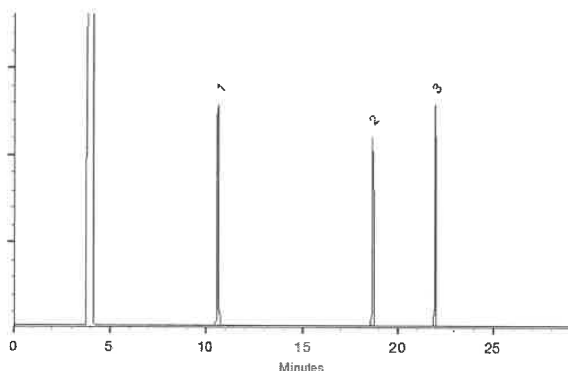
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 18-Feb-2020

Balance: B251644995

Justine A. Davidson - Operations Tech-ARM QC

Date Passed: 20-Feb-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined stressed}} = k \sqrt{U_{\text{gravimetric}}^2 + U_{\text{homogeneity}}^2 + U_{\text{storage stability}}^2 + U_{\text{shipping stability}}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

31070_00026



110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30201 **Lot No.:** A0157928
Description : 524 Internal Std / Surrogate Mix
524 Internal Std/Surrogate Mix 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 28, 2027 **Storage:** 0°C or colder

PEP / 3113 12020
Philip J. Ruckelshaus

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene	2,019.5 µg/mL (Lot BCBZ5549)	+/-	11.8516	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	113.2428	µg/mL	Unstressed
	Purity 99%		+/-	115.8920	µg/mL	Stressed
2	1-Bromo-4-fluorobenzene (BFB)	2,018.0 µg/mL (Lot 20401KO)	+/-	11.8428	µg/mL	Gravimetric
	CAS # 460-00-4		+/-	113.1587	µg/mL	Unstressed
	Purity 99%		+/-	115.8060	µg/mL	Stressed
3	1,2-Dichlorobenzene-d4	2,014.5 µg/mL (Lot BP-1072)	+/-	11.8222	µg/mL	Gravimetric
	CAS # 2199-69-1		+/-	112.9624	µg/mL	Unstressed
	Purity 99%		+/-	115.6051	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%



6517330
 ID: 31070_00020
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517331
 ID: 31070_00021
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517380
 ID: 31070_00022
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517382
 ID: 31070_00023
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517383
 ID: 31070_00024
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517385
 ID: 31070_00025
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517413
 ID: 31070_00026
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517415
 ID: 31070_00027
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517417
 ID: 31070_00028
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.



6517420
 ID: 31070_00029
 Exp: 02/28/27 Pripd: PEP
 Custom 524 is/surr std.

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

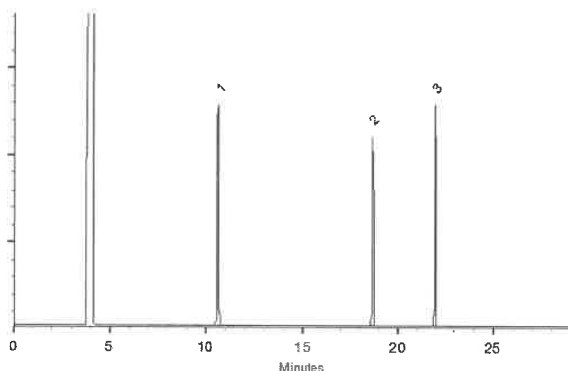
200°C

Det. Temp:

250°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 18-Feb-2020

Balance: B251644995

Justine A. Davidson - Operations Tech-ARM QC

Date Passed: 20-Feb-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

524 _ DIPE _ 00004

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.
 This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30627 **Lot No.:** A0157859
Description : Diisopropyl Ether (DIPE) Standard
Diisopropyl ether (DIPE) 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 28, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diisopropyl ether (DIPE) CAS # 108-20-3 (Lot SHBH1927V) Purity 99%	2,016.0 µg/mL	+/- 18.7477	µg/mL	Gravimetric
			+/- 45.5754	µg/mL	Unstressed
			+/- 46.7655	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6560421
 ID: 524_DIPE_00001
 Exp: 02/28/25 Prpd: SMP
 Diisopropyl Ether

6560420
 ID: 524_DIPE_00001
 Exp: 02/28/25 Prpd: SMP
 Diisopropyl Ether

6560416
 ID: 524_DIPE_00001
 Exp: 02/28/25 Prpd: SMP
 Diisopropyl Ether

6562782
 ID: 524_DIPE_00003
 Exp: 02/28/25 Prpd: EMA
 Diisopropyl Ether

6562784
 ID: 524_DIPE_00004
 Exp: 02/28/25 Prpd: EMA
 Diisopropyl Ether

↖ extra labels ↗

RD

EA
 4/20/2020

Column:
 15m x 0.53mm x 3.0µm
 #502.2 (cat.#10910)

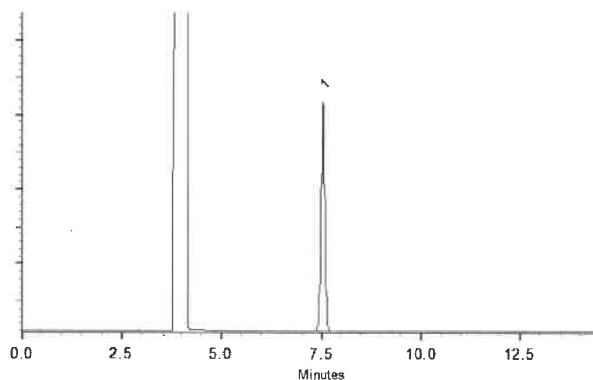
Carrier Gas:
 Nitrogen-constant pressure 11.0 psi.

Temp. Program:
 7°C (hold 2 min.) to 240°C
 8°C/min. (hold 5 min.)

inj. Temp:
 10°C

det. Temp:
 10°C

det. Type:
 FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jesse King
 Jesse King - Mix Technician

Date Mixed: 17-Feb-2020

Balance: B251644995

Tyler Brown

Tyler Brown - Operations Tech-ARM QC

Date Passed: 19-Feb-2020

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

524_ETBE_00002



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30628 **Lot No.:** A0157135
Description : Ethyl-tert-Butyl Ether (ETBE) Standard
Ethyl-Tert-Butyl Ether (ETBE) 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 (Lot MKCJ3589) Purity 99%	2,004.0 µg/mL	+/- 18.6361	µg/mL	Gravimetric
			+/- 45.3041	µg/mL	Unstressed
			+/- 46.4872	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

6560424
ID: 524_ETBE_00001
Exp: 01/31/25 Ppdt: SMP
Ethyl-Tert-Butyl-Ether

6560423
ID: 524_ETBE_00001
Exp: 01/31/25 Ppdt: SMP
Ethyl-Tert-Butyl-Ether

6560422
ID: 524_ETBE_00001
Exp: 01/31/25 Ppdt: SMP
Ethyl-Tert-Butyl-Ether

RD

Extra labels SA

6562866
ID: 524_ETBE_00002
Exp: 01/31/25 Ppdt: EMA
Ethyl-Tert-Butyl-Ether

6562868
ID: 524_ETBE_00003
Exp: 01/31/25 Ppdt: EMA
Ethyl-Tert-Butyl-Ether

SA
4/20/2020

Column:

15m x 0.53mm x 3.0µm
#502.2 (cat.#10910)

Carrier Gas:

Hydrogen-constant pressure 11.0 psi.

Temp. Program:

1°C (hold 2 min.) to 240°C
8°C/min. (hold 5 min.)

Injector Temp:

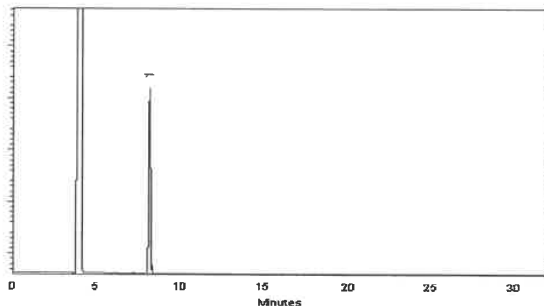
10°C

Detector Temp:

0°C

Detector Type:

0



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 27-Jan-2020

Balance: B707717271

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

524 _ TAME _ 00001

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30629 **Lot No.:** A0143927
Description : tert-Amyl Methyl Ether Standard
Tert-Amyl Methyl Ether (TAME) 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Amyl methyl ether (TAME) CAS # 994-05-8 Purity 99% (Lot HMBF8365V)	2,005.0 µg/mL	+/- 11.7665	µg/mL	Gravimetric
			+/- 42.9571	µg/mL	Unstressed
			+/- 44.2042	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6560419
 ID: 524_TAME_00001
 Exp: 12/31/23 Pprd: SMP
 Tert-amyl-methyl-ether

6560418
 ID: 524_TAME_00001
 Exp: 12/31/23 Pprd: SMP
 Tert-amyl-methyl-ether

6560417
 ID: 524_TAME_00001
 Exp: 12/31/23 Pprd: SMP
 Tert-amyl-methyl-ether

PD

extralabels EA

6562864
 ID: 524_TAME_00003
 Exp: 12/31/23 Pprd: EMA
 Tert-amyl-methyl-ether

6562861
 ID: 524_TAME_00002
 Exp: 12/31/23 Pprd: EMA
 Tert-amyl-methyl-ether

EA 4/20/2020

Column:
 15m x 0.53mm x 3.0µm
 LX-502.2 (cat.#10910)

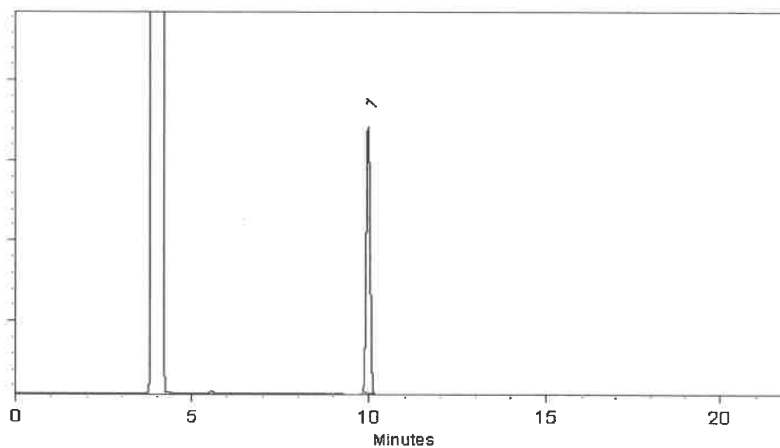
Carrier Gas:
 Hydrogen-constant pressure 11.0 psi.

Temp. Program:
 0°C (hold 2 min.) to 240°C
 18°C/min. (hold 5 min.)

inj. Temp:
 00°C

det. Temp:
 50°C

det. Type:
 FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Maggie Wong
 Maggie Wang - Operations Technician I

Date Mixed: 10-Dec-2018 Balance: 1128342314

Jennifer Pollino
 Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 12-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

569722.sec_00226



110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0148330
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder



6554208
ID: 569722.sec_00227
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554210
ID: 569722.sec_00228
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554212
ID: 569722.sec_00229
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554214
ID: 569722.sec_00230
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,513.2 µg/mL	+/-	19.3767	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 25587)		+/-	141.4861	µg/mL	Unstressed
	Purity 99%		+/-	144.7702	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,505.2 µg/mL	+/-	20.4180	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	141.1888	µg/mL	Unstressed
	Purity 99%		+/-	144.4589	µg/mL	Stressed
3	Vinyl chloride	2,524.8 µg/mL	+/-	17.9317	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	141.9344	µg/mL	Unstressed
	Purity 99%		+/-	145.2382	µg/mL	Stressed
4	1,3-Butadiene	2,521.5 µg/mL	+/-	17.6825	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	141.7249	µg/mL	Unstressed
	Purity 99%		+/-	145.0252	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,505.9 µg/mL	+/-	24.7917	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	141.9274	µg/mL	Unstressed
	Purity 99%		+/-	145.1827	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,507.1 µg/mL	+/-	24.1112	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	141.8739	µg/mL	Unstressed
	Purity 99%		+/-	145.1334	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7978700)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed



6554193
ID: 569722.sec_00220
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554196
ID: 569722.sec_00222
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554199
ID: 569722.sec_00223
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554201
ID: 569722.sec_00224
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554204
ID: 569722.sec_00225
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554206
ID: 569722.sec_00226
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases

Reagent

569722_00239

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2nd level Review 5/1/2020 - Incorrect ID label on

Corrections made, new labels created. BA 5/1/2020 Status changed. For am rules already opened.

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

DFP 3/18/20
Philip G. Paulose

Catalog No. : 569722 Lot No. : A0154679

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : November 30, 2022

Storage: 0°C or colder

6524245
 ID: 567645_00209
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

6524238
 ID: 567645_00210
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

6524236
 ID: 567645_00207
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

6524234
 ID: 567645_00206
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

6524118
 ID: 567645_00205
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

Elution Order	Chemical Name	CAS #	Purity	Lot #	Grav. Conc. weight/volume	Expanded Uncertainty (95% C.L.; K=2)	Method
1	Dichlorodifluoro	75-7	99%		2,502.7 µg/mL	+/- 18.2705 µg/mL +/- 140.7566 µg/mL +/- 144.0300 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride)	74-87-3	99%	(Lot SHBK6571)	2,500.3 µg/mL	+/- 18.7547 µg/mL +/- 140.6865 µg/mL +/- 143.9553 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride	75-01-4	99%	(Lot 00015559)	2,501.1 µg/mL	+/- 18.5858 µg/mL +/- 140.7083 µg/mL +/- 143.9787 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene	106-99-0	99%	(Lot SHBK2299)	2,497.1 µg/mL	+/- 17.5808 µg/mL +/- 140.3628 µg/mL +/- 143.6309 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide)	74-83-9	99%	(Lot 101604)	2,500.8 µg/mL	+/- 23.3138 µg/mL +/- 141.3956 µg/mL +/- 144.6498 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride)	75-00-3	99%	(Lot 107-401039114-1)	2,499.0 µg/mL	+/- 21.4252 µg/mL +/- 140.9973 µg/mL +/- 144.2558 µg/mL	Gravimetric Unstressed Stressed

chlorofluor	# 7	6574716	lot 4	6574718	500	6574719	4.	6574722	avimetric
	9	ID: 569722_00240		ID: 569722_00241		ID: 569722_00242		ID: 569722_00243	stressed
		Exp: 11/30/22 Pprd: EMA		Exp: 11/30/22 Pprd: EMA		Exp: 11/30/22 Pprd: EMA		Exp: 11/30/22 Pprd: EMA	ressed
		8260 List 1/Std #3 Gases		8260 List 1/Std #3 Gases		8260 List 1/Std #3 Gases		8260 List 1/Std #3 Gases	

8	Trichlorofluoromethane (CFC-11)	2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%		+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 2 min.) to 240°C
 @ 8°C/min. (hold 5 min.)

Inj. Temp:

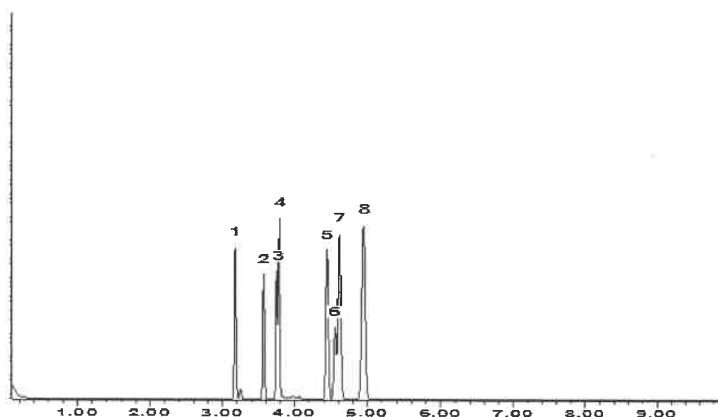
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[Signature]
 Tom Suckal - Mix Technician

Date Mixed: 04-Nov-2019 Balance: B707717271

[Signature]
 Feng-Yun Lu - QC Analyst

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

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Catalog No. : 569722 **Lot No.:** A0154679
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,502.7 µg/mL	+/-	18.2705	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	140.7566	µg/mL	Unstressed
	Purity 99%		+/-	144.0300	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.3 µg/mL	+/-	18.7547	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	140.6865	µg/mL	Unstressed
	Purity 99%		+/-	143.9553	µg/mL	Stressed
3	Vinyl chloride	2,501.1 µg/mL	+/-	18.5858	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	140.7083	µg/mL	Unstressed
	Purity 99%		+/-	143.9787	µg/mL	Stressed
4	1,3-Butadiene	2,497.1 µg/mL	+/-	17.5808	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/-	140.3628	µg/mL	Unstressed
	Purity 99%		+/-	143.6309	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.8 µg/mL	+/-	23.3138	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	141.3956	µg/mL	Unstressed
	Purity 99%		+/-	144.6498	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,499.0 µg/mL	+/-	21.4252	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	140.9973	µg/mL	Unstressed
	Purity 99%		+/-	144.2558	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

Reagent

571992.sec_00099

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Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PEP ✓ 3/16/20
 [Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 98%	2,517.0 µg/mL	+/- 14.6339	µg/mL	Gravimetric
			+/- 151.8598	µg/mL	Unstressed
			+/- 152.2203	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,506.7 µg/mL	+/- 14.5740	µg/mL	Gravimetric
			+/- 151.2383	µg/mL	Unstressed
			+/- 151.5974	µg/mL	Stressed
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 7692300) Purity 99%	2,503.3 µg/mL	+/- 14.5546	µg/mL	Gravimetric
			+/- 151.0372	µg/mL	Unstressed
			+/- 151.3958	µg/mL	Stressed
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.8 µg/mL	+/- 145.3491	µg/mL	Gravimetric
			+/- 1,508.4071	µg/mL	Unstressed
			+/- 1,511.9883	µg/mL	Stressed
5	Methyl acetate CAS # 79-20-9.SEC (Lot UCNEL) Purity 99%	5,002.3 µg/mL	+/- 29.0840	µg/mL	Gravimetric
			+/- 301.8129	µg/mL	Unstressed
			+/- 302.5295	µg/mL	Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric
			+/- 151.0472	µg/mL	Unstressed
			+/- 151.4059	µg/mL	Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot H3HGC) Purity 99%	2,511.7 µg/mL	+/- 14.6030	µg/mL	Gravimetric
			+/- 151.5400	µg/mL	Unstressed
			+/- 151.8998	µg/mL	Stressed



6521554
 ID: 571992.sec_00097
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521556
 ID: 571992.sec_00098
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521558
 ID: 571992.sec_00099
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521560
 ID: 571992.sec_00100
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6521562
 ID: 571992.sec_00101
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

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05/15/2020

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/- 14.5953 +/- 151.4595 +/- 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/- 14.6040 +/- 151.5500 +/- 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/- 14.5430 +/- 150.9165 +/- 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/- 14.5614 +/- 151.1076 +/- 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/- 14.5585 +/- 151.0774 +/- 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/- 290.7356 +/- 3,017.2028 +/- 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/- 14.5904 +/- 151.4093 +/- 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/- 14.5866 +/- 151.3690 +/- 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/- 14.5520 +/- 151.0098 +/- 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/- 14.5507 +/- 150.9970 +/- 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4 µg/mL	+/- 14.5494 +/- 150.9832 +/- 151.3417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8 µg/mL	+/- 14.5633 +/- 151.1277 +/- 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/- 7.2941 +/- 75.5202 +/- 75.6995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7 µg/mL	+/- 7.3058 +/- 75.6409 +/- 75.8205	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2 µg/mL	+/- 14.5594 +/- 151.0875 +/- 151.4462	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/- 14.5769 +/- 151.2685 +/- 151.6276	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2 µg/mL	+/- 14.5653 +/- 151.1478 +/- 151.5067	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8661 +/- 151.2243	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7 µg/mL	+/- 14.5682 +/- 151.1780 +/- 151.5369	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2 µg/mL	+/- 14.6177 +/- 151.6922 +/- 152.0524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7 µg/mL	+/- 14.5565 +/- 151.0573 +/- 151.4159	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,506.2 µg/mL	+/- 14.5711 +/- 151.2081 +/- 151.5671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,510.0 µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,509.2 µg/mL	+/- 14.5885 +/- 151.3891 +/- 151.7486	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	2,505.8 µg/mL	+/- 14.5691 +/- 151.1880 +/- 151.5470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot JMIYD)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 6628200)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8562 +/- 151.2143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,506.3 µg/mL	+/- 14.5720 +/- 151.2182 +/- 151.5772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,509.8 µg/mL	+/- 14.5924 +/- 151.4294 +/- 151.7889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	2,513.7 µg/mL	+/- 14.6147 +/- 151.6607 +/- 152.0207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot R6QDM)	2,501.8 µg/mL	+/- 14.5459 +/- 150.9467 +/- 151.3051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	2,508.5 µg/mL	+/- 14.5845 +/- 151.3473 +/- 151.7066	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	2,504.4 µg/mL	+/- 14.5607 +/- 151.1002 +/- 151.4590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

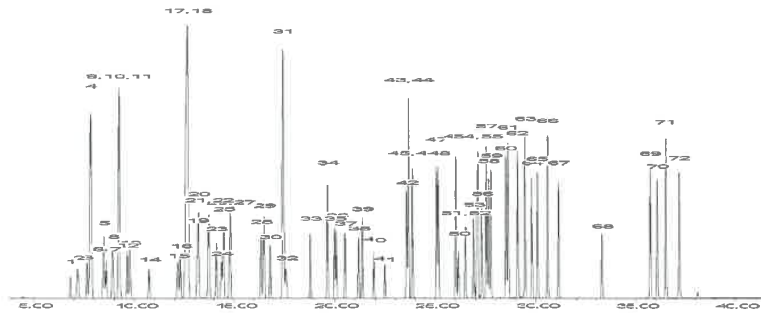
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018 Balance: 1127510105

Diane Shaffer

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

571992_00134

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PPD ✓ 312512020
Patrick P. Paulsen



6533888
 ID: 571992_00131
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533886
 ID: 571992_00130
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533884
 ID: 571992_00129
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533882
 ID: 571992_00128
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 Purity 99% (Lot SHBJ5713)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 99% (Lot 00009482)	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBG8609V)	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBJ9404)	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 Purity 99% (Lot SHBG4345V)	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99% (Lot SHBH4362V)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 99% (Lot WXBB7852V)	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	



6533903
 ID: 571992_00137
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533901
 ID: 571992_00136
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533899
 ID: 571992_00135
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533897
 ID: 571992_00134
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533892
 ID: 571992_00133
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533890
 ID: 571992_00132
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

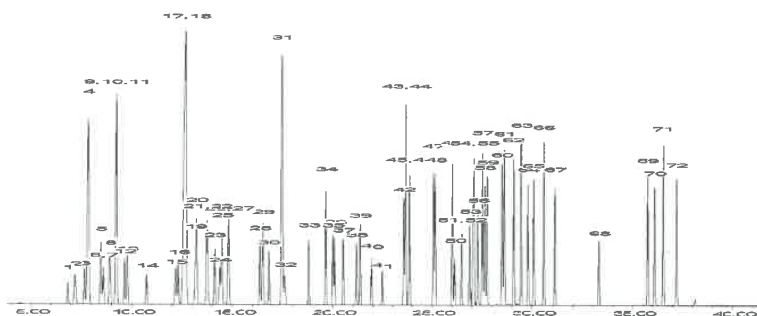
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PTP ✓ 3/25/2020
Patrick P. Paul

2nd level EA 4/12/20

6533888
 ID: 571992_00131
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533886
 ID: 571992_00130
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533884
 ID: 571992_00129
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533882
 ID: 571992_00128
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution-Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBJ5713) Purity 99%	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	Unstressed
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00009482) Purity 99%	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	Unstressed
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 (Lot SHBG8609V) Purity 99%	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	Unstressed
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBJ9404) Purity 99%	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	Unstressed
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 (Lot SHBG4345V) Purity 99%	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	Unstressed
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBH4362V) Purity 99%	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	Unstressed
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot WXBB7852V) Purity 99%	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	Unstressed
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	

6533903
 ID: 571992_00137
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533901
 ID: 571992_00136
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533899
 ID: 571992_00135
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533897
 ID: 571992_00134
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533892
 ID: 571992_00133
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533890
 ID: 571992_00132
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

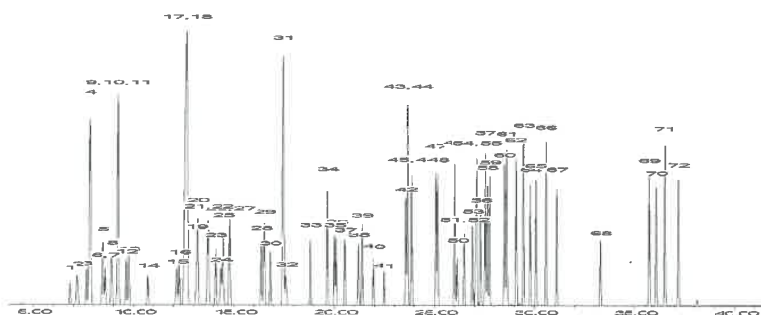
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

DBCM (504)_00053

Certificate of Analysis



Dibromochloromethane Solution

Product Number: HC-100

Page: 1 of 1

Lot Number: CR-0227

Lot Issue Date: 24-Jan-2017

Expiration Date: 28-Feb-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
dibromochloromethane	000124-48-1	RM11370	100.2 ± 0.5 µg/mL

Matrix: methanol (methyl alcohol)

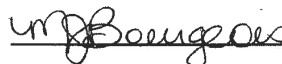
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP-2_00005



Certificate of Analysis



1,2,3-Trichloropropane Solution

Product Number: PPS-250 **Page:** 1 of 1
Lot Number: CR-2372 **Lot Issue Date:** 23-May-2017 **Expiration Date:** 30-Jun-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1004 ± 5 µg/mL

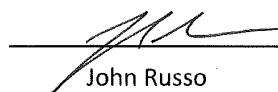
Matrix: methanol (methyl alcohol)

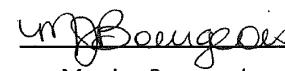
Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP_00084



Certificate of Analysis

1,2,3-Trichloropropane Solution

Product Number: PPS-251

Page: 1 of 1

Lot Number: CR-4822

Lot Issue Date: 25-Oct-2017

Expiration Date: 30-Nov-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1003 ± 5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

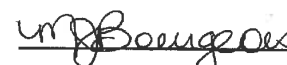
Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Reagent

SG504ICV_00064



Certificate of Analysis



EPA Method 504.1 Mixture

Product Number: DWM-514 **Page:** 1 of 1
Lot Number: CR-2830 **Lot Issue Date:** 22-Jun-2017 **Expiration Date:** 31-Jul-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2-dibromo-3-chloropropane	000096-12-8	RM11663	200.7 ± 1.0 µg/mL
1,2-dibromoethane	000106-93-4	RM00018	200.8 ± 1.0 µg/mL
1,2,3-trichloropropane	000096-18-4	RM09131	200.8 ± 1.0 µg/mL

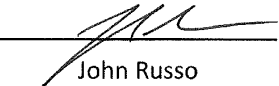
Matrix: methanol (methyl alcohol)

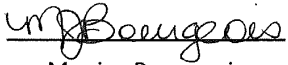
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SGPCE504_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30404 **Lot No.:** A0123209
Description : Pentachloroethane Standard
Pentachloroethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 160830B-BL2)	2,002.0 µg/mL	+/- 11.8913	µg/mL	Gravimetric
			+/- 112.2765	µg/mL	Unstressed
			+/- 114.9024	µg/mL	Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%				

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

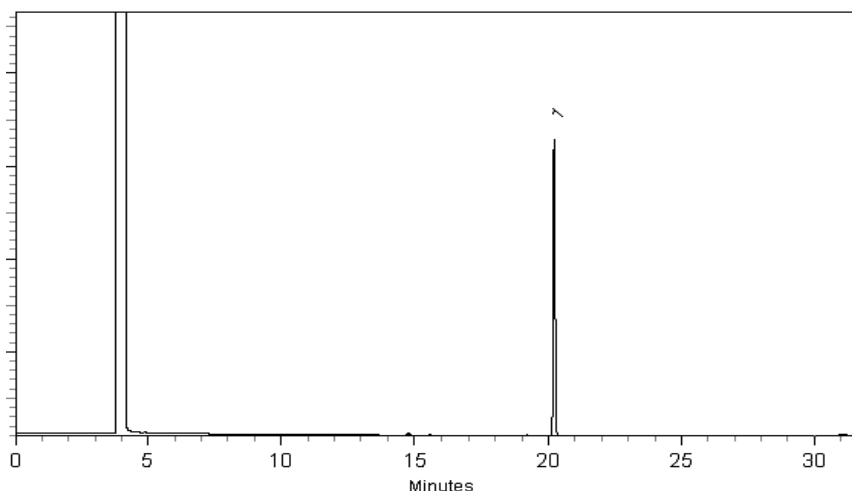
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis
Cathleen Soltis - Mix Technician

Date Mixed: 02-Dec-2016 Balance: 1125113331

Diane Shaffer
Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Dec-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00385



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 Lot No.: A0156625
 Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : January 31, 2025 Storage: 0°C or colder

PPF 3/30/2020
 [Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL Gravimetric +/- 112.5980 µg/mL Unstressed +/- 115.2321 µg/mL Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6540057
 ID: VMVG_BFB_00385
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540055
 ID: VMVG_BFB_00384
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540039
 ID: VMVG_BFB_00383
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540037
 ID: VMVG_BFB_00382
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540035
 ID: VMVG_BFB_00381
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540033
 ID: VMVG_BFB_00380
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540031
 ID: VMVG_BFB_00379
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540029
 ID: VMVG_BFB_00378
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540027
 ID: VMVG_BFB_00377
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

6540025
 ID: VMVG_BFB_00376
 Exp: 01/31/25 Ppdt: PEP
 VMVG p-BFB MIX 2000ug/ml

Column:
 105m x 0.53mm x 3.0µm
 Rtx-502.2 (cat.#10910)

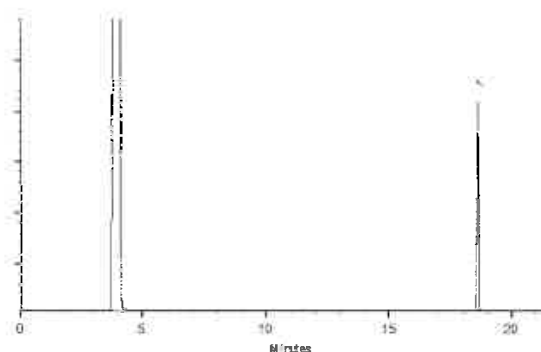
Carrier Gas:
 hydrogen-constant pressure 11.0 psi.

Temp. Program:
 40°C (hold 2 min.) to 240°C
 @ 8°C/min. (hold 5 min.)

Inj. Temp:
 260°C

Det. Temp:
 250°C

Det. Type:
 FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J. Lidgett
 Dustin Lidgett - Mix Technician

Date Mixed: 12-Jan-2020 **Balance:** 1128342314

Justin Alberson
 Justin Alberson - Operations Tech-ARM CG

Date Passed: 14-Jan-2020

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 524.2

Volatile Organic Compounds (GC/MS)
by Method 524.2

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	BFB #	DCZ #
GWK003-2022	680-183527-1	94	104
GWK016-2022	680-183527-2	94	103
TB2022-02	680-183527-3	94	102
GWVA2-2022	680-183527-4	93	101
GWVA2-6022	680-183527-5	95	102
TB2022-01	680-183527-6	92	100
	MB 680-618502/9	95	101
	LCS 680-618502/4	98	101
	LCSD 680-618502/5	103	99
GWK016-2022 MS	680-183527-2 MS	102	99
GWK016-2022 MSD	680-183527-2 MSD	103	99

BFB = 4-Bromofluorobenzene
DCZ = 1,2-Dichlorobenzene-d4 (Surr)

QC LIMITS
70-130
70-130

Column to be used to flag recovery values

FORM II 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: UE1304.D

Lab ID: LCS 680-618502/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	20.0	19.4	97	70-130	
Ethylbenzene	20.0	19.8	99	70-130	
Tetrachloroethene	20.0	19.0	95	70-130	
Toluene	20.0	19.5	98	70-130	
Trichloroethene	20.0	18.6	93	70-130	
Vinyl chloride	20.0	18.6	93	70-130	
Xylenes, Total	40.0	39.5	99	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UE1305.D
 Lab ID: LCSD 680-618502/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	20.0	16.3	82	17	20	70-130	
Ethylbenzene	20.0	16.1	81	21	20	70-130	*1
Tetrachloroethene	20.0	15.0	75	23	20	70-130	*1
Toluene	20.0	16.3	82	18	20	70-130	
Trichloroethene	20.0	15.8	79	16	20	70-130	
Vinyl chloride	20.0	15.8	79	16	20	70-130	
Xylenes, Total	40.0	32.4	81	20	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UE1328.D
 Lab ID: 680-183527-2 MS Client ID: GWK016-2022 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Benzene	20.0	ND	17.9	90	70-130	
Ethylbenzene	20.0	ND	17.7	88	70-130	
Toluene	20.0	ND	17.8	89	70-130	
Xylenes, Total	40.0	ND	34.8	87	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: UE1329.D

Lab ID: 680-183527-2 MSD Client ID: GWK016-2022 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	20.0	17.5	87	2	20	70-130	
Ethylbenzene	20.0	17.7	88	0	20	70-130	
Toluene	20.0	17.6	88	1	20	70-130	
Xylenes, Total	40.0	34.8	87	0	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab File ID: UE1309.D Lab Sample ID: MB 680-618502/9
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CMSU Date Analyzed: 05/13/2020 12:37
 GC Column: Rtx-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-618502/4	UE1304.D	05/13/2020 10:57
	LCSD 680-618502/5	UE1305.D	05/13/2020 11:17
TB2022-02	680-183527-3	UE1312.D	05/13/2020 13:38
TB2022-01	680-183527-6	UE1313.D	05/13/2020 13:58
GWK003-2022	680-183527-1	UE1321.D	05/13/2020 16:39
GWVA2-2022	680-183527-4	UE1322.D	05/13/2020 16:59
GWVA2-6022	680-183527-5	UE1323.D	05/13/2020 17:20
GWK016-2022	680-183527-2	UE1327.D	05/13/2020 18:40
GWK016-2022 MS	680-183527-2 MS	UE1328.D	05/13/2020 19:01
GWK016-2022 MSD	680-183527-2 MSD	UE1329.D	05/13/2020 19:21

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab File ID: UE1101.D BFB Injection Date: 05/11/2020
 Instrument ID: CMSU BFB Injection Time: 10:07
 Analysis Batch No.: 618210

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
75	30.0 - 80.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	>50.0 % of mass 95	100.8	
175	5.0 - 9.0 % of mass 174	7.3	(7.2) 1
176	>95.0 but <101.0 % of mass 174	98.7	(97.8) 1
177	5.0 - 9.0 % of mass 176	6.7	(6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-618210/6	UE1106.D	05/11/2020	11:58
	IC 680-618210/7	UE1107.D	05/11/2020	12:18
	IC 680-618210/8	UE1108.D	05/11/2020	12:38
	IC 680-618210/9	UE1109.D	05/11/2020	12:58
	IC 680-618210/10	UE1110.D	05/11/2020	13:18
	ICIS 680-618210/11	UE1111.D	05/11/2020	13:38
	IC 680-618210/12	UE1112.D	05/11/2020	13:59
	IC 680-618210/13	UE1113.D	05/11/2020	14:19
	ICV 680-618210/15	UE1115.D	05/11/2020	14:59

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab File ID: UE1301.D BFB Injection Date: 05/13/2020
 Instrument ID: CMSU BFB Injection Time: 09:47
 Analysis Batch No.: 618502

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 80.0 % of mass 95	45.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	>50.0 % of mass 95	99.8	
175	5.0 - 9.0 % of mass 174	7.3	(7.4) 1
176	>95.0 but <101.0 % of mass 174	96.6	(96.8) 1
177	5.0 - 9.0 % of mass 176	6.2	(6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-618502/3	UE1303.D	05/13/2020	10:36
	LCS 680-618502/4	UE1304.D	05/13/2020	10:57
	LCSD 680-618502/5	UE1305.D	05/13/2020	11:17
	MB 680-618502/9	UE1309.D	05/13/2020	12:37
TB2022-02	680-183527-3	UE1312.D	05/13/2020	13:38
TB2022-01	680-183527-6	UE1313.D	05/13/2020	13:58
GWK003-2022	680-183527-1	UE1321.D	05/13/2020	16:39
GWVA2-2022	680-183527-4	UE1322.D	05/13/2020	16:59
GWVA2-6022	680-183527-5	UE1323.D	05/13/2020	17:20
GWK016-2022	680-183527-2	UE1327.D	05/13/2020	18:40
GWK016-2022 MS	680-183527-2 MS	UE1328.D	05/13/2020	19:01
GWK016-2022 MSD	680-183527-2 MSD	UE1329.D	05/13/2020	19:21

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Sample No.: ICIS 680-618210/11 Date Analyzed: 05/11/2020 13:38
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): UE1111.D Heated Purge: (Y/N) N
 Calibration ID: 75486

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	1264984	3.87	500731	6.17	290427	8.07	
UPPER LIMIT	1644479	4.37	650950	6.67	377555	8.57	
LOWER LIMIT	885489	3.37	350512	5.67	203299	7.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-618210/15	1110446	3.87	455823	6.17	258845	8.07	
680-183527-3	TB2022-02	1211764	3.87	472800	6.17	239838	8.07
680-183527-6	TB2022-01	1248341	3.87	500955	6.17	245560	8.07
680-183527-1	GWK003-2022	1178248	3.87	463665	6.17	233894	8.07
680-183527-4	GWVA2-2022	1309183	3.87	514669	6.17	264230	8.07
680-183527-5	GWVA2-6022	1234670	3.87	494060	6.17	248685	8.07
680-183527-2	GWK016-2022	1221944	3.87	476411	6.17	246657	8.07
680-183527-2 MS	GWK016-2022 MS	1314839	3.87	526509	6.17	295895	8.07
680-183527-2 MSD	GWK016-2022 MSD	1379143	3.87	560058	6.17	312005	8.07

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Sample No.: CCVIS 680-618502/3 Date Analyzed: 05/13/2020 10:36
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): UE1303.D Heated Purge: (Y/N) N
 Calibration ID: 75486

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	1259121	3.87	502378	6.17	274597	8.07	
UPPER LIMIT	1636857	4.37	653091	6.67	356976	8.57	
LOWER LIMIT	881385	3.37	351665	5.67	192218	7.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-618502/4		1382099	3.87	539193	6.17	293123	8.07
LCSD 680-618502/5		1236284	3.87	493377	6.17	278567	8.07
MB 680-618502/9		1286574	3.87	508947	6.17	259479	8.07
680-183527-3	TB2022-02	1211764	3.87	472800	6.17	239838	8.07
680-183527-6	TB2022-01	1248341	3.87	500955	6.17	245560	8.07
680-183527-1	GWK003-2022	1178248	3.87	463665	6.17	233894	8.07
680-183527-4	GWVA2-2022	1309183	3.87	514669	6.17	264230	8.07
680-183527-5	GWVA2-6022	1234670	3.87	494060	6.17	248685	8.07
680-183527-2	GWK016-2022	1221944	3.87	476411	6.17	246657	8.07
680-183527-2 MS	GWK016-2022 MS	1314839	3.87	526509	6.17	295895	8.07
680-183527-2 MSD	GWK016-2022 MSD	1379143	3.87	560058	6.17	312005	8.07

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK003-2022 Lab Sample ID: 680-183527-1
 Matrix: Water Lab File ID: UE1321.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 10:03
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 16:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*1	0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	104		70-130
460-00-4	4-Bromofluorobenzene	94		70-130

Report Date: 14-May-2020 10:09:56

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1321.D
 Lims ID: 680-183527-A-1
 Client ID: GWK003-2022
 Sample Type: Client
 Inject. Date: 13-May-2020 16:39:30 ALS Bottle#: 21 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-021
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:09:56 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau Date: 14-May-2020 10:09:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1178248	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	463665	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	233894	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	203824	9.43	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	229770	10.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 14-May-2020 10:09:56

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1321.D

Injection Date: 13-May-2020 16:39:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-1

Lab Sample ID: 680-183527-1

Worklist Smp#: 21

Client ID: GWK003-2022

Purge Vol: 5.000 mL

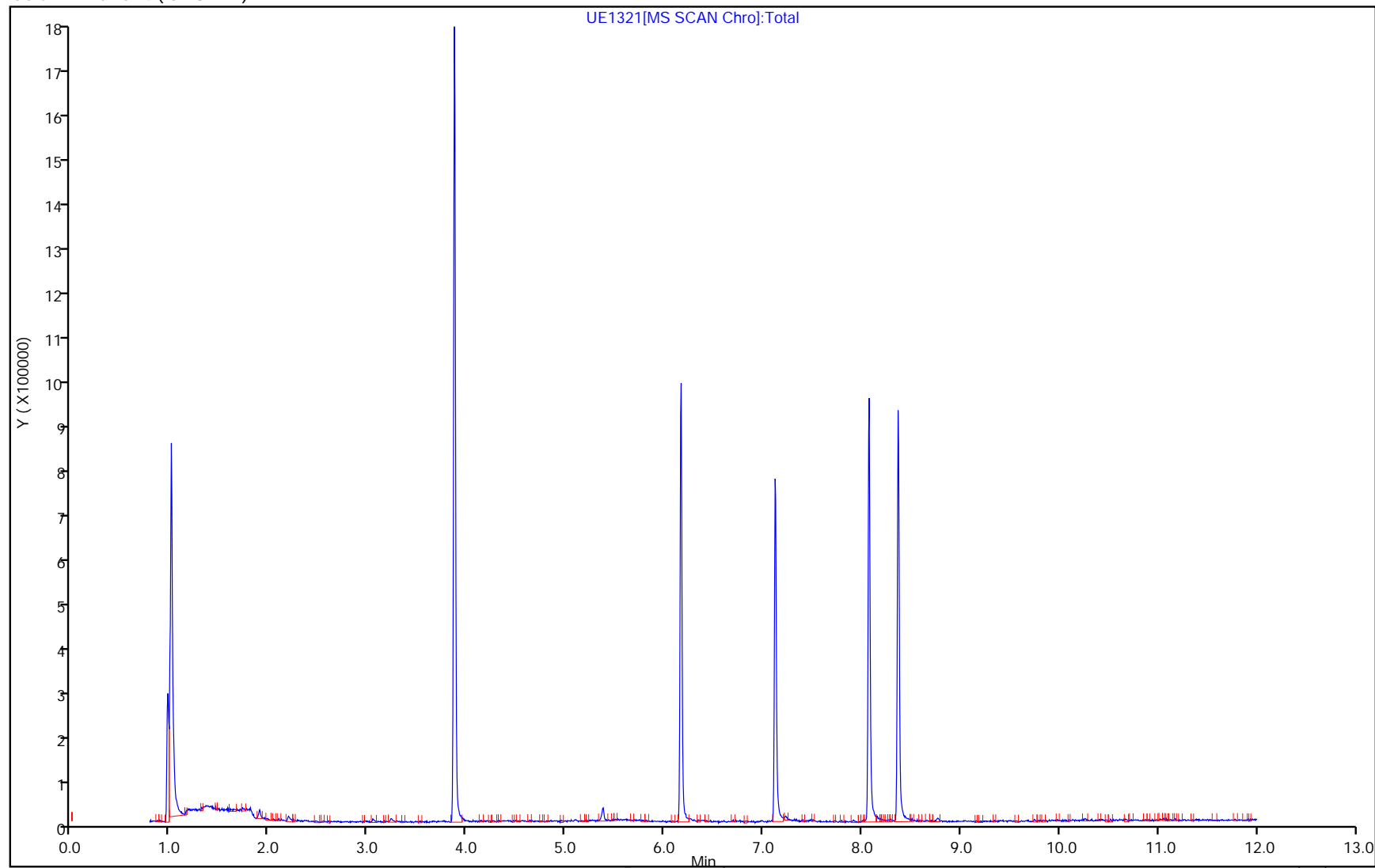
Dil. Factor: 1.0000

ALS Bottle#: 21

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:09:56

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1321.D
 Lims ID: 680-183527-A-1
 Client ID: GWK003-2022
 Sample Type: Client
 Inject. Date: 13-May-2020 16:39:30 ALS Bottle#: 21 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-021
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:09:56 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:09:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.43	94.33
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.4	103.71

Report Date: 14-May-2020 10:09:56

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

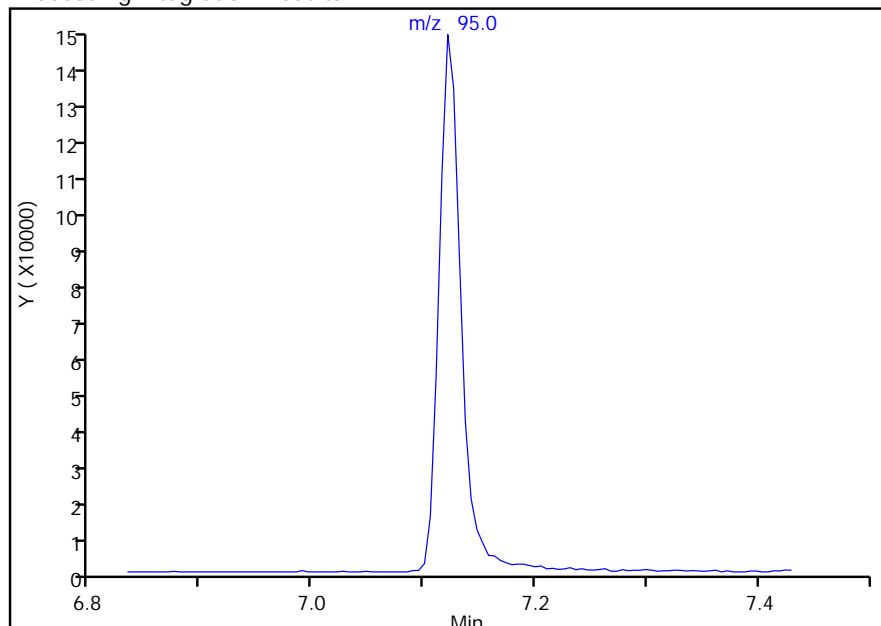
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1321.D		
Injection Date:	13-May-2020 16:39:30	Instrument ID:	CMSU
Lims ID:	680-183527-A-1	Lab Sample ID:	680-183527-1
Client ID:	GWK003-2022		
Operator ID:	rd	ALS Bottle#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	21

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

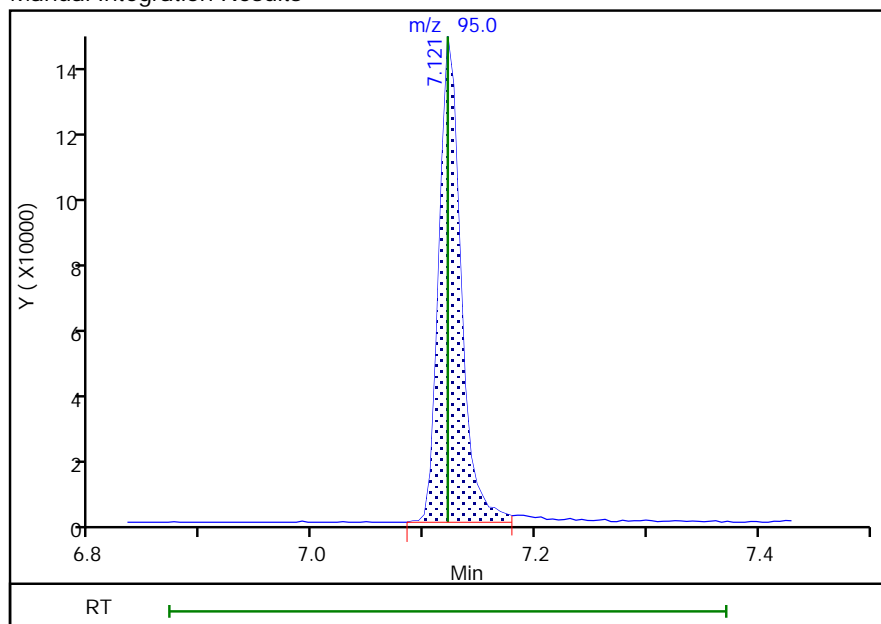
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	203824
Amount:	9.432848
Amount Units:	ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:09:49

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 Lab Sample ID: 680-183527-2
 Matrix: Water Lab File ID: UE1327.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 09:33
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 18:40
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*1	0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	103		70-130
460-00-4	4-Bromofluorobenzene	94		70-130

Report Date: 14-May-2020 10:19:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1327.D
 Lims ID: 680-183527-A-2
 Client ID: GWK016-2022
 Sample Type: Client
 Inject. Date: 13-May-2020 18:40:30 ALS Bottle#: 27 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-027
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:19:07 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau Date: 14-May-2020 10:19:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1221944	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	476411	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	246657	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	210873	9.41	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	240341	10.3	
\$ 6 BFB								

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 14-May-2020 10:19:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1327.D

Injection Date: 13-May-2020 18:40:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-2

Lab Sample ID: 680-183527-2

Worklist Smp#: 27

Client ID: GWK016-2022

Purge Vol: 5.000 mL

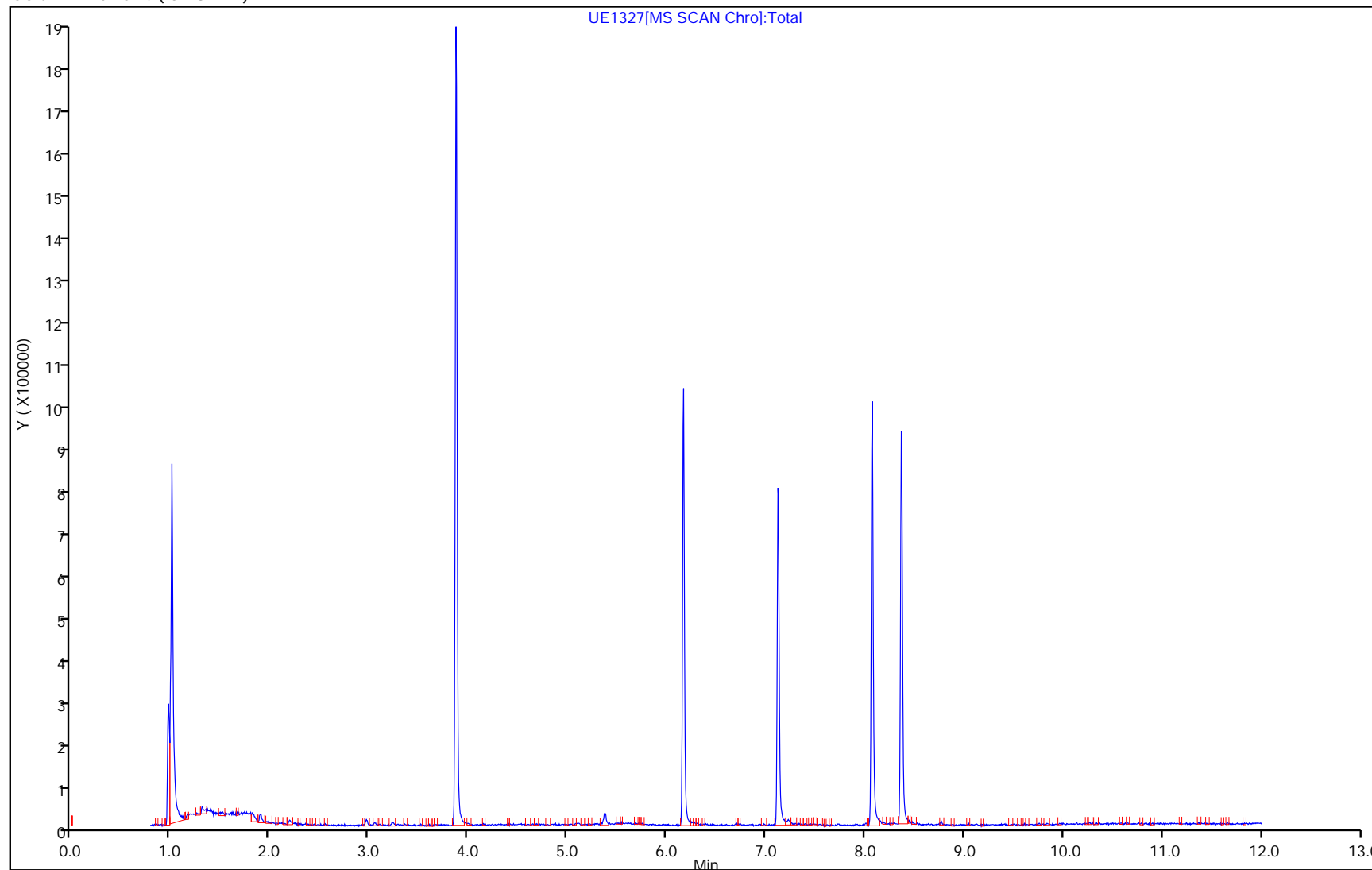
Dil. Factor: 1.0000

ALS Bottle#: 27

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:19:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1327.D
 Lims ID: 680-183527-A-2
 Client ID: GWK016-2022
 Sample Type: Client
 Inject. Date: 13-May-2020 18:40:30 ALS Bottle#: 27 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-027
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:19:07 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:19:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.41	94.10
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.3	102.87

Report Date: 14-May-2020 10:19:07

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

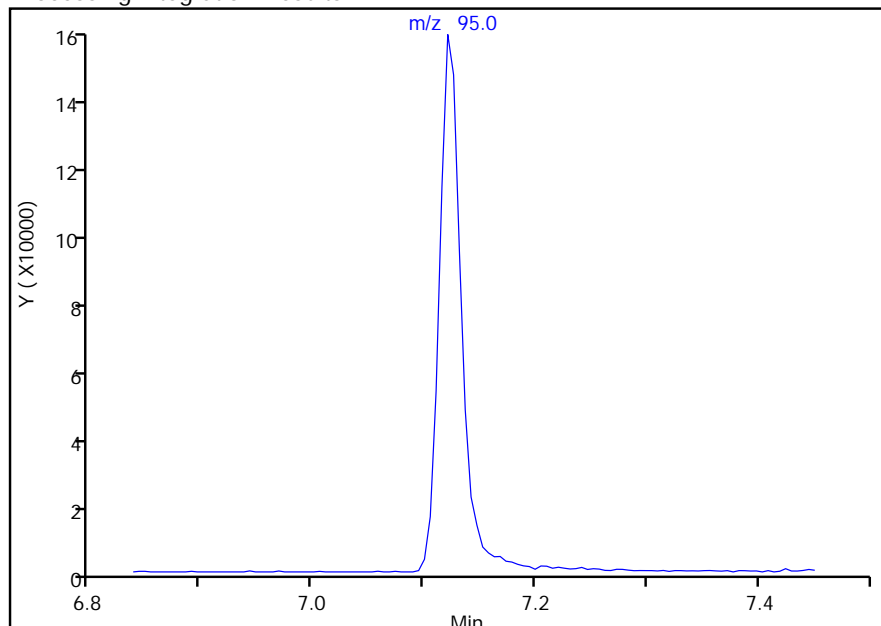
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1327.D		
Injection Date:	13-May-2020 18:40:30	Instrument ID:	CMSU
Lims ID:	680-183527-A-2	Lab Sample ID:	680-183527-2
Client ID:	GWK016-2022		
Operator ID:	rd	ALS Bottle#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	27

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

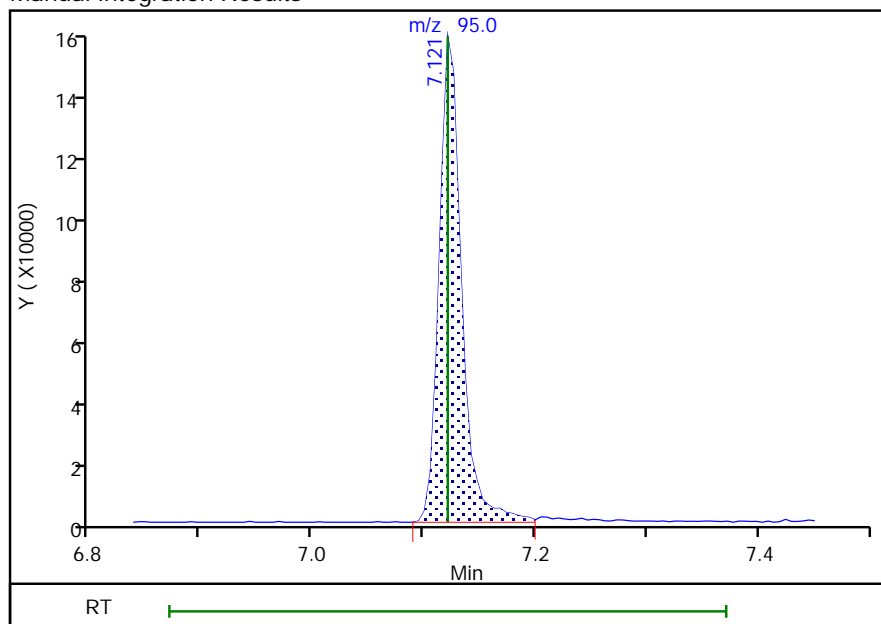
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	210873
Amount:	9.410092
Amount Units:	ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:18:36

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: TB2022-02 Lab Sample ID: 680-183527-3
 Matrix: Water Lab File ID: UE1312.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 08:00
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 13:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*1	0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	102		70-130
460-00-4	4-Bromofluorobenzene	94		70-130

Report Date: 14-May-2020 10:02:55

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1312.D
 Lims ID: 680-183527-A-3
 Client ID: TB2022-02
 Sample Type: Client
 Inject. Date: 13-May-2020 13:38:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-012
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:02:55 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau Date: 14-May-2020 10:02:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1211764	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	472800	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	239838	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	208191	9.37	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	232176	10.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 14-May-2020 10:02:55

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1312.D

Injection Date: 13-May-2020 13:38:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-3

Lab Sample ID: 680-183527-3

Worklist Smp#: 12

Client ID: TB2022-02

Purge Vol: 5.000 mL

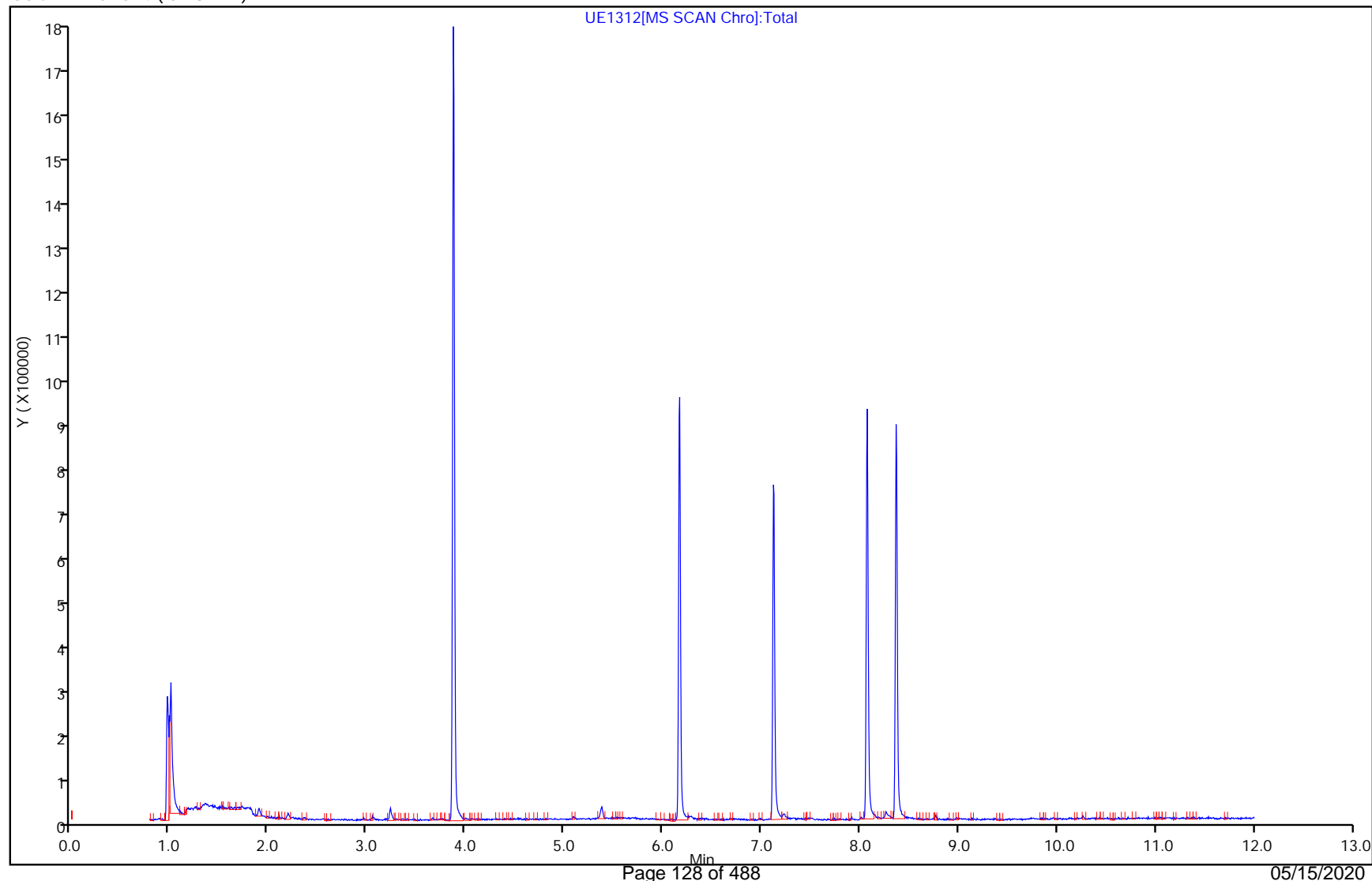
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:02:55

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1312.D
 Lims ID: 680-183527-A-3
 Client ID: TB2022-02
 Sample Type: Client
 Inject. Date: 13-May-2020 13:38:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-012
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:02:55 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:02:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.37	93.68
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.2	102.20

Report Date: 14-May-2020 10:02:55

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

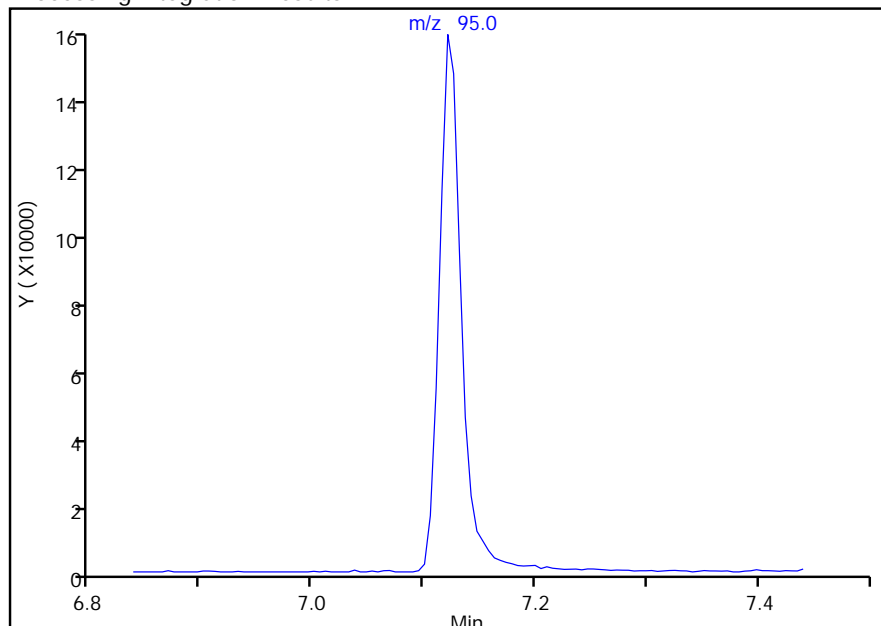
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1312.D		
Injection Date:	13-May-2020 13:38:30	Instrument ID:	CMSU
Lims ID:	680-183527-A-3	Lab Sample ID:	680-183527-3
Client ID:	TB2022-02		
Operator ID:	rd	ALS Bottle#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	12

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

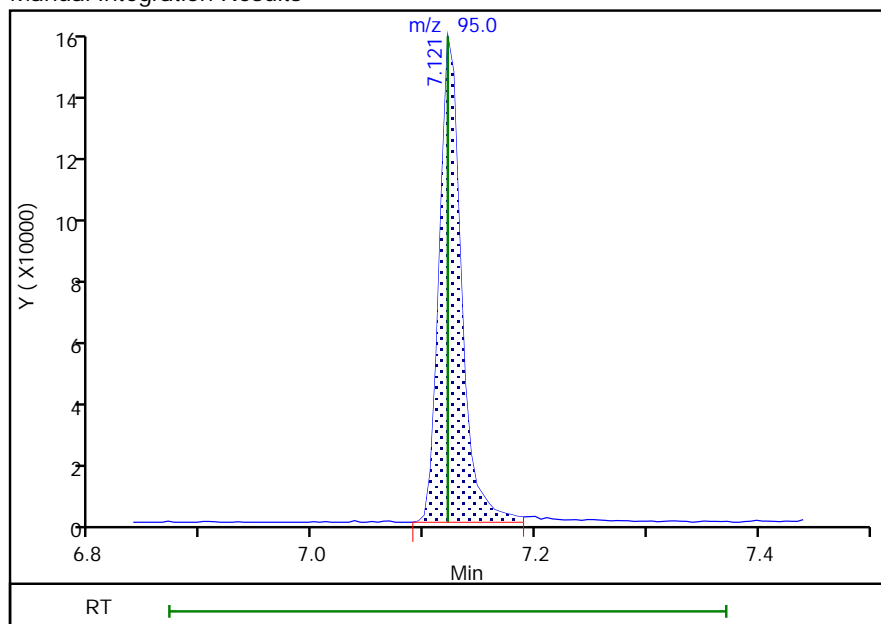
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 208191
Amount: 9.368458
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:02:49

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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FORM I
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Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWVA2-2022 Lab Sample ID: 680-183527-4
 Matrix: Water Lab File ID: UE1322.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 10:30
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 16:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*1	0.50	0.099
127-18-4	Tetrachloroethene	ND	*1	0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	101		70-130
460-00-4	4-Bromofluorobenzene	93		70-130

Report Date: 14-May-2020 10:10:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1322.D
 Lims ID: 680-183527-A-4
 Client ID: GWVA2-2022
 Sample Type: Client
 Inject. Date: 13-May-2020 16:59:30 ALS Bottle#: 22 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-022
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:10:08 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau Date: 14-May-2020 10:10:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1309183	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	514669	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	264230	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	224445	9.35	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	253332	10.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 14-May-2020 10:10:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1322.D

Injection Date: 13-May-2020 16:59:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-4

Lab Sample ID: 680-183527-4

Worklist Smp#: 22

Client ID: GWVA2-2022

Purge Vol: 5.000 mL

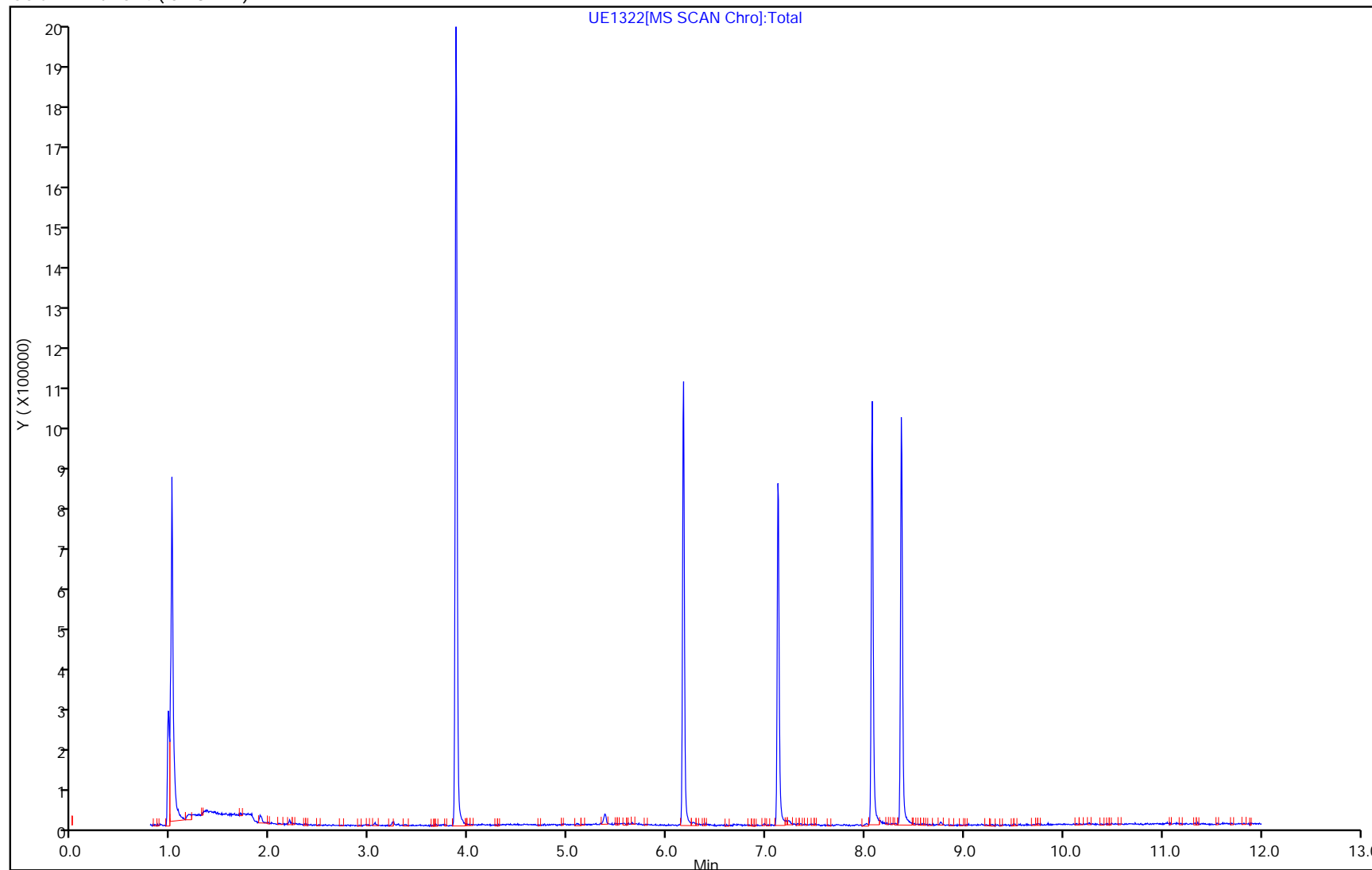
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:10:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1322.D
 Lims ID: 680-183527-A-4
 Client ID: GWVA2-2022
 Sample Type: Client
 Inject. Date: 13-May-2020 16:59:30 ALS Bottle#: 22 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-022
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:10:08 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:10:08

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.35	93.48
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.1	101.21

Report Date: 14-May-2020 10:10:08

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

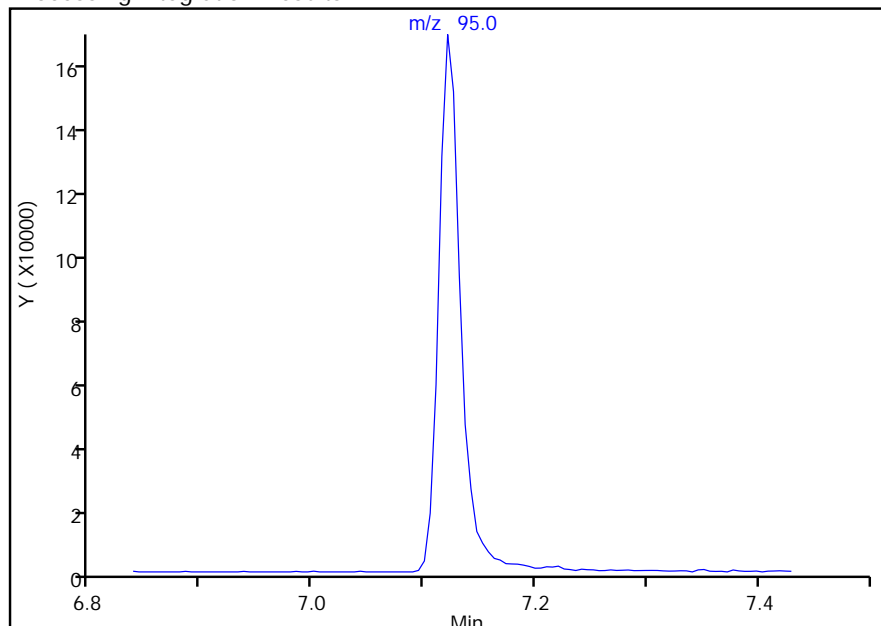
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1322.D	Instrument ID:	CMSU	Worklist Smp#:	22
Injection Date:	13-May-2020 16:59:30	Lab Sample ID:	680-183527-4		
Lims ID:	680-183527-A-4				
Client ID:	GWVA2-2022				
Operator ID:	rd	ALS Bottle#:	22		
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	U524.2	Limit Group:	524.2		
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN		

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

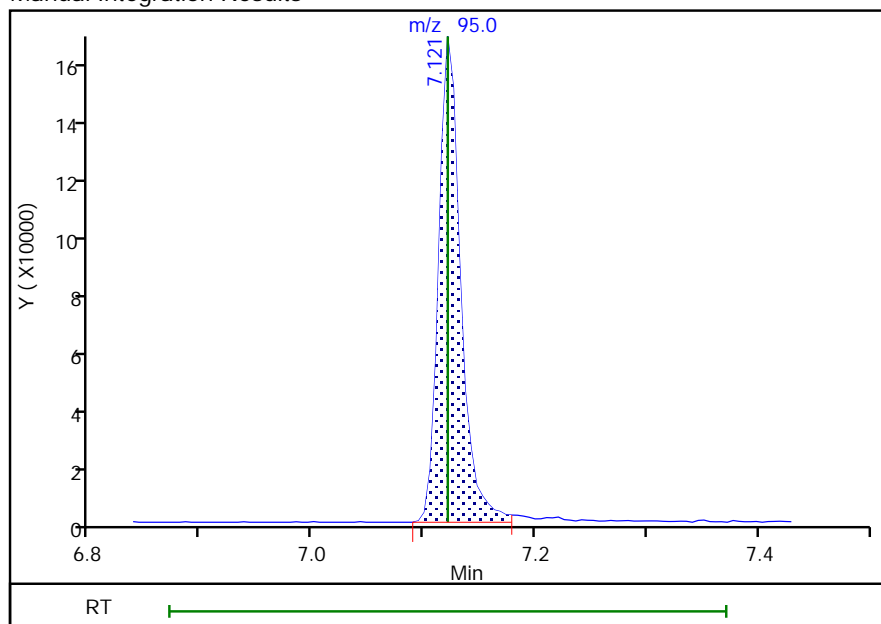
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 224445
Amount: 9.348325
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:10:01

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWVA2-6022 Lab Sample ID: 680-183527-5
 Matrix: Water Lab File ID: UE1323.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 10:30
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 17:20
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*1	0.50	0.099
127-18-4	Tetrachloroethene	ND	*1	0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	102		70-130
460-00-4	4-Bromofluorobenzene	95		70-130

Report Date: 14-May-2020 10:11:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1323.D
 Lims ID: 680-183527-A-5
 Client ID: GWVA2-6022
 Sample Type: Client
 Inject. Date: 13-May-2020 17:20:30 ALS Bottle#: 23 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-023
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:11:00 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau Date: 14-May-2020 10:11:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1234670	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	494060	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	248685	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	214856	9.49	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	239842	10.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 14-May-2020 10:11:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1323.D

Injection Date: 13-May-2020 17:20:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-5

Lab Sample ID: 680-183527-5

Worklist Smp#: 23

Client ID: GWVA2-6022

Purge Vol: 5.000 mL

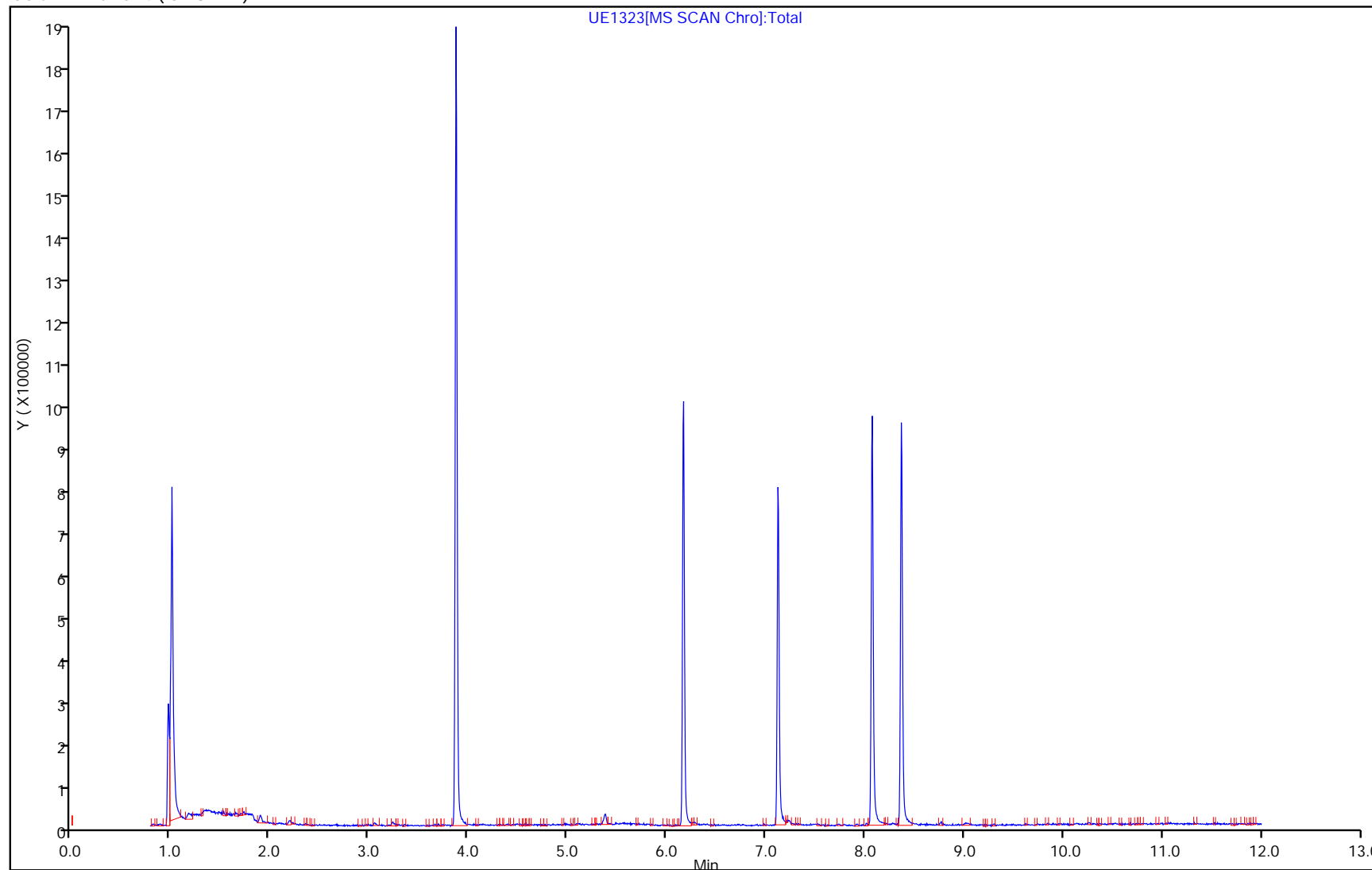
Dil. Factor: 1.0000

ALS Bottle#: 23

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:11:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1323.D
 Lims ID: 680-183527-A-5
 Client ID: GWVA2-6022
 Sample Type: Client
 Inject. Date: 13-May-2020 17:20:30 ALS Bottle#: 23 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-023
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:11:00 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:11:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.49	94.89
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.2	101.81

Report Date: 14-May-2020 10:11:01

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

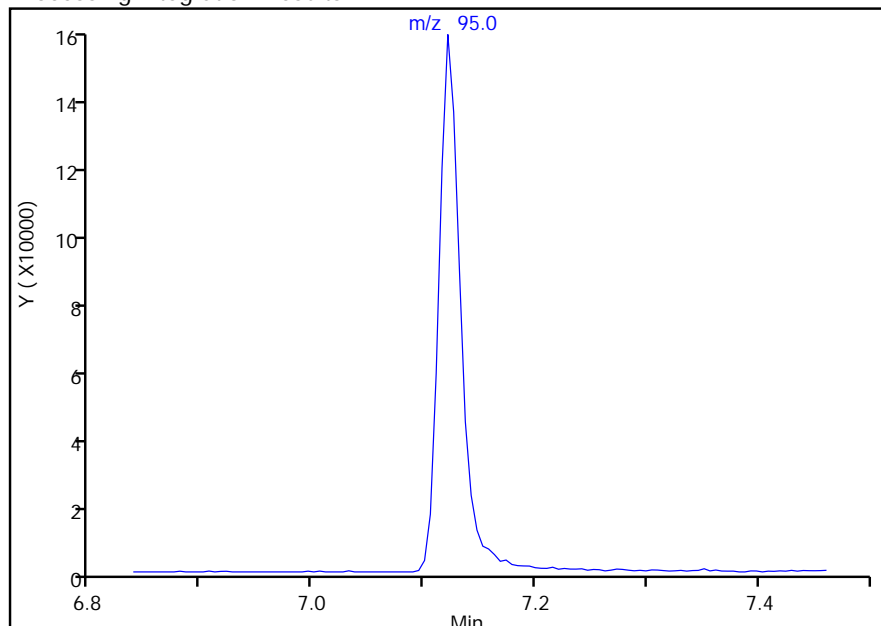
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1323.D		
Injection Date:	13-May-2020 17:20:30	Instrument ID:	CMSU
Lims ID:	680-183527-A-5	Lab Sample ID:	680-183527-5
Client ID:	GWVA2-6022		
Operator ID:	rd	ALS Bottle#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	23

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

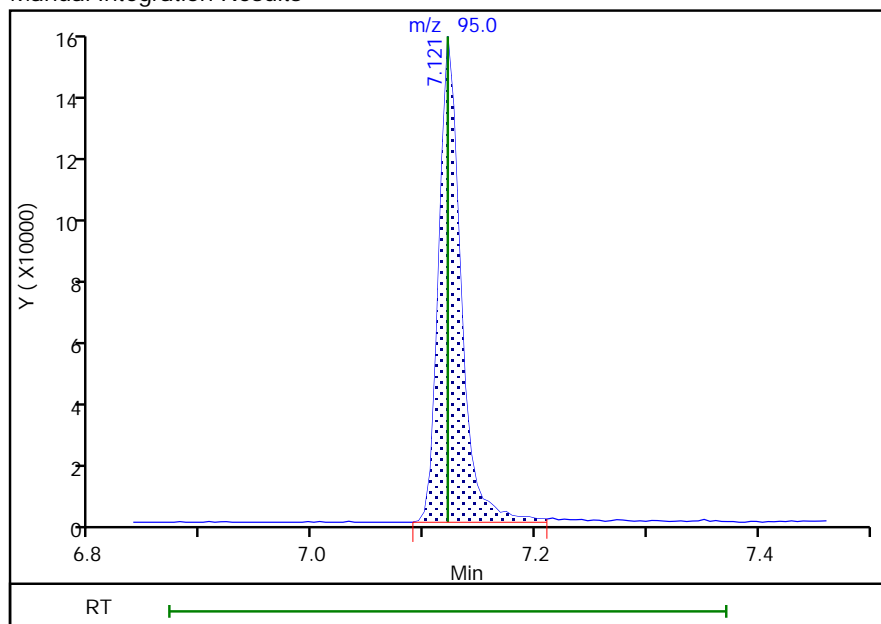
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	214856
Amount:	9.489008
Amount Units:	ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:10:13

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: TB2022-01 Lab Sample ID: 680-183527-6
 Matrix: Water Lab File ID: UE1313.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 08:00
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 13:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*1	0.50	0.099
127-18-4	Tetrachloroethene	ND	*1	0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	100		70-130
460-00-4	4-Bromofluorobenzene	92		70-130

Report Date: 14-May-2020 10:03:09

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1313.D
 Lims ID: 680-183527-A-6
 Client ID: TB2022-01
 Sample Type: Client
 Inject. Date: 13-May-2020 13:58:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-013
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:03:09 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau Date: 14-May-2020 10:03:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1248341	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	500955	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	245560	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	211409	9.23	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	232855	10.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 14-May-2020 10:03:10

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1313.D

Injection Date: 13-May-2020 13:58:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-6

Lab Sample ID: 680-183527-6

Worklist Smp#: 13

Client ID: TB2022-01

Purge Vol: 5.000 mL

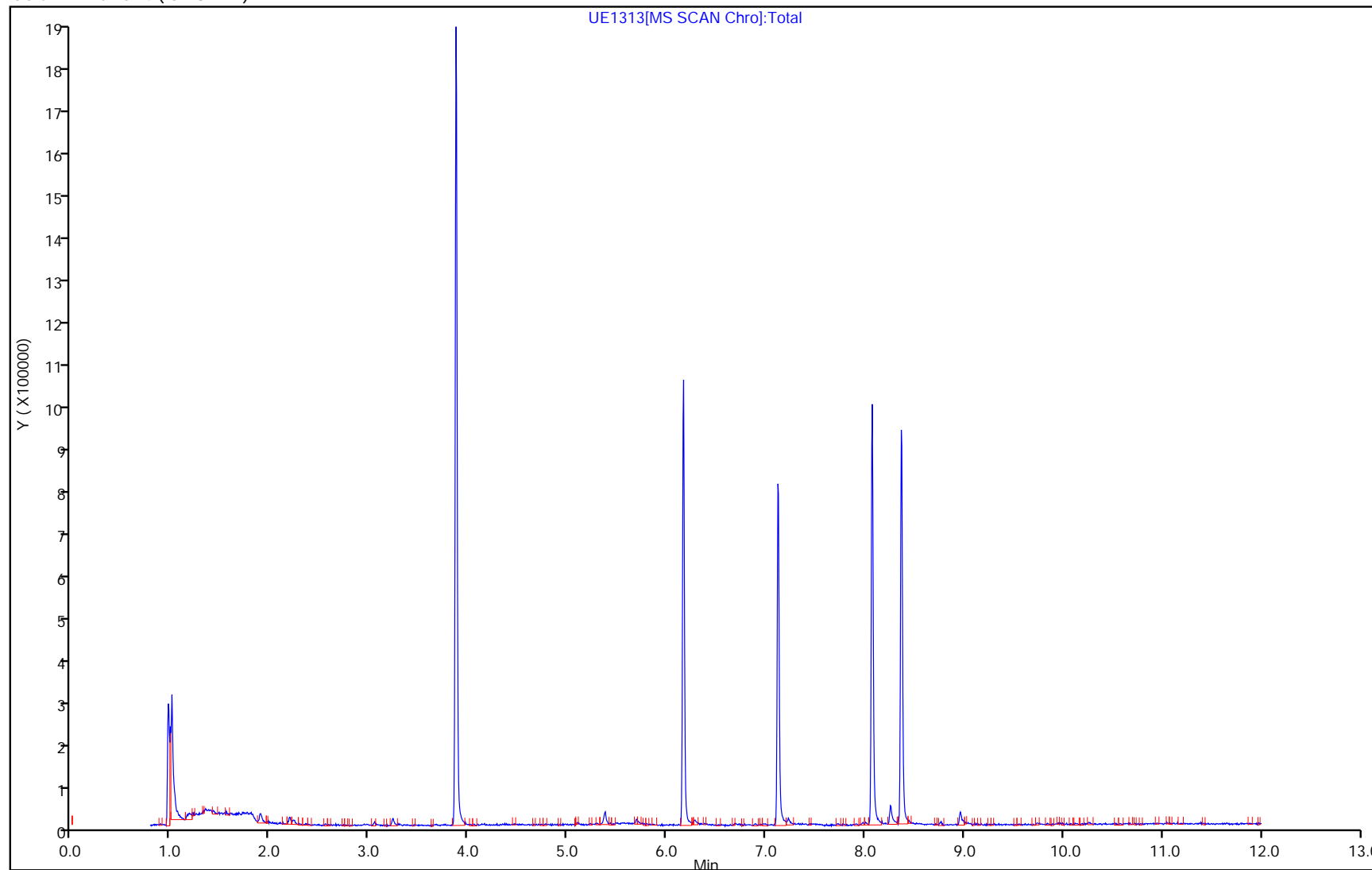
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:03:09

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1313.D
 Lims ID: 680-183527-A-6
 Client ID: TB2022-01
 Sample Type: Client
 Inject. Date: 13-May-2020 13:58:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-013
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:03:09 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:03:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.23	92.35
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.0	100.11

Report Date: 14-May-2020 10:03:10

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

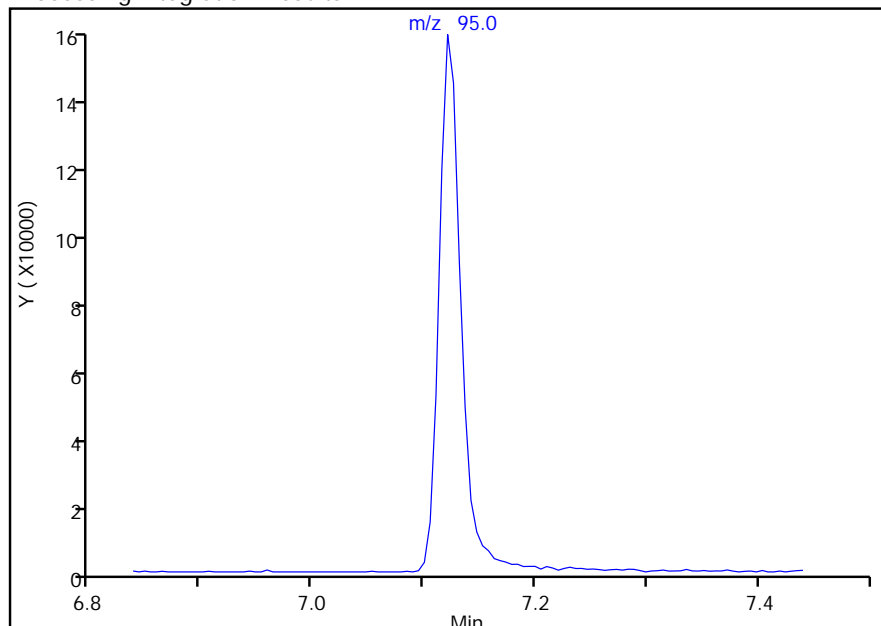
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1313.D		
Injection Date:	13-May-2020 13:58:30	Instrument ID:	CMSU
Lims ID:	680-183527-A-6	Lab Sample ID:	680-183527-6
Client ID:	TB2022-01		
Operator ID:	rd	ALS Bottle#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

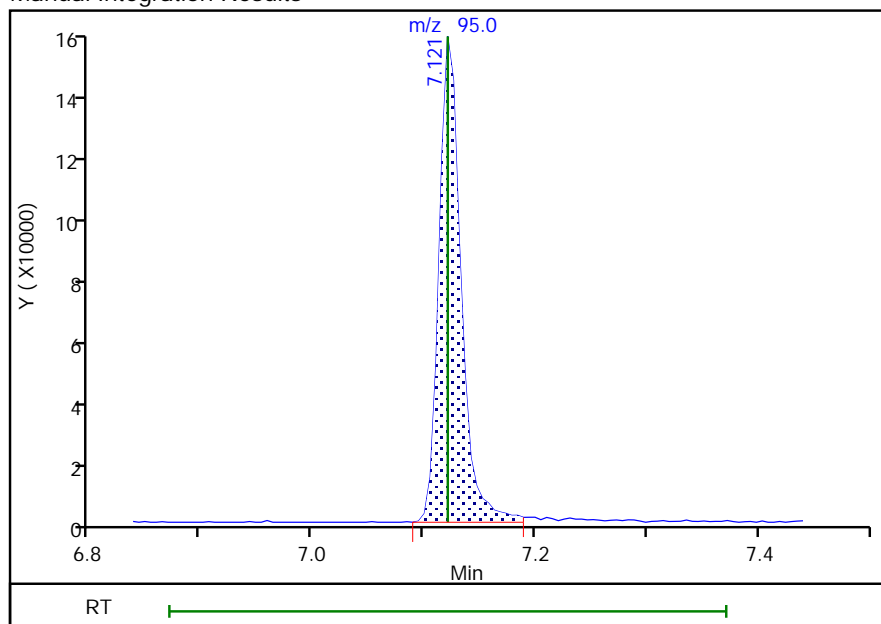
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 211409
Amount: 9.234523
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:02:59

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-618210/6	UE1106.D
Level 2	IC 680-618210/7	UE1107.D
Level 3	IC 680-618210/8	UE1108.D
Level 4	IC 680-618210/9	UE1109.D
Level 5	IC 680-618210/10	UE1110.D
Level 6	ICIS 680-618210/11	UE1111.D
Level 7	IC 680-618210/12	UE1112.D
Level 8	IC 680-618210/13	UE1113.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 5													
Dichlorodifluoromethane	0.3660 0.3107	0.3222 0.2983	0.3217 0.2950	0.2933	0.2860	Ave	0.3116				8.2		20.0				
Vinyl chloride	0.3386 0.3021	0.3025 0.2900	0.3313 0.2872	0.3273	0.3409	Ave	0.3150				7.0		20.0				
Chloromethane	0.3058 0.3437	0.3159 0.2878	0.3096 0.3589	0.2915	0.3302	Ave	0.3179				7.8		20.0				
Bromomethane	0.3088 0.1911	0.1566 0.1839	0.1965 0.1869	0.1829	0.2260	Lin1	0.0345	0.1873						0.9970		0.9900	
Chloroethane	0.2022 0.1755	0.1681 0.1743	0.1604 0.1701	0.1940	0.2078	Ave	0.1816				9.6		20.0				
Trichlorofluoromethane	0.4529 0.2949	0.3276 0.2937	0.3112 0.2822	0.3695	0.3349	Ave	0.3334				16.7		20.0				
Freon 113	0.3269 0.2372	0.2561 0.2300	0.2342 0.2228	0.2730	0.2849	Ave	0.2581				13.7		20.0				
1,1-Dichloroethene	0.2499 0.1884	0.1984 0.1635	0.2001 0.1474	0.2190	0.2296	Ave	0.1996				16.9		20.0				
Acetone	++++ 0.0181	++++ 0.0167	0.0258 0.0139	0.0170	0.0210	Qua	0.0384	0.0191	-0.000011					1.0000		0.9900	
Methylene Chloride	0.3531 0.2760	0.3176 0.2576	0.2493 0.2577	0.2758	0.2845	Ave	0.2840				12.4		20.0				
tert-Butyl alcohol	++++ 0.0222	0.0252 0.0207	0.0228 0.0210	0.0215	0.0251	Ave	0.0226				8.2		20.0				
Methyl tert-butyl ether	0.8724 0.7254	0.7508 0.6869	0.6745 0.7046	0.7160	0.7074	Ave	0.7298				8.5		20.0				
trans-1,2-Dichloroethene	0.3509 0.2615	0.2779 0.2533	0.2507 0.2540	0.2698	0.2593	Ave	0.2722				12.2		20.0				
1,1-Dichloroethane	0.5419 0.4248	0.4505 0.4047	0.4233 0.4163	0.4232	0.4298	Ave	0.4393				9.9		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Diisopropyl ether	0.7652 0.6466	0.6578 0.6308	0.6137 0.6554	0.6213	0.6420	Ave		0.6541			7.3		20.0				
Tert-butyl ethyl ether	0.9061 0.7577	0.8103 0.7349	0.7312 0.7613	0.7315	0.7283	Ave		0.7702			8.0		20.0				
2-Butanone (MEK)	+++++ 0.0308	+++++ 0.0292	0.0346 0.0291	0.0318	0.0302	Ave		0.0309			6.6		20.0				
cis-1,2-Dichloroethene	0.4964 0.3765	0.3959 0.3690	0.3664 0.3703	0.3973	0.3677	Ave		0.3924			11.2		20.0				
2,2-Dichloropropane	0.5729 0.3773	0.4282 0.3685	0.3765 0.3674	0.4014	0.3728	Ave		0.4081			17.1		20.0				
Chlorobromomethane	0.2407 0.1701	0.1824 0.1797	0.1691 0.1830	0.1828	0.1593	Ave		0.1834			13.4		20.0				
Chloroform	0.6638 0.4588	0.4901 0.4423	0.4517 0.4423	0.4847	0.4400	Ave		0.4842			15.5		20.0				
1,1,1-Trichloroethane	0.6671 0.5202	0.5565 0.4961	0.5543 0.5016	0.5458	0.3995	Ave		0.5301			14.2		20.0				
Carbon tetrachloride	0.6031 0.4644	0.5009 0.4507	0.5062 0.4590	0.5038	0.3632	Ave		0.4814			14.0		20.0				
1,1-Dichloropropene	0.5514 0.4333	0.4942 0.4279	0.4776 0.4391	0.4617	0.3353	Ave		0.4526			13.8		20.0				
Benzene	1.8826 1.3526	1.4268 1.3123	1.4178 1.3656	1.3805	1.0676	Ave		1.4007			16.1		20.0				
1,2-Dichloroethane	0.6141 0.4205	0.4745 0.3940	0.4703 0.4019	0.4400	0.3527	Ave		0.4460			17.7		20.0				
Tert-amyl methyl ether	0.8312 0.6902	0.7024 0.6659	0.6590 0.6829	0.6658	0.6558	Ave		0.6942			8.3		20.0				
Trichloroethene	0.5502 0.3825	0.4144 0.3689	0.4269 0.3773	0.4216	0.3066	Ave		0.4061			17.2		20.0				
1,2-Dichloropropane	0.4129 0.3152	0.3507 0.3012	0.3369 0.3060	0.3167	0.2719	Ave		0.3265			12.9		20.0				
Dibromomethane	0.3048 0.2194	0.2286 0.2019	0.2387 0.2042	0.2202	0.1728	Ave		0.2238			17.1		20.0				
Dichlorobromomethane	0.5550 0.4512	0.4675 0.4215	0.4534 0.4349	0.4248	0.3324	Ave		0.4426			13.9		20.0				
cis-1,3-Dichloropropene	0.6578 0.5239	0.5652 0.5048	0.5504 0.5315	0.5110	0.4031	Ave		0.5309			13.3		20.0				
4-Methyl-2-pentanone (MIBK)	0.4179 0.2909	0.3128 0.2831	0.2862 0.2933	0.2813	0.2688	Ave		0.3043			15.6		20.0				
Toluene	1.1079 0.8741	0.8622 0.8456	0.8960 0.8834	0.8599	0.8339	Ave		0.8954			9.8		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210
SDG No.: _____
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	0.6133 0.4879	0.4790 0.4691	0.4758 0.4951	0.4661	0.4494	Ave		0.4920			10.4		20.0				
1,1,2-Trichloroethane	0.3589 0.2642	0.2882 0.2459	0.2624 0.2490	0.2647	0.2490	Ave		0.2728			13.7		20.0				
Tetrachloroethene	0.8695 0.6170	0.7043 0.6020	0.7279 0.6077	0.6678	0.6292	Ave		0.6782			13.3		20.0				
1,3-Dichloropropane	0.7083 0.5094	0.5251 0.4822	0.5128 0.4976	0.5272	0.4921	Ave		0.5319			13.7		20.0				
2-Hexanone	0.4628 0.3451	0.3453 0.3428	0.3449 0.3533	0.3284	0.3347	Ave		0.3572			12.1		20.0				
Chlorodibromomethane	0.9867 0.6623	0.7554 0.6510	0.6898 0.6705	0.6665	0.6453	Ave		0.7159			16.0		20.0				
Ethylene Dibromide	0.3907 0.3524	0.3751 0.3323	0.3364 0.3389	0.3526	0.3341	Ave		0.3516			6.0		20.0				
Chlorobenzene	1.4024 1.0131	1.0997 0.9831	0.9770 1.0113	1.0312	0.9689	Ave		1.0608			13.6		20.0				
1,1,1,2-Tetrachloroethane	0.9644 0.6433	0.7450 0.6349	0.7260 0.6362	0.6240	0.6374	Ave		0.7014			16.5		20.0				
Ethylbenzene	3.9150 2.8922	3.1543 2.9032	2.9115 2.9732	2.8418	2.8227	Ave		3.0517			11.9		20.0				
m-Xylene & p-Xylene	3.0394 2.2448	2.5027 2.2535	2.3231 2.2959	2.1963	2.1925	Ave		2.3810			11.9		20.0				
o-Xylene	3.2576 2.3196	2.5190 2.3256	2.3432 2.3742	2.3717	2.2282	Ave		2.4674			13.3		20.0				
Styrene	2.3106 1.9150	2.0528 1.8942	1.7786 1.9499	1.8385	1.8280	Ave		1.9460			8.7		20.0				
Bromoform	0.6504 0.4962	0.5472 0.4938	0.4577 0.5044	0.4886	0.4706	Ave		0.5136			11.9		20.0				
Isopropylbenzene	3.9124 2.9142	3.1084 2.9771	2.8257 3.0299	2.9741	2.7789	Ave		3.0651			11.7		20.0				
Bromobenzene	1.2616 0.8674	1.0331 0.8413	0.9155 0.8409	0.8570	0.8390	Ave		0.9320			15.9		20.0				
1,1,2,2-Tetrachloroethane	1.2058 0.7355	0.9421 0.6986	0.7310 0.6902	0.7039	0.7056	QuaF		0.7180	-0.000283					1.0000		0.9900	
1,2,3-Trichloropropane	0.3591 0.2282	0.2812 0.2147	0.2259 0.2113	0.2456	0.2144	QuaF		0.2224	-0.000113					1.0000		0.9900	
N-Propylbenzene	4.5691 3.3355	3.5983 3.4245	3.1811 3.4720	3.2983	3.2063	Ave		3.5106			12.8		20.0				
2-Chlorotoluene	2.9347 1.9858	2.3774 1.9987	2.0043 2.0165	1.9841	1.9032	Ave		2.1506			16.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	3.0559 2.1590	2.3523 2.1715	2.0978 2.2275	2.1194	2.0864	Ave		2.2837			14.2		20.0				
4-Chlorotoluene	3.3635 2.2897	2.5367 2.2850	2.1859 2.3201	2.1956	2.1603	Ave		2.4171			16.6		20.0				
tert-Butylbenzene	2.6787 2.0917	2.3561 2.1245	2.0394 2.1518	2.1278	1.9999	Ave		2.1962			10.1		20.0				
1,2,4-Trimethylbenzene	2.8457 2.0460	2.1973 2.0738	1.9214 2.1084	1.8578	2.0004	Ave		2.1313			14.4		20.0				
sec-Butylbenzene	4.0097 2.9618	3.2064 3.0374	2.8177 3.1048	2.9209	2.8512	Ave		3.1137			12.3		20.0				
1,3-Dichlorobenzene	2.2023 1.5405	1.7242 1.5304	1.5049 1.5298	1.5409	1.4808	Ave		1.6317			14.8		20.0				
4-Isopropyltoluene	3.1743 2.4086	2.5847 2.4799	2.3294 2.5349	2.3438	2.3161	Ave		2.5214			11.2		20.0				
1,4-Dichlorobenzene	2.3473 1.5584	1.8421 1.5200	1.5972 1.5436	1.5592	1.4951	Ave		1.6828			17.2		20.0				
n-Butylbenzene	2.0532 1.7637	1.7565 1.8274	1.5432 1.8793	1.7952	1.6965	Ave		1.7894			8.2		20.0				
1,2-Dichlorobenzene	2.2155 1.4926	1.6818 1.4627	1.4505 1.4590	1.6738	1.4235	Ave		1.6074			16.5		20.0				
1,2-Dibromo-3-Chloropropane	0.3286 0.1927	0.2020 0.1906	0.1863 0.1869	0.1698	0.1700	Lin1	0.0356	0.1861						0.9980		0.9900	
1,2,4-Trichlorobenzene	1.2103 0.7143	0.7360 0.7085	0.6766 0.6877	0.7238	0.6918	Qua	-0.014	0.7244	-0.000363					1.0000		0.9900	
Hexachlorobutadiene	0.8336 0.4592	0.5147 0.4460	0.4698 0.4310	0.4966	0.4311	Qua	0.0686	0.4573	-0.000269					1.0000		0.9900	
Naphthalene	3.1956 1.9044	2.0013 1.8541	1.7690 1.7856	1.7719	1.7759	Lin1	0.4225	1.8023						0.9990		0.9900	
1,2,3-Trichlorobenzene	1.2698 0.6633	0.7653 0.6593	0.6724 0.6289	0.6788	0.6518	Qua	0.0253	0.6806	-0.000515					1.0000		0.9900	
4-Bromofluorobenzene	0.3417 0.3712	0.3497 0.3885	0.3102 0.3721	0.3555	0.4454	Ave		0.3668			10.8		20.0				
1,2-Dichlorobenzene-d4 (Surr)	0.9321 0.9281	0.9546 0.9319	0.9207 0.9276	1.0553	0.9276	Ave		0.9472			4.7		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210
SDG No.:
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

Calibration Files:

Table with 3 columns: LEVEL, LAB SAMPLE ID, LAB FILE ID. Rows 1-8 showing calibration levels and corresponding sample IDs and file names.

Main data table with columns: ANALYTE, IS REF, CURVE TYPE, RESPONSE (LVL 1-5), CONCENTRATION (UG/L) (LVL 1-5). Lists various analytes like Dichlorodifluoromethane, Vinyl chloride, etc., with their respective response and concentration values.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210
SDG No.:
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

Table with columns: ANALYTE, IS REF, CURVE TYPE, RESPONSE (LVL 1-5), CONCENTRATION (UG/L) (LVL 1-5). Rows include various chemical compounds like Tert-butyl ethyl ether, 2-Butanone (MEK), cis-1,2-Dichloroethene, etc.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Tetrachloroethene	DCBd 4	Ave	9132 358363	17855 915624	33835 1865763	73546	167732	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	13860 510175	24885 1284740	44379 2663300	100248	234442	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	DCBd 4	Ave	24304 1002328	43775 2607196	80156 5422504	180810	446045	2.50 100	5.00 250	10.0 500	25.0	50.0
Chlorodibromomethane	DCBd 4	Ave	10363 384671	19150 990251	32065 2058397	73401	172027	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	7646 352935	17776 885342	29108 1813765	67046	159155	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	27442 1014535	52116 2619236	84545 5412945	196077	461586	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	DCBd 4	Ave	10128 373677	18888 965667	33748 1953179	68719	169904	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	DCBd 4	Ave	41117 1679948	79968 4416021	135342 9127481	312971	752446	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
m-Xylene & p-Xylene	DCBd 4	Ave	31921 1303904	63448 3427794	107992 7048185	241878	584443	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	DCBd 4	Ave	34212 1347375	63862 3537388	108927 7288655	261195	593975	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	DCBd 4	Ave	24267 1112307	52043 2881303	82682 5986044	202473	487290	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	DCBd 4	Ave	6831 288195	13872 751083	21275 1548442	53804	125434	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	41089 1692709	78805 4528355	131354 9301781	327534	740753	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	13250 503821	26192 1279634	42558 2581574	94378	223655	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	QuaF	12664 427245	23883 1062596	33980 2118952	77521	188095	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	QuaF	3771 132540	7129 326529	10499 648755	27049	57150	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	47986 1937436	91224 5209025	147875 10658962	363244	854687	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	30821 1153450	60272 3040222	93172 6190650	218510	507337	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	32094 1254043	59635 3303104	97517 6838450	233405	556165	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	35324 1329996	64311 3475724	101613 7122505	241797	575867	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	28133 1214946	59731 3231518	94802 6605990	234337	533120	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 618210
SDG No.:
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 05/11/2020 11:58 Calibration End Date: 05/11/2020 14:19 Calibration ID: 75486

Table with columns: ANALYTE, IS REF, CURVE TYPE, RESPONSE (LVL 1-5), CONCENTRATION (UG/L) (LVL 1-5). Rows include various chemical compounds like 1,2,4-Trimethylbenzene, sec-Butylbenzene, etc.

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD
QuaF = Quadratic ISTD forced zero

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 11-May-2020 11:58:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-006
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:38 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 12:55:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1012232	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	391360	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	210046	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	92	172929	10.0	9.32	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	195780	10.0	9.84	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	98	9261	0.5000	0.5872	a
9 Vinyl chloride	62	1.232	1.232	0.000	96	8569	0.5000	0.5375	
8 Chloromethane	50	1.248	1.253	-0.005	88	7738	0.5000	0.4809	
10 Bromomethane	94	1.404	1.404	0.000	88	7814	0.5000	0.6397	
11 Chloroethane	64	1.457	1.457	0.000	96	5117	0.5000	0.5568	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	96	11460	0.5000	0.6792	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.880	1.875	0.005	88	8273	0.5000	0.6332	
13 1,1-Dichloroethene	96	1.875	1.880	-0.005	96	6325	0.5000	0.6262	
15 Acetone	58	1.901	1.896	0.005	88	9413	2.50	7.74	
16 Methylene Chloride	84	2.194	2.194	0.000	88	8936	0.5000	0.6218	M
17 2-Methyl-2-propanol	59	2.247	2.241	0.006	97	9290	5.00	8.11	
18 Methyl tert-butyl ether	73	2.356	2.362	-0.006	94	22077	0.5000	0.5977	
19 trans-1,2-Dichloroethene	96	2.367	2.372	-0.005	92	8881	0.5000	0.6447	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	98	13712	0.5000	0.6167	
21 Isopropyl ether	45	2.681	2.681	0.000	94	15491	0.4000	0.4679	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	89	18343	0.4000	0.4706	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	100	8221	2.50	5.25	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	91	12561	0.5000	0.6324	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	87	14497	0.5000	0.7018	
26 Chlorobromomethane	130	3.225	3.225	0.000	78	6090	0.5000	0.6562	
27 Chloroform	83	3.287	3.293	-0.006	97	16798	0.5000	0.6854	
28 1,1,1-Trichloroethane	97	3.413	3.413	0.000	96	13053	0.5000	0.6291	
29 Carbon tetrachloride	117	3.518	3.517	0.001	91	11801	0.5000	0.6264	
30 1,1-Dichloropropene	75	3.518	3.523	-0.005	93	10789	0.5000	0.6091	
31 Benzene	78	3.664	3.664	0.000	94	36839	0.5000	0.6720	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	97	12017	0.5000	0.6885	

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	98	16828	0.4000	0.4790	
34 Trichloroethene	132	4.135	4.135	0.000	92	10766	0.5000	0.6775	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	84	8079	0.5000	0.6324	
36 Dibromomethane	93	4.391	4.386	0.005	88	5965	0.5000	0.6809	
37 Dichlorobromomethane	83	4.511	4.516	-0.005	97	10861	0.5000	0.6270	
38 cis-1,3-Dichloropropene	75	4.846	4.841	0.005	92	12871	0.5000	0.6194	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	97	40887	2.50	3.43	
40 Toluene	92	5.097	5.092	0.005	94	21679	0.5000	0.6187	
41 trans-1,3-Dichloropropene	75	5.280	5.275	0.005	97	12002	0.5000	0.6233	
42 1,1,2-Trichloroethane	83	5.421	5.426	-0.005	91	7023	0.5000	0.6579	
43 Tetrachloroethene	164	5.489	5.484	0.005	94	9132	0.5000	0.6411	
44 1,3-Dichloropropane	76	5.557	5.547	0.010	91	13860	0.5000	0.6659	
45 2-Hexanone	43	5.599	5.589	0.010	95	24304	2.50	3.24	
46 Chlorodibromomethane	129	5.719	5.714	0.005	96	10363	0.5000	0.6891	
47 Ethylene Dibromide	107	5.808	5.803	0.005	99	7646	0.5000	0.5557	
48 Chlorobenzene	112	6.190	6.190	0.000	96	27442	0.5000	0.6610	
49 1,1,1,2-Tetrachloroethane	131	6.258	6.263	-0.005	95	10128	0.5000	0.6875	
50 Ethylbenzene	91	6.274	6.269	0.005	98	41117	0.5000	0.6414	
51 m-Xylene & p-Xylene	91	6.384	6.378	0.006	99	31921	0.5000	0.6383	
52 o-Xylene	91	6.682	6.682	0.000	90	34212	0.5000	0.6601	
53 Styrene	104	6.703	6.697	0.006	97	24267	0.5000	0.5937	
54 Bromoform	173	6.849	6.844	0.005	95	6831	0.5000	0.6332	
55 Isopropylbenzene	105	6.980	6.980	0.000	96	41089	0.5000	0.6382	
56 Bromobenzene	156	7.236	7.231	0.005	87	13250	0.5000	0.6769	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.236	0.005	97	12664	0.5000	0.8399	M
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	95	3771	0.5000	0.8075	
59 N-Propylbenzene	91	7.325	7.320	0.005	99	47986	0.5000	0.6507	
60 2-Chlorotoluene	91	7.393	7.388	0.005	96	30821	0.5000	0.6823	
61 1,3,5-Trimethylbenzene	105	7.477	7.471	0.006	94	32094	0.5000	0.6691	a
62 4-Chlorotoluene	91	7.498	7.492	0.006	98	35324	0.5000	0.6958	
63 tert-Butylbenzene	119	7.728	7.728	0.000	94	28133	0.5000	0.6098	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	29886	0.5000	0.6676	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	42111	0.5000	0.6439	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	93	23129	0.5000	0.6748	
67 4-Isopropyltoluene	119	8.047	8.042	0.005	96	33337	0.5000	0.6295	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	95	24652	0.5000	0.6974	
70 n-Butylbenzene	91	8.387	8.382	0.005	87	21563	0.5000	0.5737	
69 1,2-Dichlorobenzene	146	8.387	8.382	0.005	97	23268	0.5000	0.6891	a
71 1,2-Dibromo-3-Chloropropane	157	9.056	9.041	0.015	91	3451	0.5000	0.6915	a
72 1,2,4-Trichlorobenzene	180	9.726	9.715	0.011	92	12711	0.5000	0.8549	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	92	8755	0.5000	0.7617	
74 Naphthalene	128	9.940	9.930	0.010	99	33561	0.5000	0.6521	
75 1,2,3-Trichlorobenzene	180	10.123	10.118	0.005	95	13336	0.5000	0.8963	
S 76 Xylenes, Total	1				0		1.00	1.30	
S 77 Trihalomethanes, Total	1				0			2.63	
S 78 1,3-Dichloropropene, Total	1				0		1.00	1.24	

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 0.05

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D

Injection Date: 11-May-2020 11:58:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

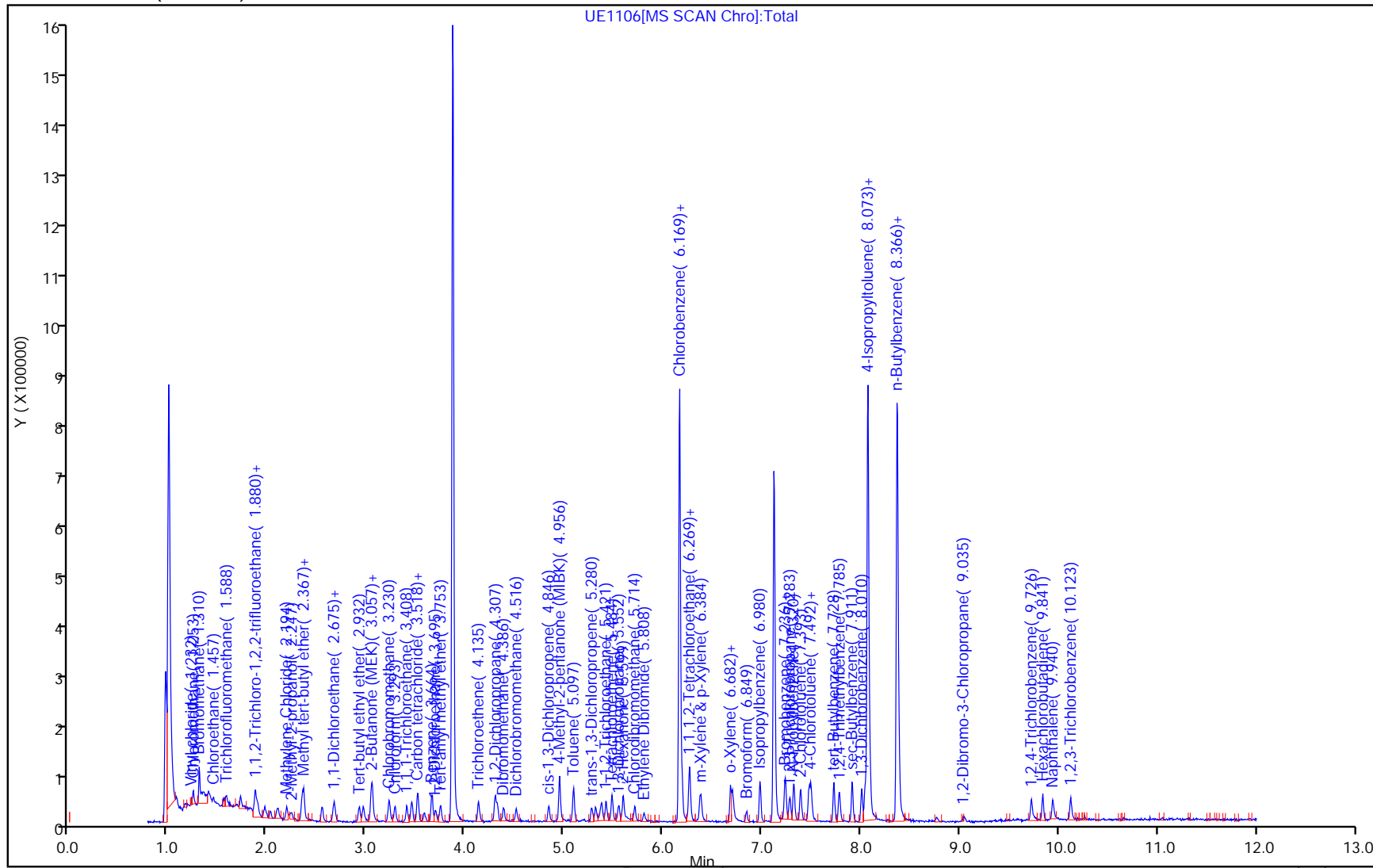
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D

Injection Date: 11-May-2020 11:58:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

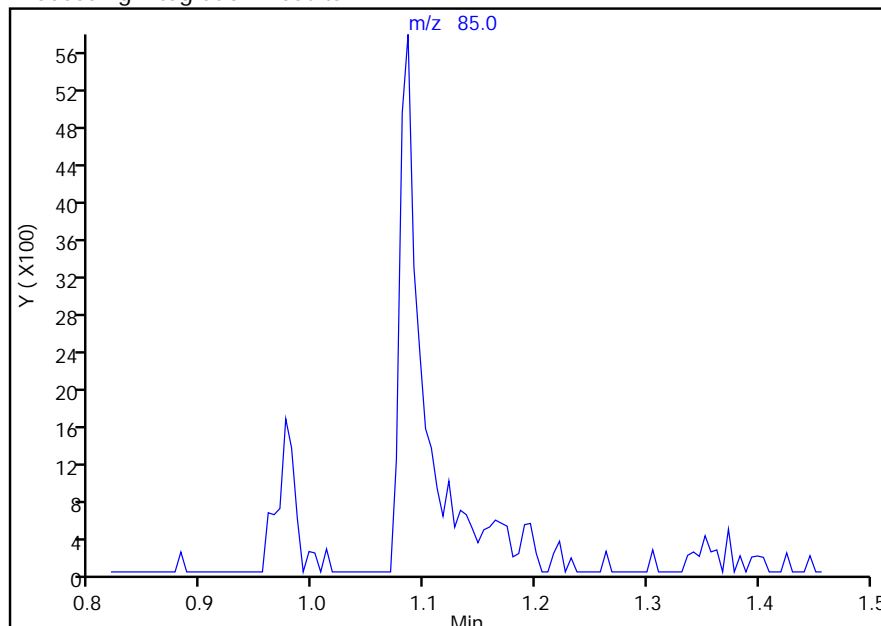
7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

Not Detected

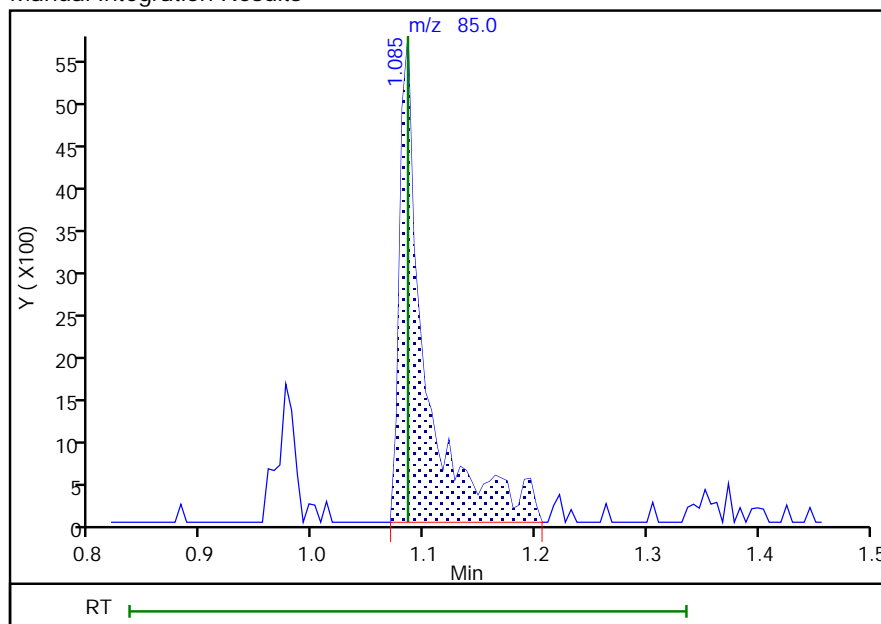
Expected RT: 1.09

Processing Integration Results



RT: 1.09
 Area: 9261
 Amount: 0.587154
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:58:08

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

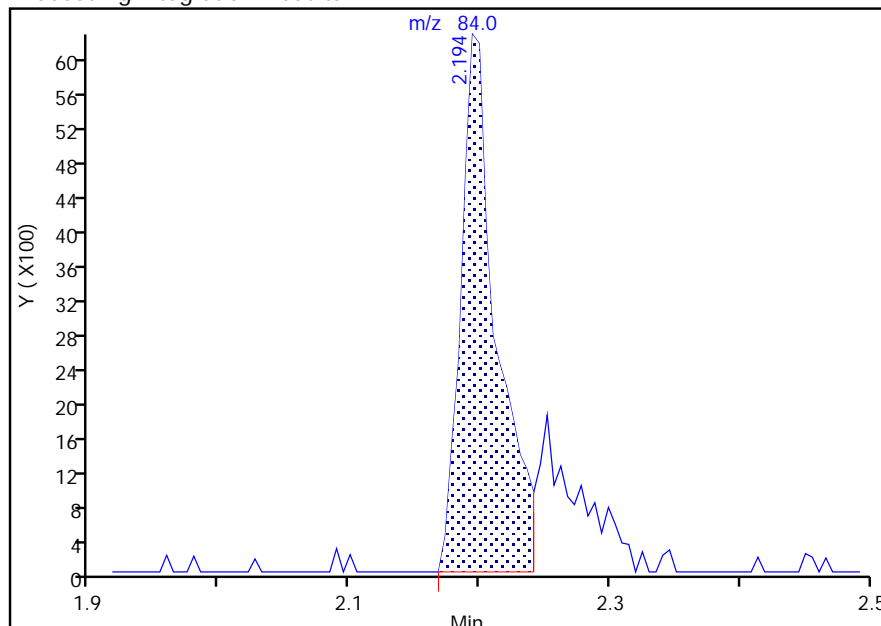
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D
 Injection Date: 11-May-2020 11:58:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

16 Methylene Chloride, CAS: 75-09-2

Signal: 1

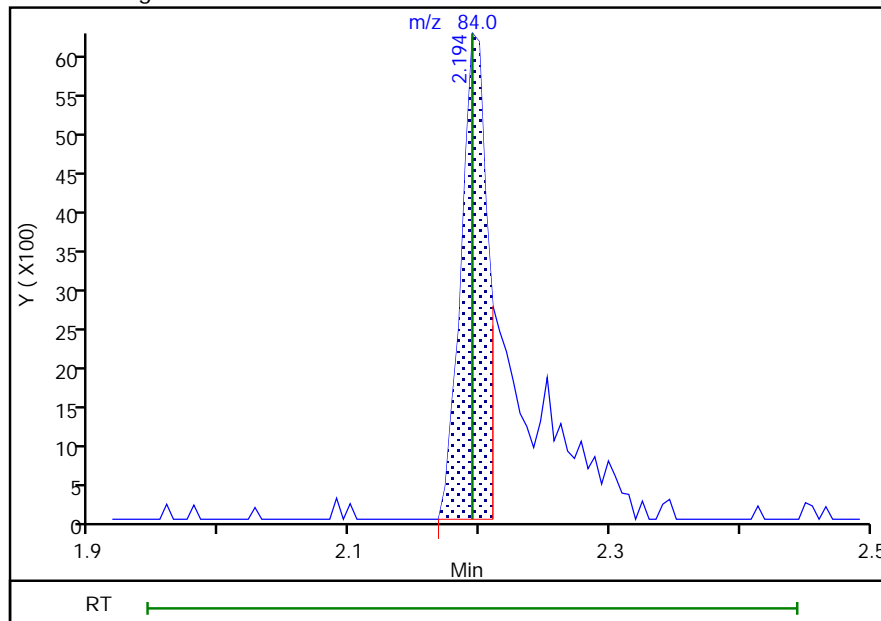
RT: 2.19
 Area: 12044
 Amount: 0.596809
 Amount Units: ug/l

Processing Integration Results



RT: 2.19
 Area: 8936
 Amount: 0.621777
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:58:19

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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September 2020

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

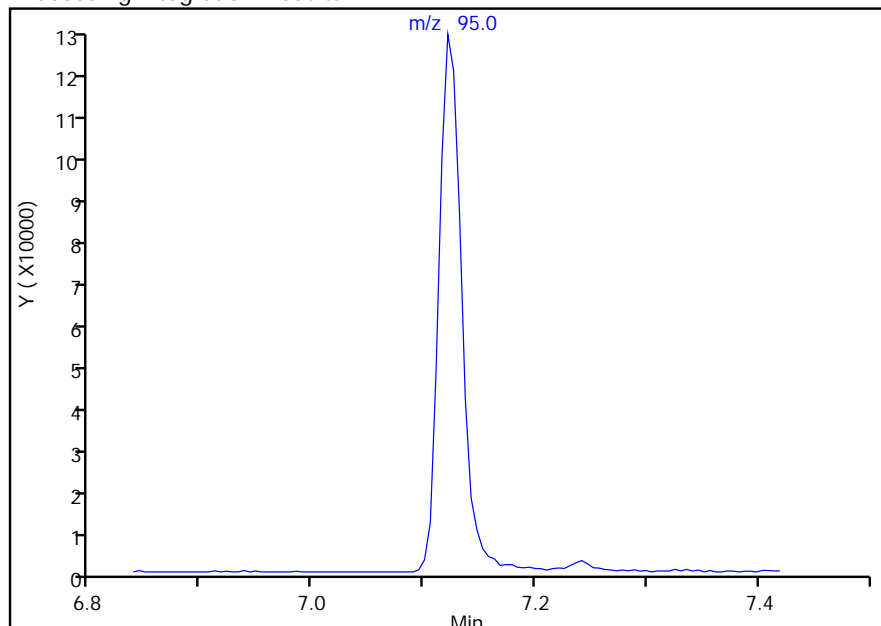
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Injection Date:	11-May-2020 11:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	6

§ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

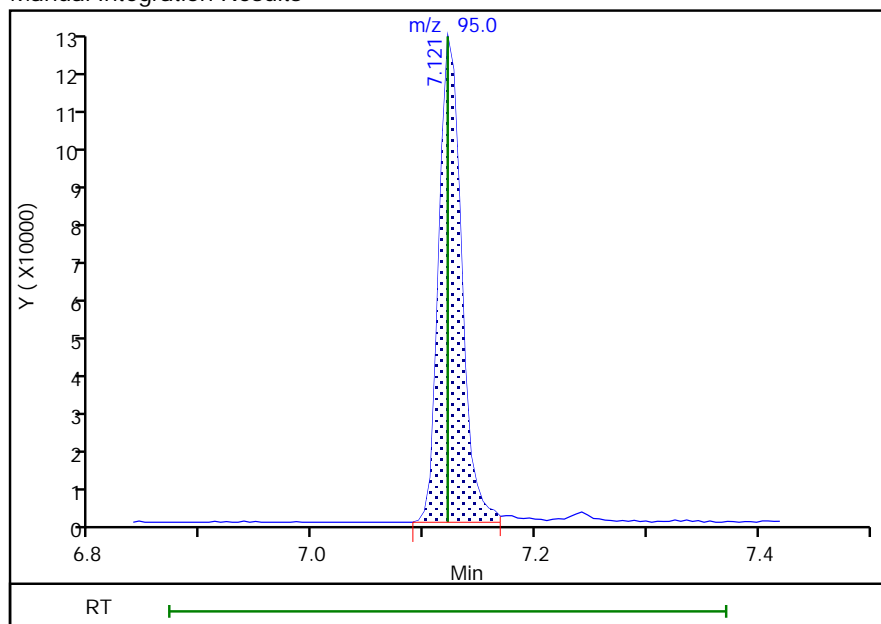
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	172929
Amount:	9.315624
Amount Units:	ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:58:05

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

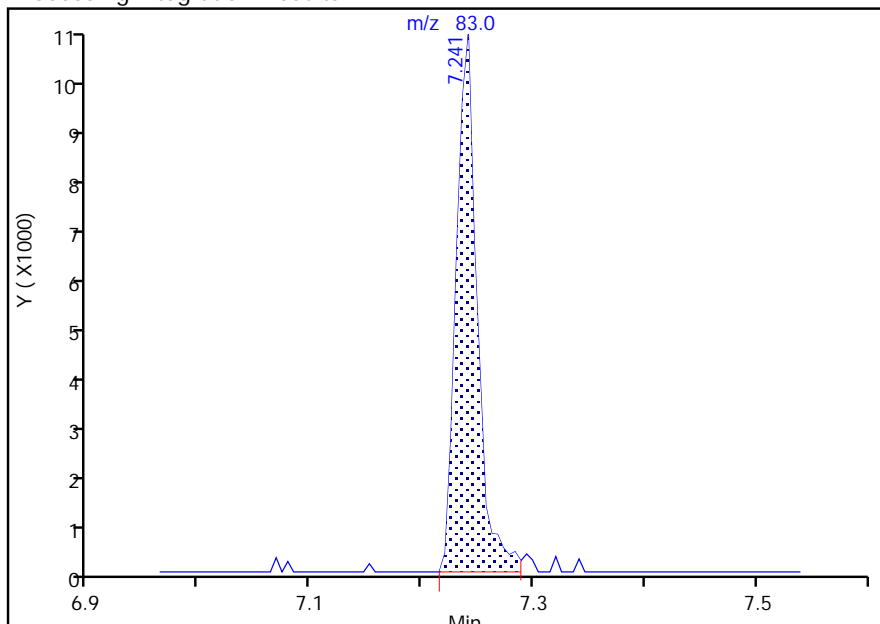
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Injection Date:	11-May-2020 11:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	6

57 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

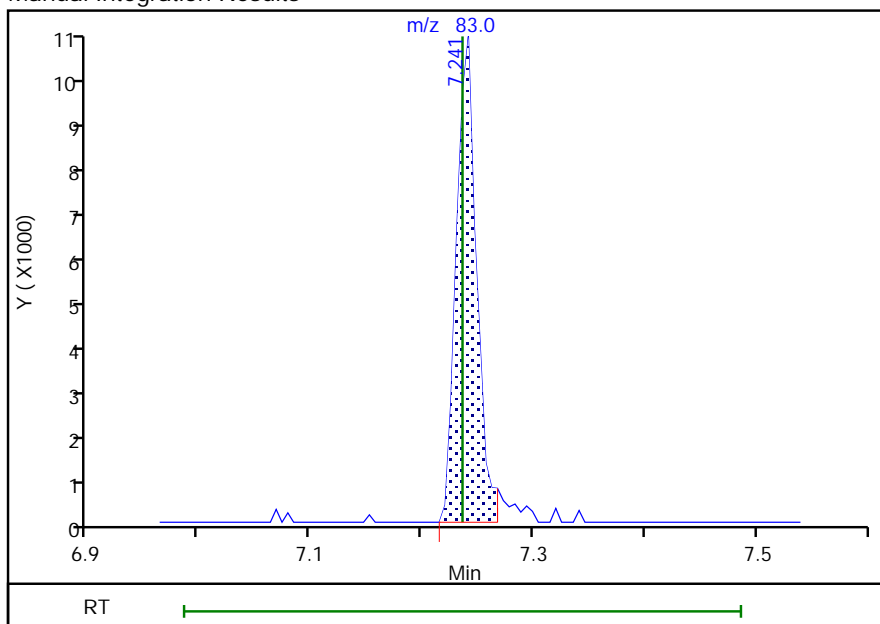
RT: 7.24
 Area: 13091
 Amount: 0.898820
 Amount Units: ug/l

Processing Integration Results



RT: 7.24
 Area: 12664
 Amount: 0.839935
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:59:11

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

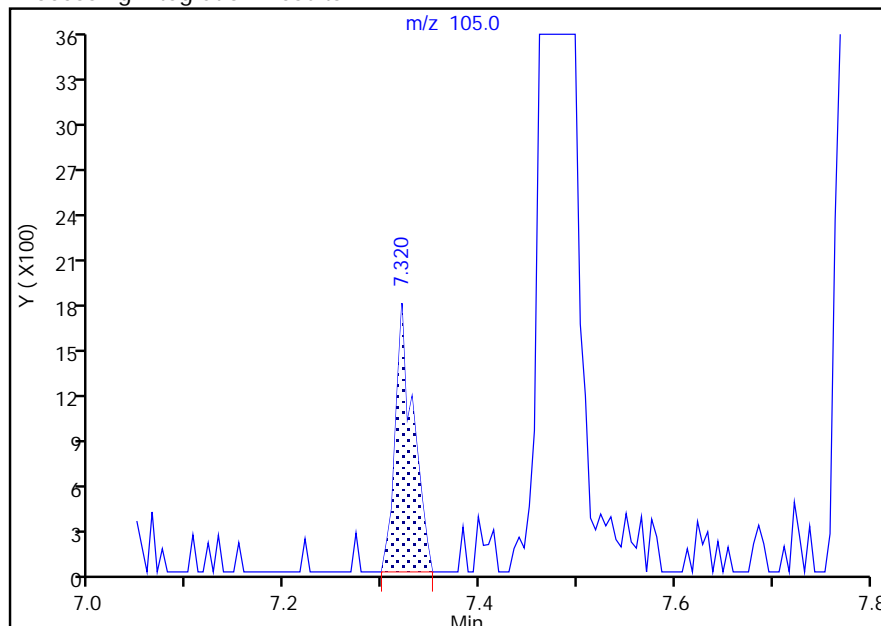
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D
 Injection Date: 11-May-2020 11:58:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

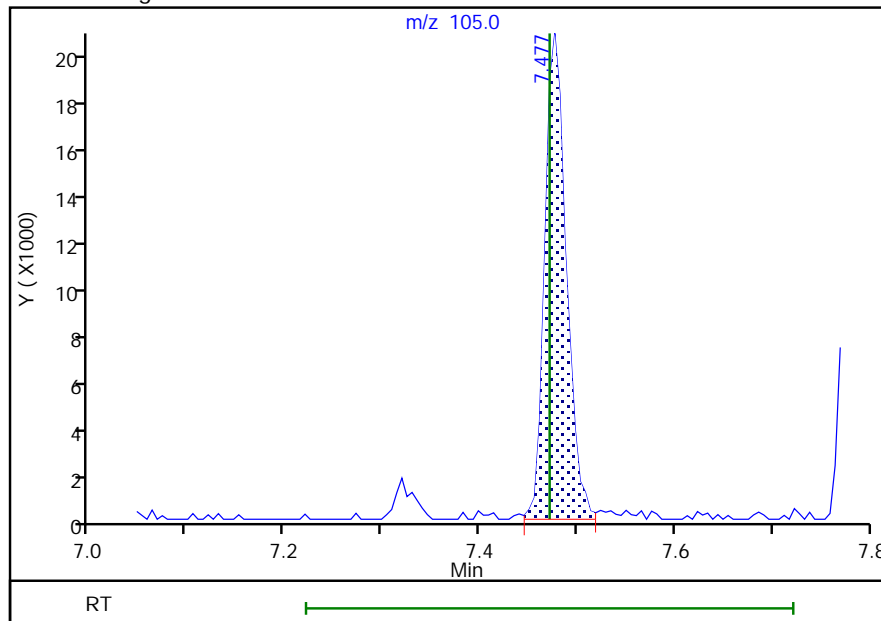
RT: 7.32
 Area: 2247
 Amount: 0.161841
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 32094
 Amount: 0.669062
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:59:04

Audit Action: Assigned Compound ID

Audit Reason: Split Peak

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05/15/2020

September 2020

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

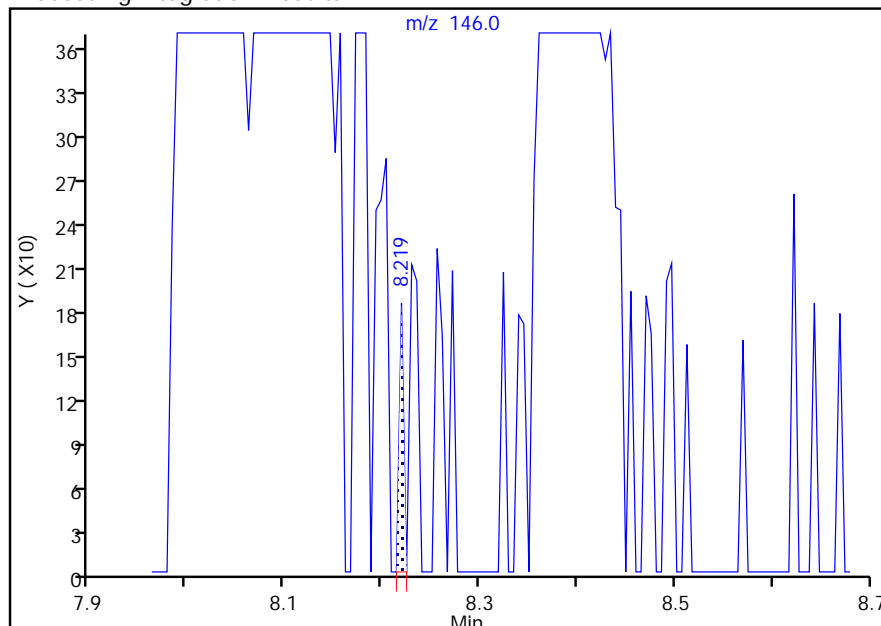
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D
 Injection Date: 11-May-2020 11:58:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

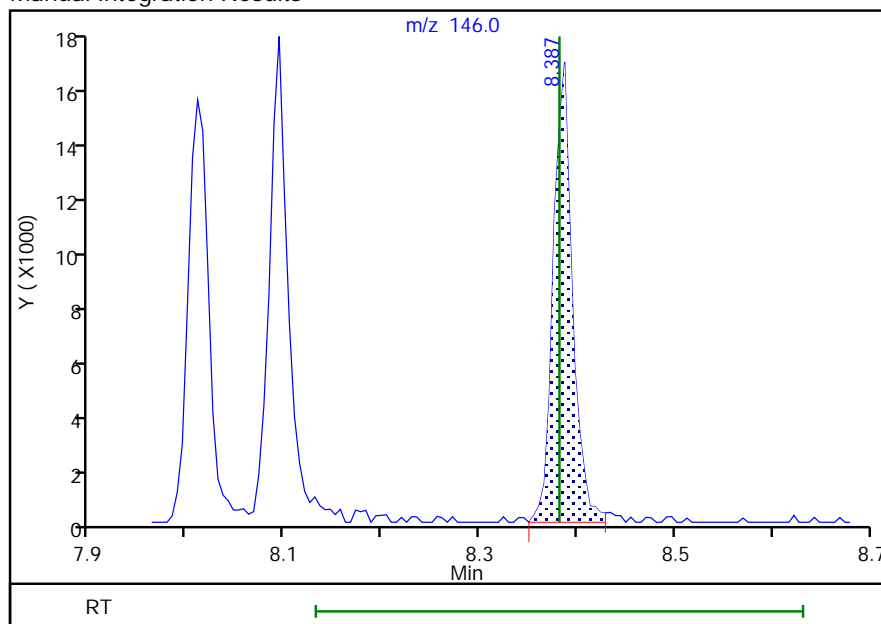
RT: 8.22
 Area: 57
 Amount: 0.001858
 Amount Units: ug/l

Processing Integration Results



RT: 8.39
 Area: 23268
 Amount: 0.689141
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:59:01

Audit Action: Assigned Compound ID

Audit Reason: Split Peak

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05/15/2020

September 2020

Report Date: 12-May-2020 09:09:39

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1106.D

Injection Date: 11-May-2020 11:58:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

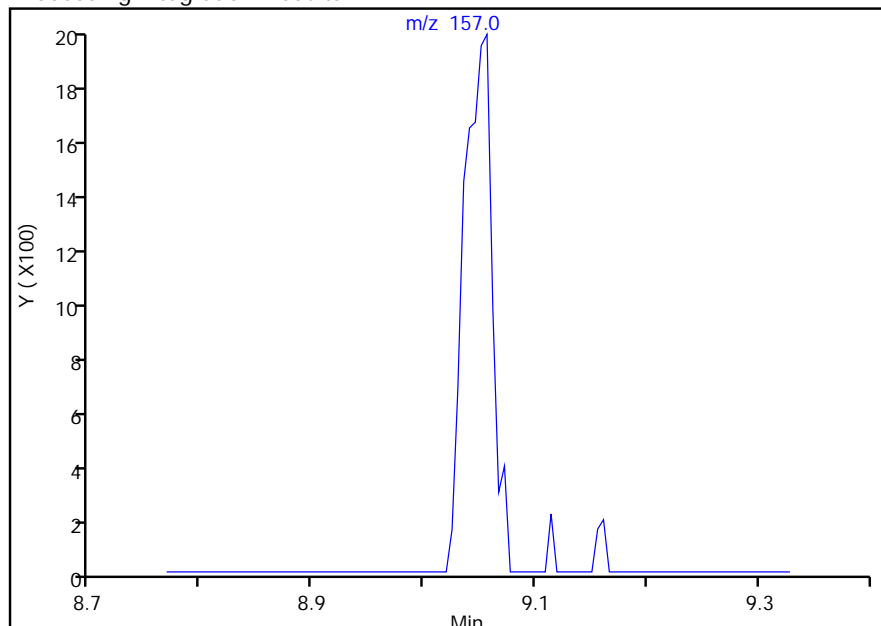
71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

Not Detected

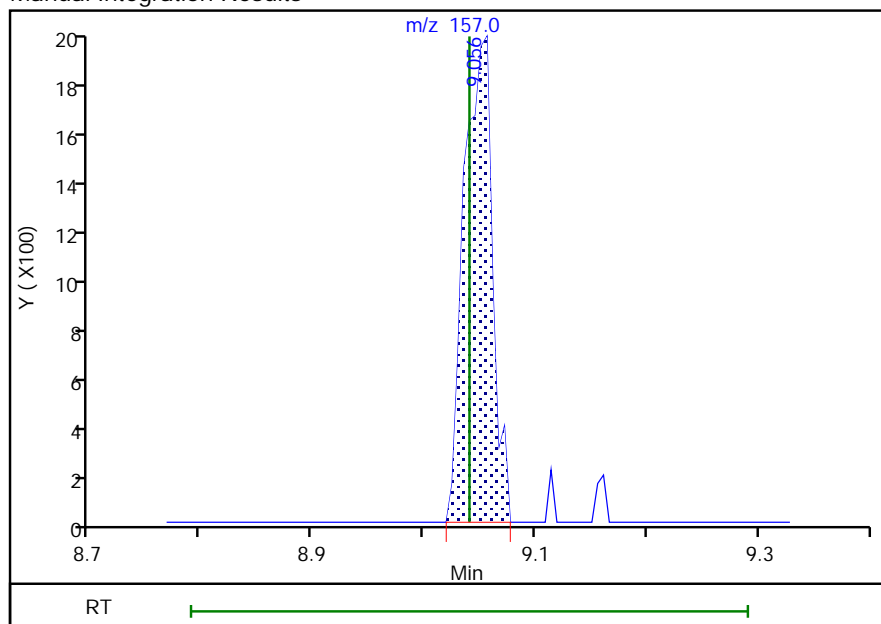
Expected RT: 9.04

Processing Integration Results



RT: 9.06
 Area: 3451
 Amount: 0.691467
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:58:58

Audit Action: Assigned Compound ID

Audit Reason: Split Peak

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September 2020

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 11-May-2020 12:18:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-007
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:44 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 12:56:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1223417	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	473892	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	253520	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	213939	10.0	9.54	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	242012	10.0	10.1	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	98	19712	1.00	1.03	a
9 Vinyl chloride	62	1.232	1.232	0.000	97	18503	1.00	0.9603	
8 Chloromethane	50	1.253	1.253	0.000	78	19323	1.00	0.99	
10 Bromomethane	94	1.404	1.404	0.000	96	9580	1.00	0.6516	
11 Chloroethane	64	1.457	1.457	0.000	95	10282	1.00	0.9258	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	94	20042	1.00	0.9828	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	95	15666	1.00	0.99	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	97	12136	1.00	0.99	
15 Acetone	58	1.901	1.896	0.005	87	15256	5.00	11.1	
16 Methylene Chloride	84	2.194	2.194	0.000	86	19427	1.00	1.12	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	15404	10.0	11.1	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	97	45929	1.00	1.03	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	89	16997	1.00	1.02	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	100	27560	1.00	1.03	
21 Isopropyl ether	45	2.681	2.681	0.000	96	32190	0.8000	0.8045	
22 Tert-butyl ethyl ether	59	2.926	2.932	-0.006	89	39653	0.8000	0.8417	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	12833	5.00	6.78	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	97	24218	1.00	1.01	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	82	26194	1.00	1.05	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	11159	1.00	0.99	
27 Chloroform	83	3.287	3.293	-0.006	98	29979	1.00	1.01	
28 1,1,1-Trichloroethane	97	3.408	3.413	-0.005	98	26373	1.00	1.05	
29 Carbon tetrachloride	117	3.517	3.517	0.000	88	23736	1.00	1.04	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	23422	1.00	1.09	
31 Benzene	78	3.664	3.664	0.000	95	67616	1.00	1.02	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	98	22484	1.00	1.06	

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	98	34372	0.8000	0.8095	
34 Trichloroethene	132	4.135	4.135	0.000	95	19640	1.00	1.02	
35 1,2-Dichloropropane	63	4.328	4.323	0.005	91	16621	1.00	1.07	
36 Dibromomethane	93	4.391	4.386	0.005	91	10835	1.00	1.02	
37 Dichlorobromomethane	83	4.516	4.516	0.000	98	22155	1.00	1.06	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	91	26783	1.00	1.06	
39 4-Methyl-2-pentanone (MIBK)	43	4.956	4.951	0.006	95	74113	5.00	5.14	
40 Toluene	92	5.097	5.092	0.005	92	40859	1.00	0.9630	
41 trans-1,3-Dichloropropene	75	5.280	5.275	0.005	95	22700	1.00	0.9736	
42 1,1,2-Trichloroethane	83	5.427	5.426	0.000	93	13657	1.00	1.06	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	17855	1.00	1.04	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	93	24885	1.00	0.9873	
45 2-Hexanone	43	5.599	5.589	0.010	95	43775	5.00	4.83	
46 Chlorodibromomethane	129	5.719	5.714	0.005	97	19150	1.00	1.06	
47 Ethylene Dibromide	107	5.808	5.803	0.005	96	17776	1.00	1.07	
48 Chlorobenzene	112	6.190	6.190	0.000	97	52116	1.00	1.04	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	91	18888	1.00	1.06	
50 Ethylbenzene	91	6.269	6.269	0.000	98	79968	1.00	1.03	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	63448	1.00	1.05	
52 o-Xylene	91	6.682	6.682	0.000	92	63862	1.00	1.02	
53 Styrene	104	6.703	6.697	0.006	98	52043	1.00	1.05	
54 Bromoform	173	6.844	6.844	0.000	95	13872	1.00	1.07	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	78805	1.00	1.01	
56 Bromobenzene	156	7.236	7.231	0.005	92	26192	1.00	1.11	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.236	0.005	96	23883	1.00	1.31	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	96	7129	1.00	1.27	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	91224	1.00	1.02	
60 2-Chlorotoluene	91	7.393	7.388	0.005	96	60272	1.00	1.11	
61 1,3,5-Trimethylbenzene	105	7.472	7.471	0.001	94	59635	1.00	1.03	a
62 4-Chlorotoluene	91	7.498	7.492	0.006	97	64311	1.00	1.05	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	59731	1.00	1.07	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	55706	1.00	1.03	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	81288	1.00	1.03	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	98	43713	1.00	1.06	
67 4-Isopropyltoluene	119	8.047	8.042	0.005	98	65527	1.00	1.03	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	95	46700	1.00	1.09	
69 1,2-Dichlorobenzene	146	8.387	8.382	0.005	98	42636	1.00	1.05	a
70 n-Butylbenzene	91	8.382	8.382	0.000	94	44532	1.00	0.9816	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	5120	1.00	0.8939	
72 1,2,4-Trichlorobenzene	180	9.726	9.715	0.011	92	18660	1.00	1.04	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	94	13049	1.00	0.9760	
74 Naphthalene	128	9.940	9.930	0.010	99	50736	1.00	0.8760	
75 1,2,3-Trichlorobenzene	180	10.123	10.118	0.005	95	19403	1.00	1.09	
S 76 Xylenes, Total	1				0		2.00	2.07	
S 77 Trihalomethanes, Total	1				0			4.19	
S 78 1,3-Dichloropropene, Total	1				0		2.00	2.04	

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 0.10

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D

Injection Date: 11-May-2020 12:18:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

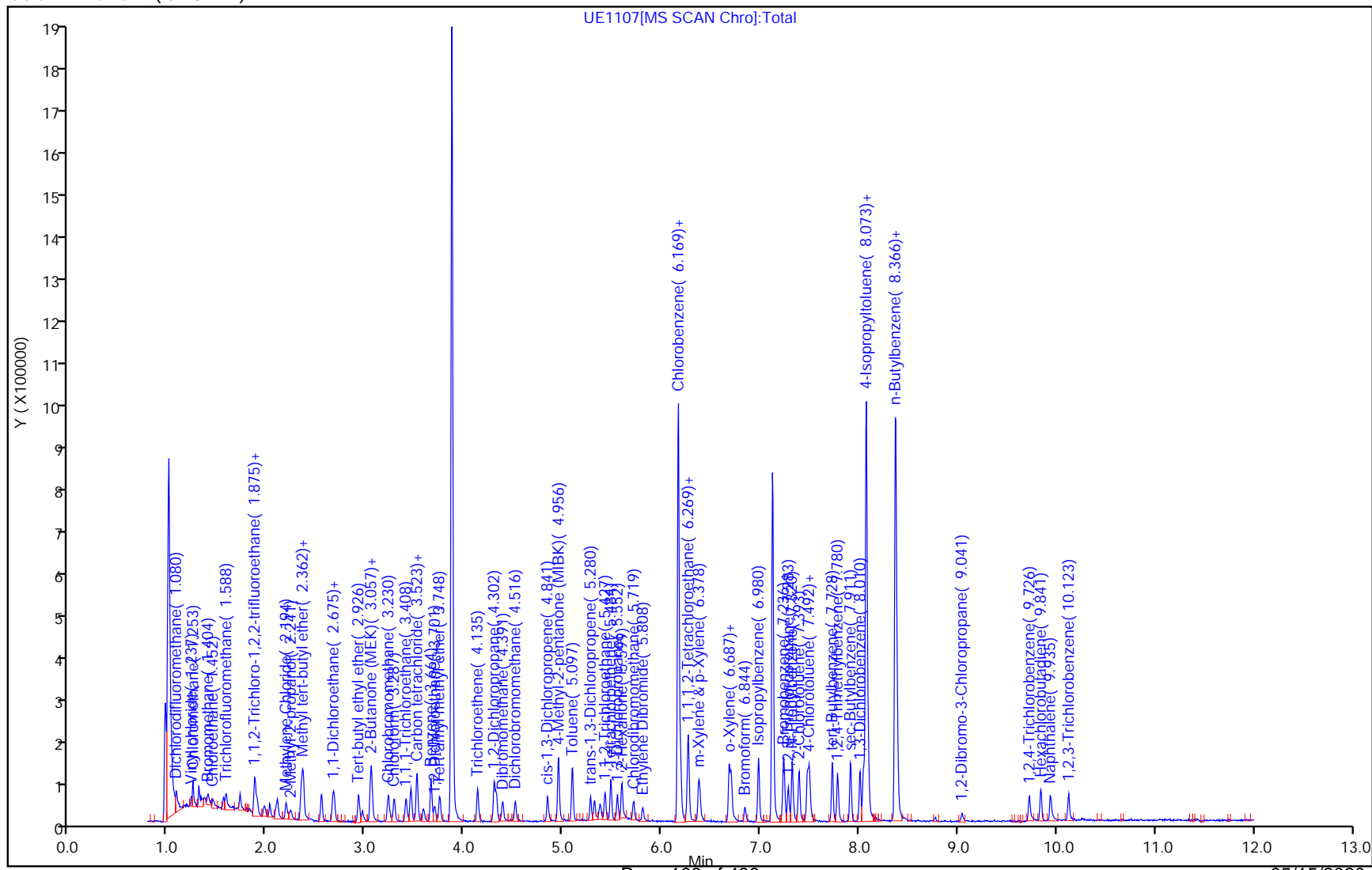
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

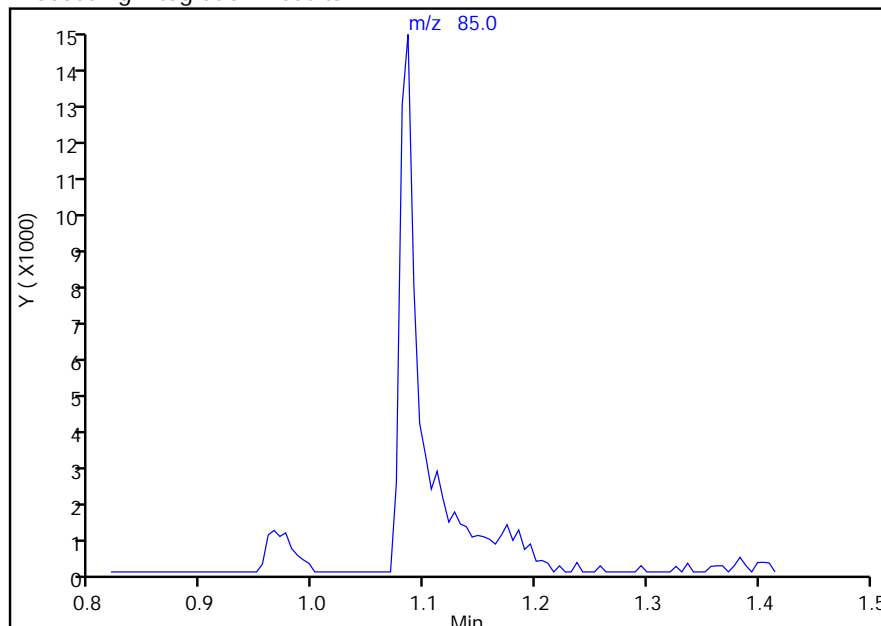
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D		
Injection Date:	11-May-2020 12:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

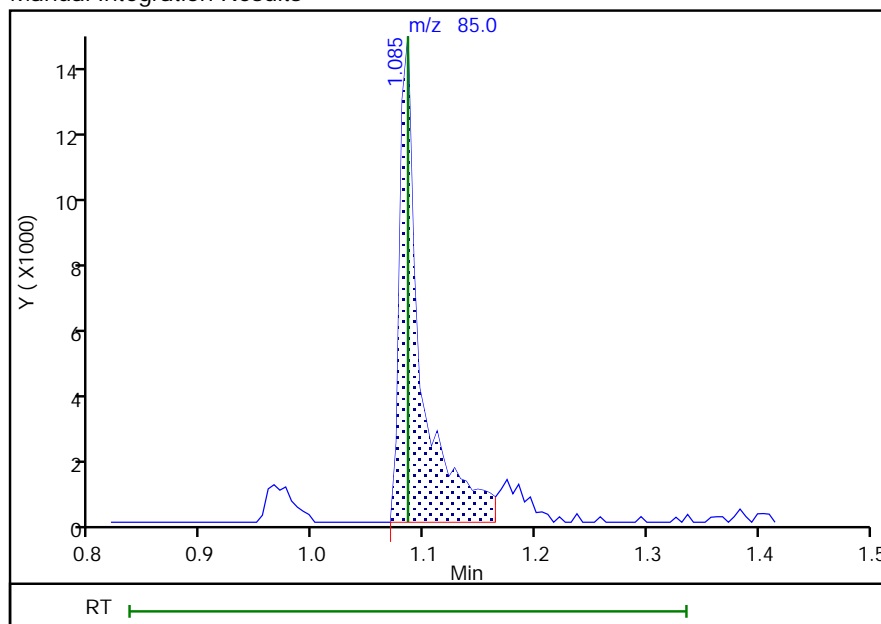
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 19712
Amount: 1.034024
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 12:56:00

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

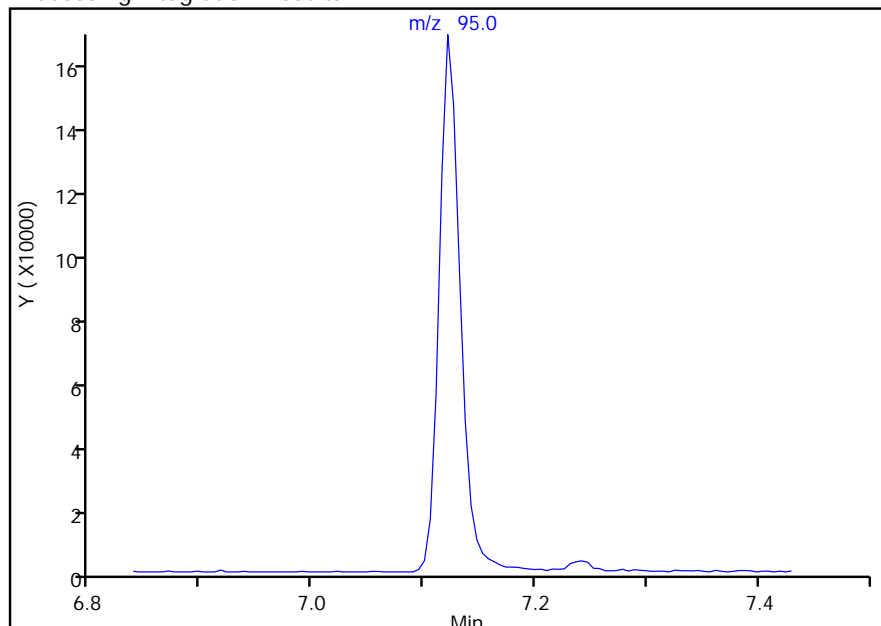
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D		
Injection Date:	11-May-2020 12:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

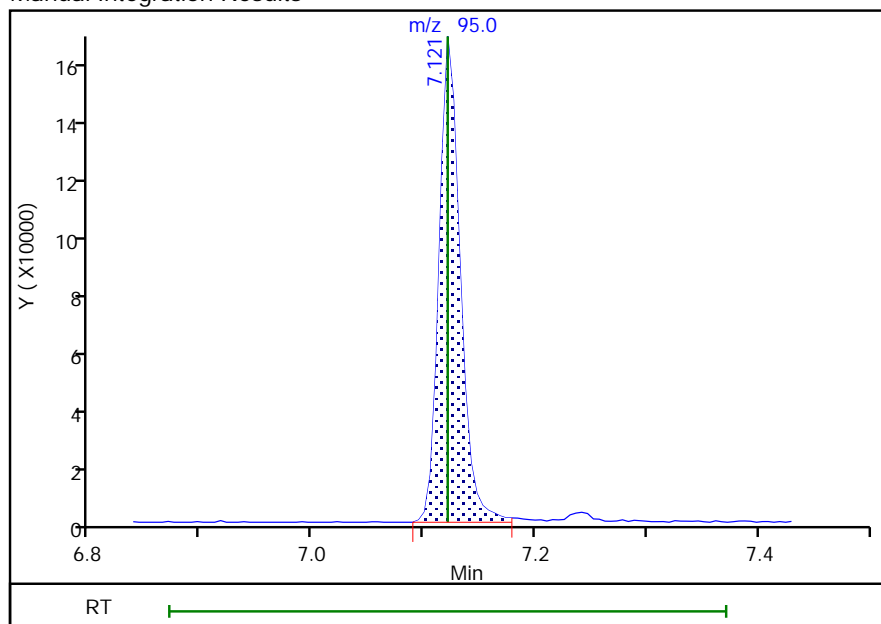
Not Detected
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
Area: 213939
Amount: 9.535416
Amount Units: ug/l



Reviewer: proctors, 11-May-2020 12:55:58

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

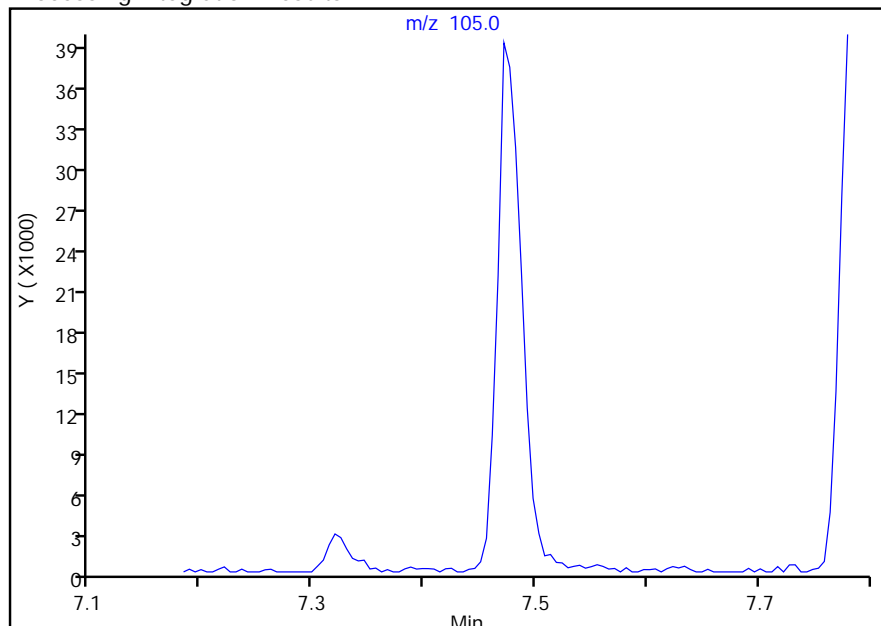
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D		
Injection Date:	11-May-2020 12:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

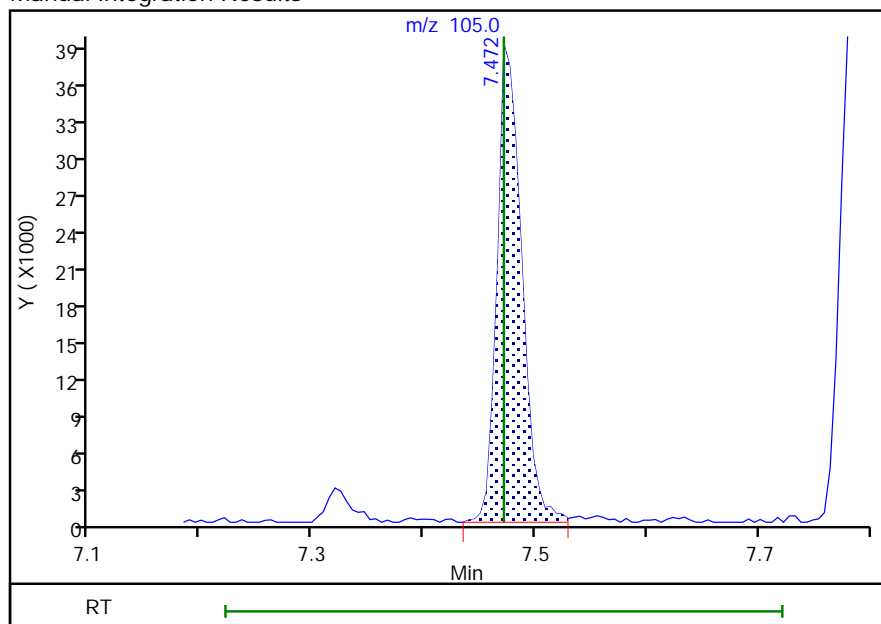
Not Detected
Expected RT: 7.47

Processing Integration Results



Manual Integration Results

RT: 7.47
Area: 59635
Amount: 1.030021
Amount Units: ug/l



Reviewer: proctors, 11-May-2020 12:56:12

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:44

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

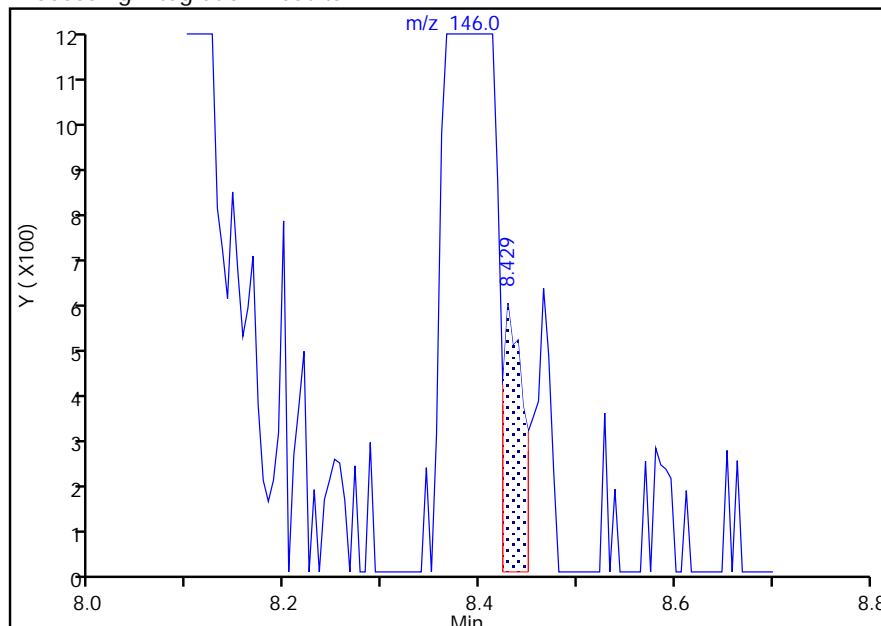
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1107.D		
Injection Date:	11-May-2020 12:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

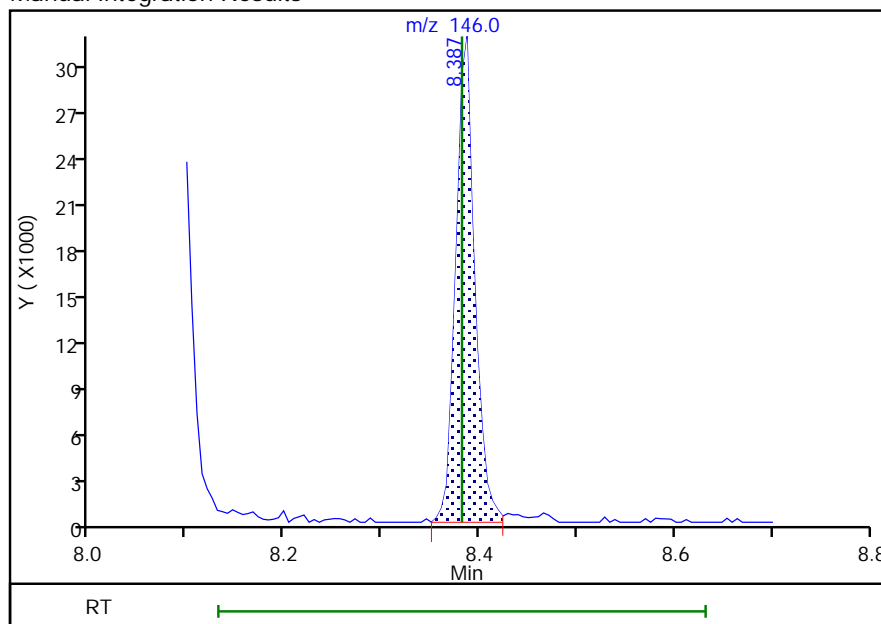
RT: 8.43
Area: 819
Amount: 0.023298
Amount Units: ug/l

Processing Integration Results



RT: 8.39
Area: 42636
Amount: 1.046231
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:20:43

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Kirtland AFB BFF
Quarterly Report - April-June 2020
SWMUs ST-106/SS-111

H-2-1539

Report Date: 12-May-2020 09:09:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1108.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 11-May-2020 12:38:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-008
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:49 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 12:54:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1210761	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	432677	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	92	232430	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	92	187762	10.0	8.46	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	213987	10.0	9.72	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	38945	2.00	2.06	a
9 Vinyl chloride	62	1.237	1.232	0.005	98	40113	2.00	2.10	
8 Chloromethane	50	1.253	1.253	0.000	74	37486	2.00	1.95	
10 Bromomethane	94	1.404	1.404	0.000	98	23787	2.00	1.91	
11 Chloroethane	64	1.457	1.457	0.000	99	19423	2.00	1.77	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	96	37677	2.00	1.87	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	28362	2.00	1.81	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	24233	2.00	2.01	
15 Acetone	58	1.901	1.896	0.005	87	15648	10.0	11.6	M
16 Methylene Chloride	84	2.199	2.194	0.005	88	30181	2.00	1.76	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	27638	20.0	20.2	
18 Methyl tert-butyl ether	73	2.361	2.362	-0.001	97	81667	2.00	1.85	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	90	30349	2.00	1.84	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	98	51248	2.00	1.93	
21 Isopropyl ether	45	2.681	2.681	-0.001	92	59448	1.60	1.50	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	91	70825	1.60	1.52	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	20945	10.0	11.2	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	97	44358	2.00	1.87	
25 2,2-Dichloropropane	77	3.068	3.062	0.006	92	45591	2.00	1.85	
26 Chlorobromomethane	130	3.224	3.225	-0.001	80	20470	2.00	1.84	
27 Chloroform	83	3.287	3.293	-0.006	99	54691	2.00	1.87	
28 1,1,1-Trichloroethane	97	3.413	3.413	0.000	98	47965	2.00	2.09	
29 Carbon tetrachloride	117	3.517	3.517	0.000	96	43800	2.00	2.10	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	95	41329	2.00	2.11	
31 Benzene	78	3.664	3.664	0.000	94	122689	2.00	2.02	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	97	40700	2.00	2.11	

Report Date: 12-May-2020 09:09:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1108.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	98	63836	1.60	1.52	
34 Trichloroethene	132	4.135	4.135	0.000	95	36939	2.00	2.10	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	29153	2.00	2.06	
36 Dibromomethane	93	4.391	4.386	0.005	90	20655	2.00	2.13	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	39238	2.00	2.05	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	93	47625	2.00	2.07	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	0.000	95	123848	10.0	9.41	
40 Toluene	92	5.092	5.092	0.000	92	77535	2.00	2.00	
41 trans-1,3-Dichloropropene	75	5.280	5.275	0.005	97	41173	2.00	1.93	
42 1,1,2-Trichloroethane	83	5.426	5.426	0.000	95	22709	2.00	1.92	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	33835	2.00	2.15	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	92	44379	2.00	1.93	
45 2-Hexanone	43	5.594	5.589	0.005	95	80156	10.0	9.66	
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	32065	2.00	1.93	
47 Ethylene Dibromide	107	5.808	5.803	0.005	98	29108	2.00	1.91	
48 Chlorobenzene	112	6.190	6.190	0.000	99	84545	2.00	1.84	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	93	33748	2.00	2.07	
50 Ethylbenzene	91	6.268	6.269	-0.001	98	135342	2.00	1.91	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	100	107992	2.00	1.95	
52 o-Xylene	91	6.682	6.682	0.000	95	108927	2.00	1.90	
53 Styrene	104	6.703	6.697	0.006	98	82682	2.00	1.83	
54 Bromoform	173	6.844	6.844	0.000	95	21275	2.00	1.78	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	131354	2.00	1.84	
56 Bromobenzene	156	7.231	7.231	0.000	86	42558	2.00	1.96	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	96	33980	2.00	2.04	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	97	10499	2.00	2.03	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	147875	2.00	1.81	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	93172	2.00	1.86	
61 1,3,5-Trimethylbenzene	105	7.477	7.471	0.006	92	97517	2.00	1.84	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	101613	2.00	1.81	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	94802	2.00	1.86	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	89318	2.00	1.80	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	130985	2.00	1.81	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	97	69958	2.00	1.84	
67 4-Isopropyltoluene	119	8.047	8.042	0.005	97	108286	2.00	1.85	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	94	74249	2.00	1.90	
70 n-Butylbenzene	91	8.381	8.382	-0.001	96	71738	2.00	1.72	
69 1,2-Dichlorobenzene	146	8.387	8.382	0.005	98	67430	2.00	1.80	a
71 1,2-Dibromo-3-Chloropropane	157	9.046	9.041	0.005	92	8662	2.00	1.81	
72 1,2,4-Trichlorobenzene	180	9.720	9.715	0.005	93	31452	2.00	1.89	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	94	21841	2.00	1.91	
74 Naphthalene	128	9.940	9.930	0.010	99	82233	2.00	1.73	
75 1,2,3-Trichlorobenzene	180	10.123	10.118	0.005	95	31255	2.00	1.94	
S 76 Xylenes, Total	1				0		4.00	3.85	
S 77 Trihalomethanes, Total	1				0			7.62	
S 78 1,3-Dichloropropene, Total	1				0		4.00	4.01	

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QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 0.20

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:50

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Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1108.D

Injection Date: 11-May-2020 12:38:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

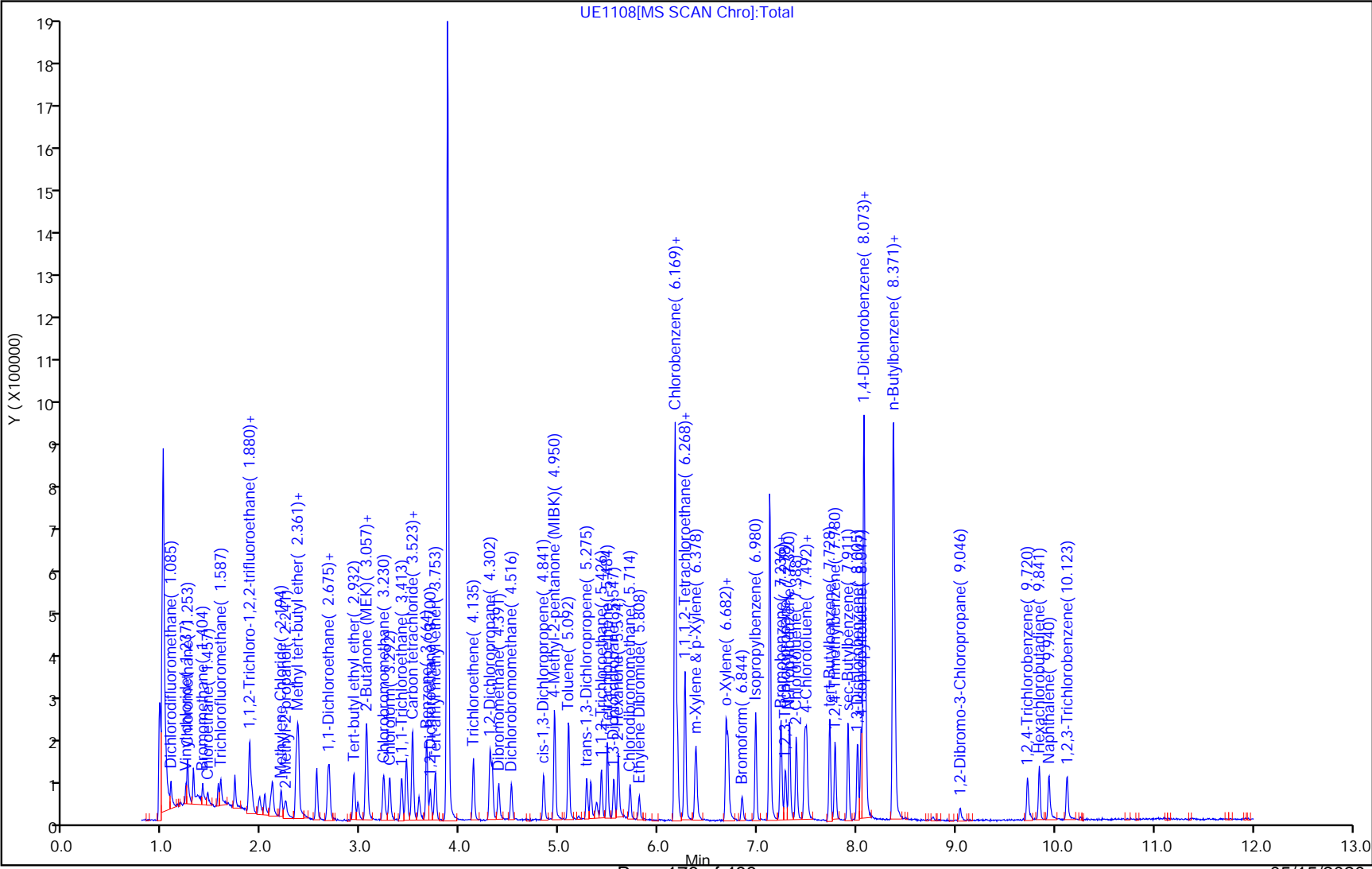
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:50

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

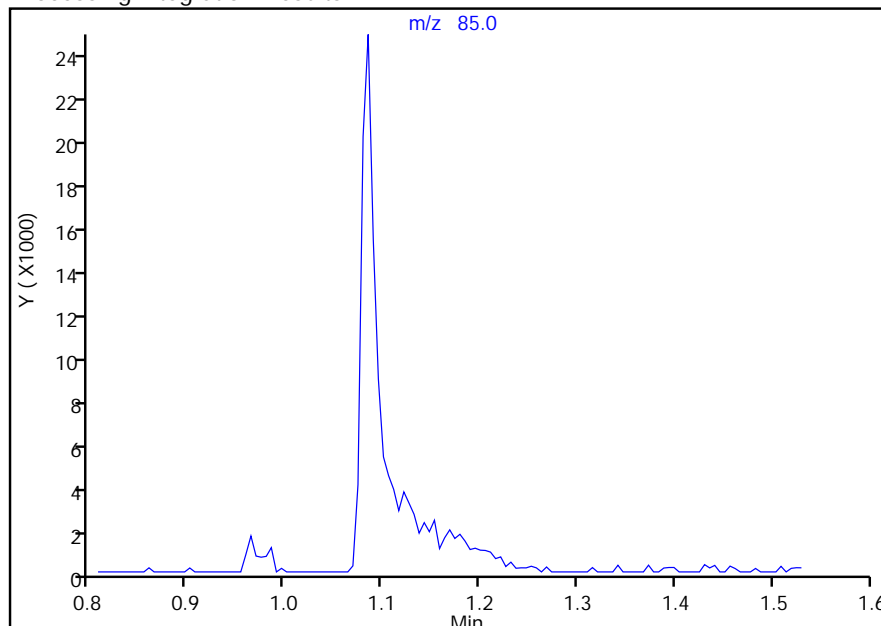
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Injection Date: 11-May-2020 12:38:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

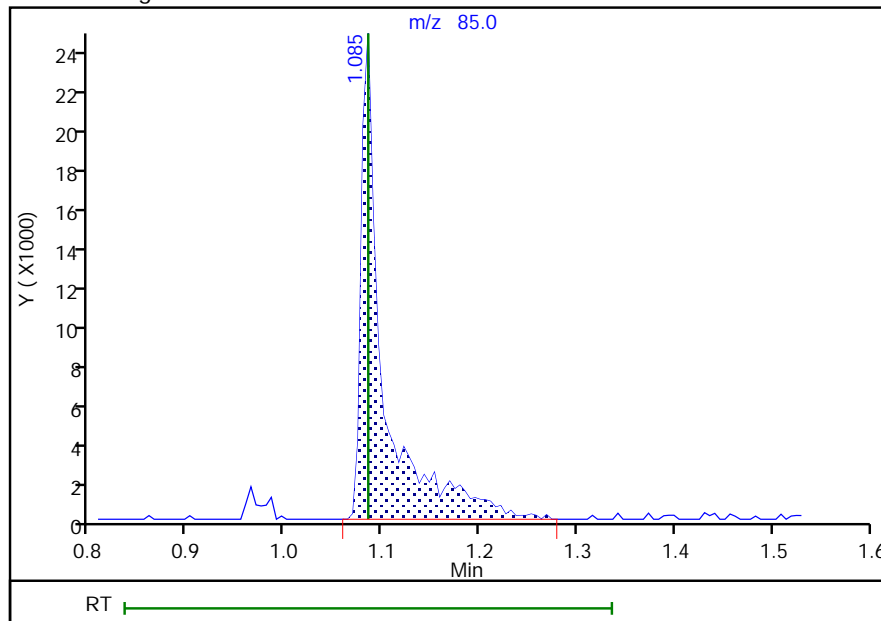
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 38945
Amount: 2.064276
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 12:57:57

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:50

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 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

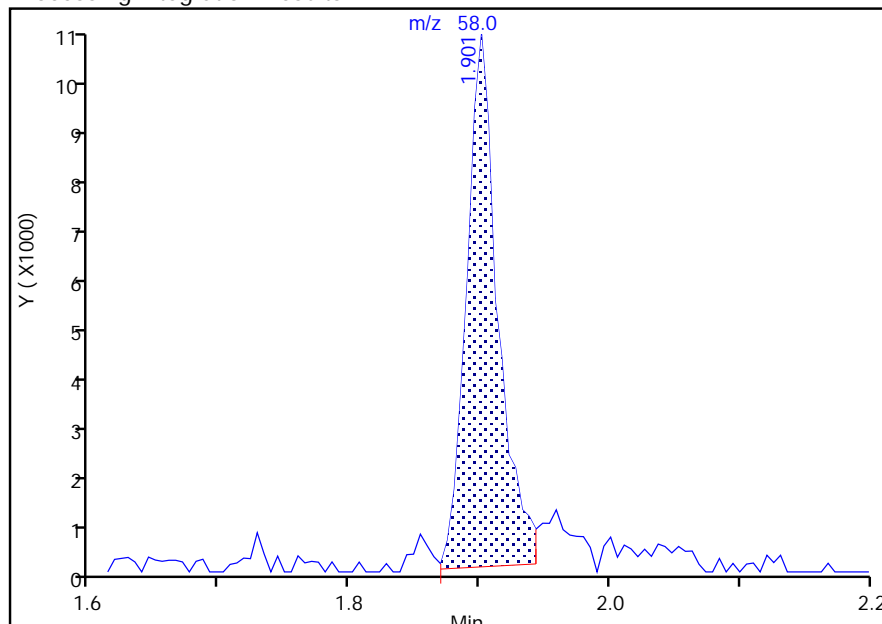
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Injection Date:	11-May-2020 12:38:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

15 Acetone, CAS: 67-64-1

Signal: 1

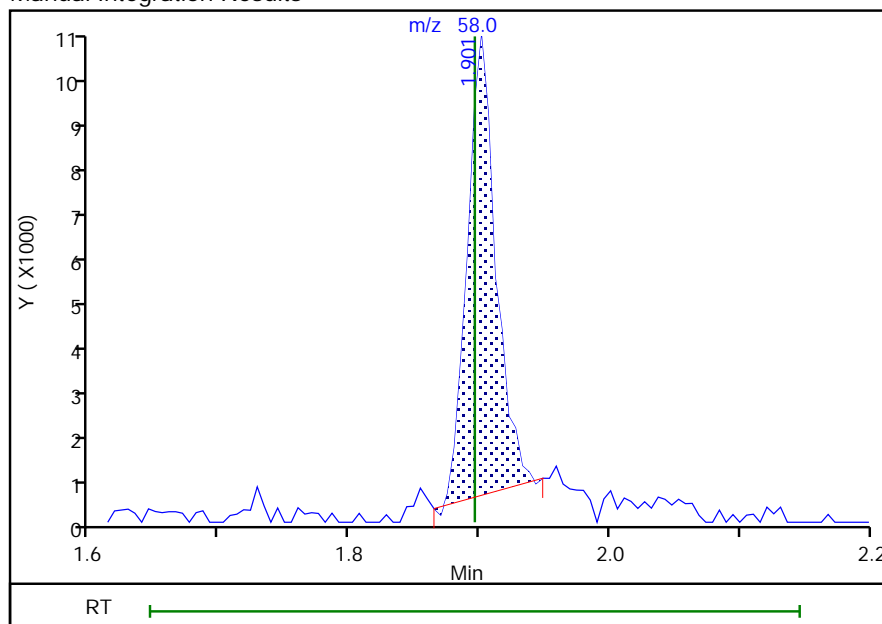
RT: 1.90
 Area: 18188
 Amount: 12.882753
 Amount Units: ug/l

Processing Integration Results



RT: 1.90
 Area: 15648
 Amount: 11.567975
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 16:47:17
 Audit Action: Manually Integrated

Audit Reason: Peak Tail

Report Date: 12-May-2020 09:09:50

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

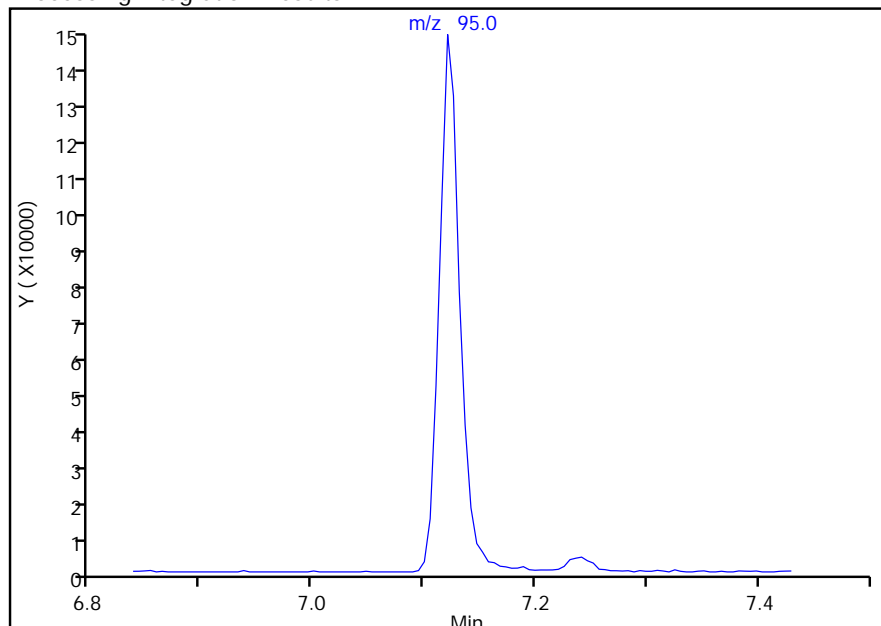
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Injection Date: 11-May-2020 12:38:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

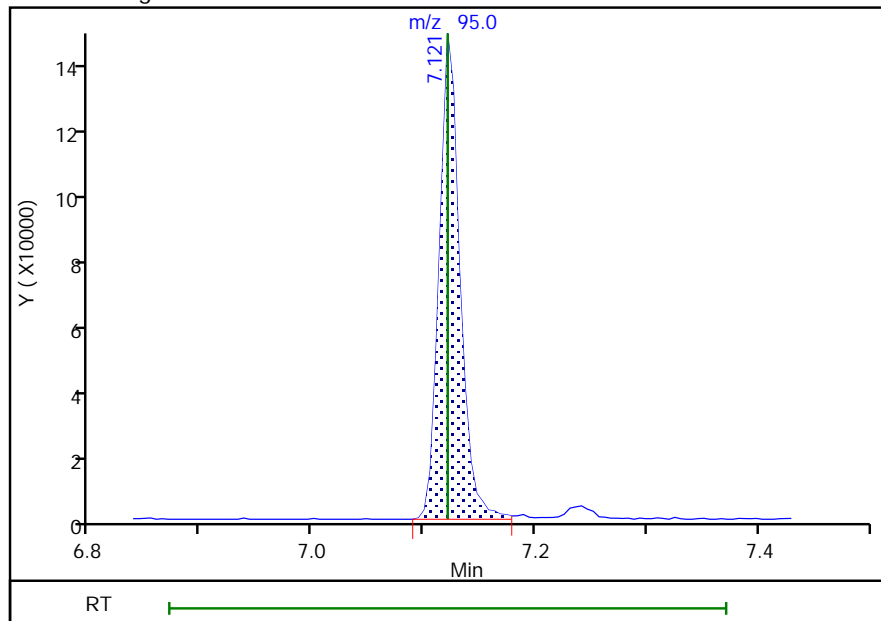
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 187762
Amount: 8.456166
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 12:57:59

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:50

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1108.D

Injection Date: 11-May-2020 12:38:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 8

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

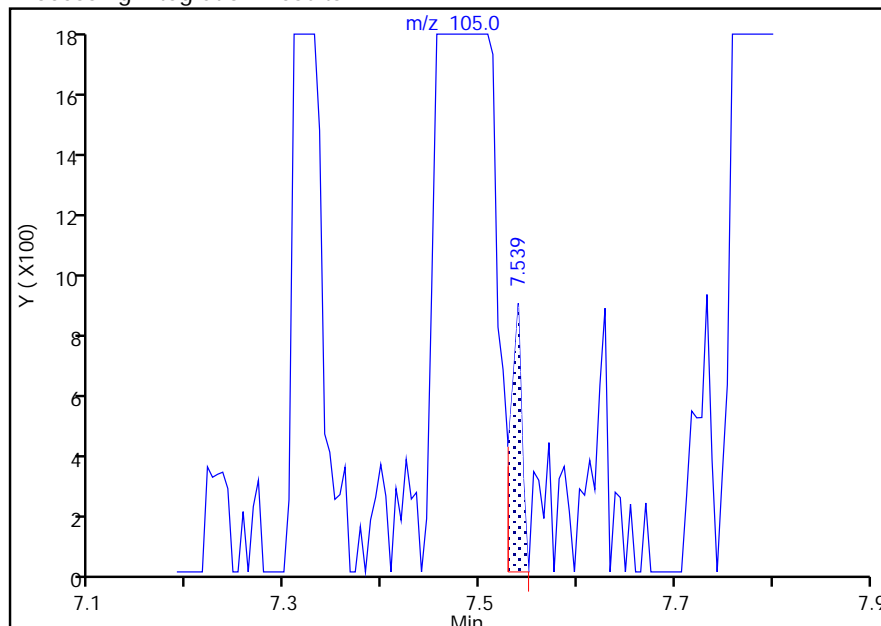
Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

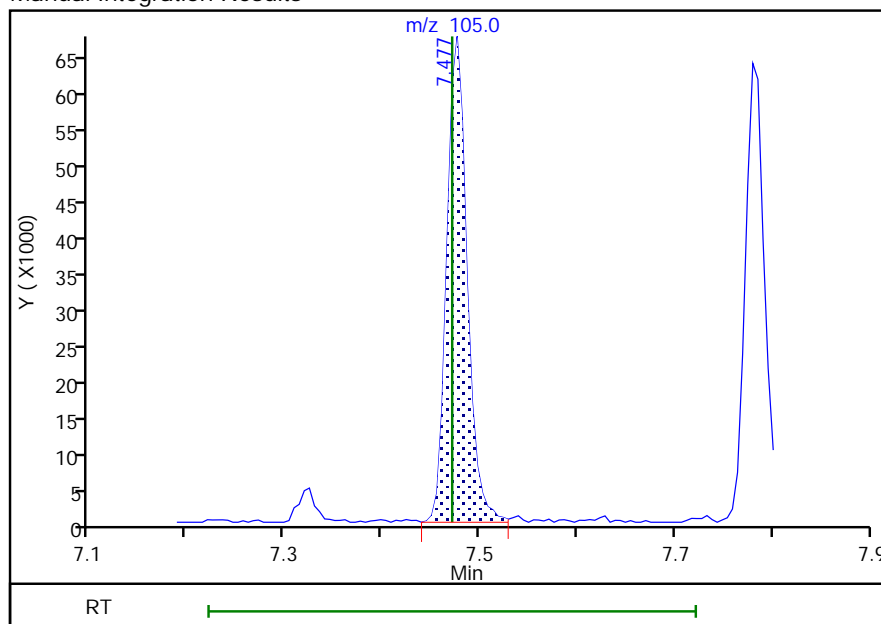
RT: 7.54
Area: 714
Amount: 0.038662
Amount Units: ug/l

Processing Integration Results



RT: 7.48
Area: 97517
Amount: 1.837153
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 12:57:43

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:50

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

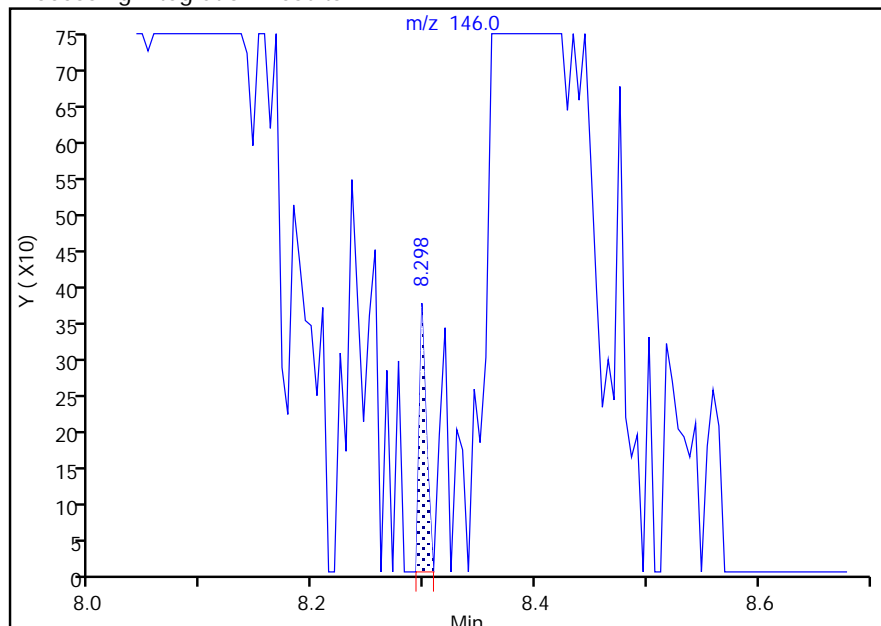
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Injection Date:	11-May-2020 12:38:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

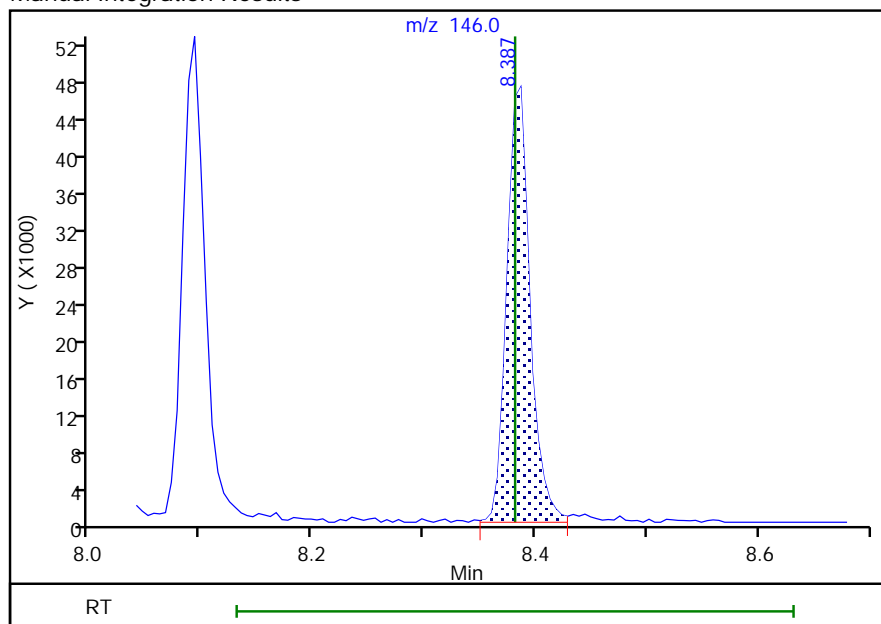
RT: 8.30
Area: 164
Amount: 0.290009
Amount Units: ug/l

Processing Integration Results



RT: 8.39
Area: 67430
Amount: 1.804780
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 12:57:48

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:52

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Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 11-May-2020 12:58:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-009
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:51 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 14:02:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	982754	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	380278	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	92	220259	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	174673	10.0	9.69	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	232442	10.0	11.1	
7 Dichlorodifluoromethane	85	1.086	1.085	0.001	98	72070	5.00	4.71	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	80404	5.00	5.19	
8 Chloromethane	50	1.253	1.253	0.000	72	71619	5.00	4.58	
10 Bromomethane	94	1.405	1.404	0.001	97	44927	5.00	4.70	
11 Chloroethane	64	1.457	1.457	0.000	99	47671	5.00	5.34	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	98	90780	5.00	5.54	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	96	67069	5.00	5.29	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	53811	5.00	5.49	
15 Acetone	58	1.896	1.896	0.000	86	20931	25.0	20.5	M
16 Methylene Chloride	84	2.194	2.194	0.000	87	67763	5.00	4.86	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	52844	50.0	47.5	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	175909	5.00	4.91	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	90	66278	5.00	4.96	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	103965	5.00	4.82	
21 Isopropyl ether	45	2.681	2.681	0.000	92	122110	4.00	3.80	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	88	143786	4.00	3.80	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	39061	25.0	25.7	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	97	97605	5.00	5.06	
25 2,2-Dichloropropane	77	3.063	3.062	0.001	96	98619	5.00	4.92	
26 Chlorobromomethane	130	3.225	3.225	0.000	79	44915	5.00	4.98	
27 Chloroform	83	3.287	3.293	-0.006	98	119091	5.00	5.01	
28 1,1,1-Trichloroethane	97	3.413	3.413	0.000	98	103780	5.00	5.15	
29 Carbon tetrachloride	117	3.518	3.517	0.001	96	95792	5.00	5.23	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	87793	5.00	5.10	
31 Benzene	78	3.664	3.664	0.000	95	262485	5.00	4.93	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	98	83654	5.00	4.93	

Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	98	130869	4.00	3.84	
34 Trichloroethene	132	4.135	4.135	0.000	95	80158	5.00	5.19	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	88	60217	5.00	4.85	a
36 Dibromomethane	93	4.386	4.386	0.000	90	41860	5.00	4.92	
37 Dichlorobromomethane	83	4.517	4.516	0.001	99	80778	5.00	4.80	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	94	97163	5.00	4.81	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	96	267387	25.0	23.1	
40 Toluene	92	5.092	5.092	0.000	93	163509	5.00	4.80	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	88627	5.00	4.74	
42 1,1,2-Trichloroethane	83	5.427	5.426	0.001	94	50332	5.00	4.85	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	73546	5.00	4.92	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	92	100248	5.00	4.96	
45 2-Hexanone	43	5.594	5.589	0.005	94	180810	25.0	23.0	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	73401	5.00	4.65	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	67046	5.00	5.02	
48 Chlorobenzene	112	6.190	6.190	0.000	98	196077	5.00	4.86	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	68719	5.00	4.45	
50 Ethylbenzene	91	6.269	6.269	0.000	98	312971	5.00	4.66	
51 m-Xylene & p-Xylene	91	6.379	6.378	0.000	98	241878	5.00	4.61	
52 o-Xylene	91	6.682	6.682	0.000	94	261195	5.00	4.81	
53 Styrene	104	6.703	6.697	0.006	97	202473	5.00	4.72	
54 Bromoform	173	6.844	6.844	0.000	98	53804	5.00	4.76	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	327534	5.00	4.85	
56 Bromobenzene	156	7.231	7.231	0.000	94	94378	5.00	4.60	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	96	77521	5.00	4.91	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	96	27049	5.00	5.54	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	363244	5.00	4.70	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	218510	5.00	4.61	
61 1,3,5-Trimethylbenzene	105	7.477	7.471	0.006	94	233405	5.00	4.64	a
62 4-Chlorotoluene	91	7.493	7.492	0.001	98	241797	5.00	4.54	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	234337	5.00	4.84	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	204594	5.00	4.36	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	321680	5.00	4.69	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	169695	5.00	4.72	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	258121	5.00	4.65	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	97	171709	5.00	4.63	
69 1,2-Dichlorobenzene	146	8.387	8.382	0.005	95	184340	5.00	5.21	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	197700	5.00	5.02	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	91	18702	5.00	4.37	
72 1,2,4-Trichlorobenzene	180	9.721	9.715	0.006	93	79710	5.00	5.03	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	94	54689	5.00	5.30	
74 Naphthalene	128	9.935	9.930	0.005	99	195134	5.00	4.68	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	94	74753	5.00	4.97	
S 76 Xylenes, Total	1				0		10.0	9.42	
S 77 Trihalomethanes, Total	1				0			19.2	
S 78 1,3-Dichloropropene, Total	1				0		10.0	9.55	

Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 0.50

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D

Injection Date: 11-May-2020 12:58:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

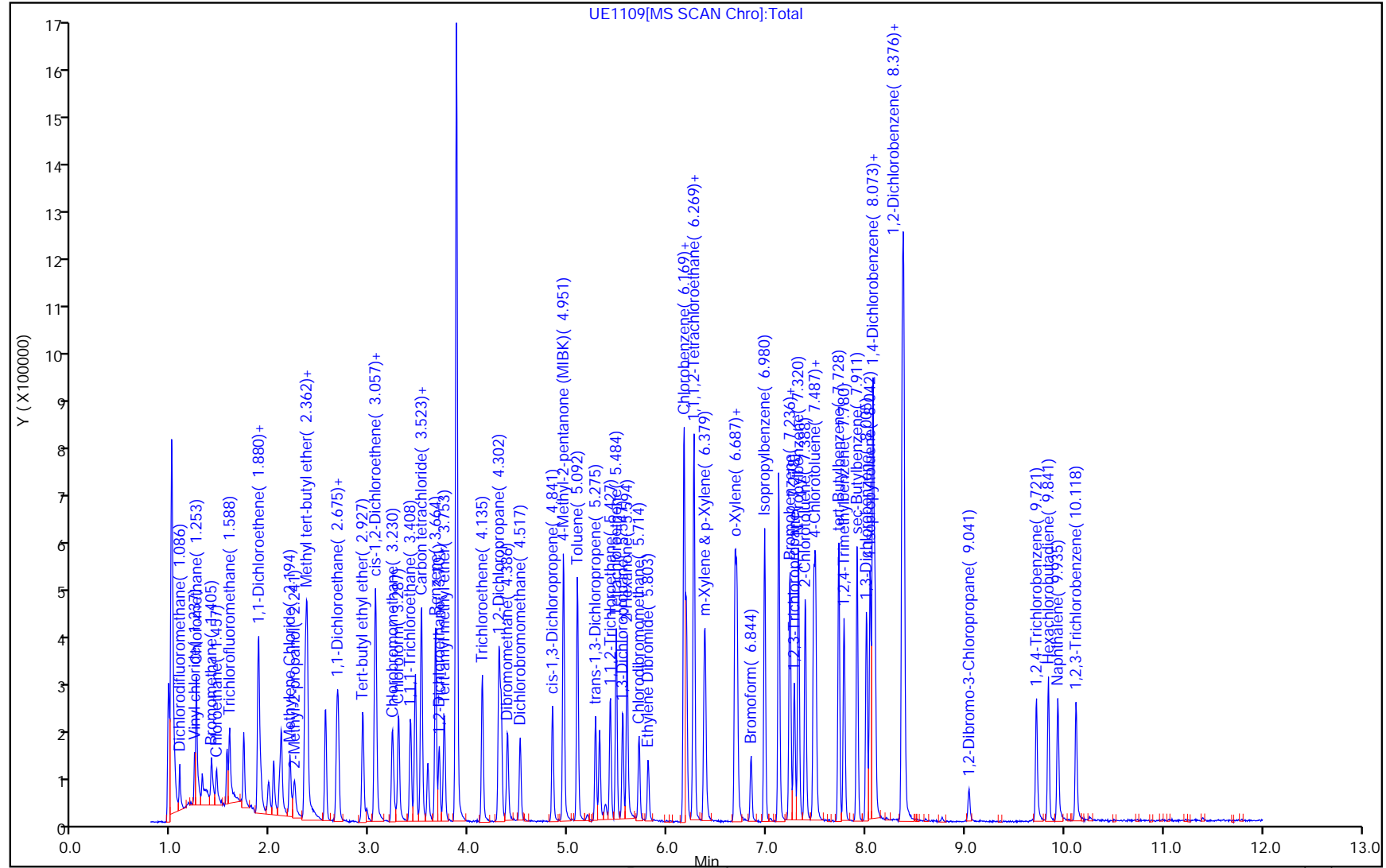
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

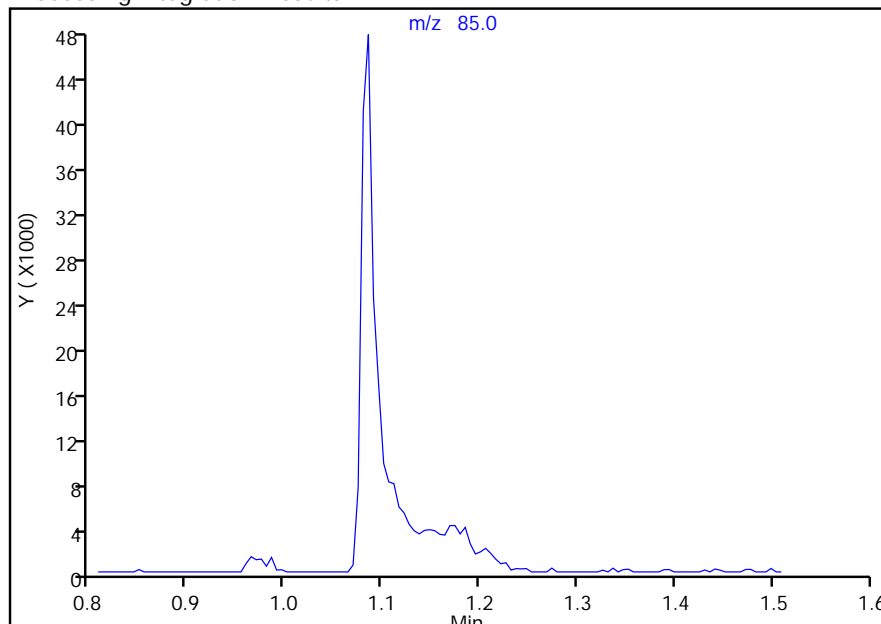
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D
Injection Date: 11-May-2020 12:58:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

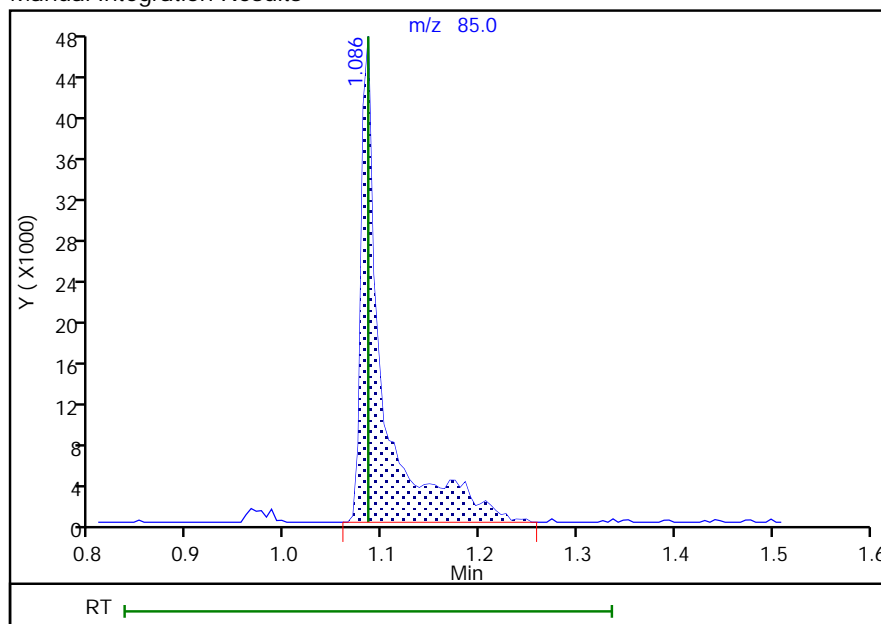
Signal: 1

Not Detected
Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 72070
Amount: 4.706349
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:02:06

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

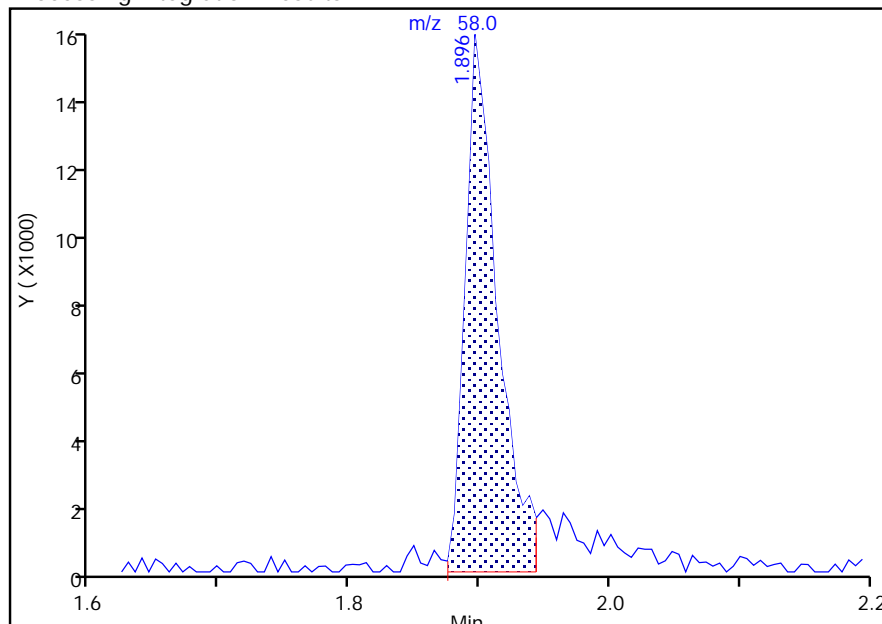
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D		
Injection Date:	11-May-2020 12:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

15 Acetone, CAS: 67-64-1

Signal: 1

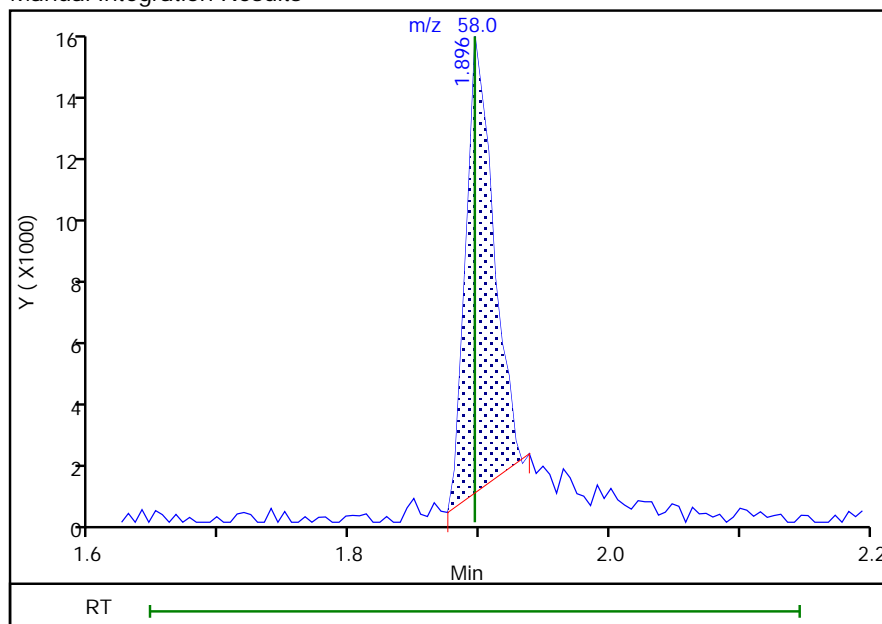
RT: 1.90
 Area: 26433
 Amount: 27.801198
 Amount Units: ug/l

Processing Integration Results



RT: 1.90
 Area: 20931
 Amount: 20.473054
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 16:47:02
 Audit Action: Manually Integrated

Audit Reason: Peak Tail

Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

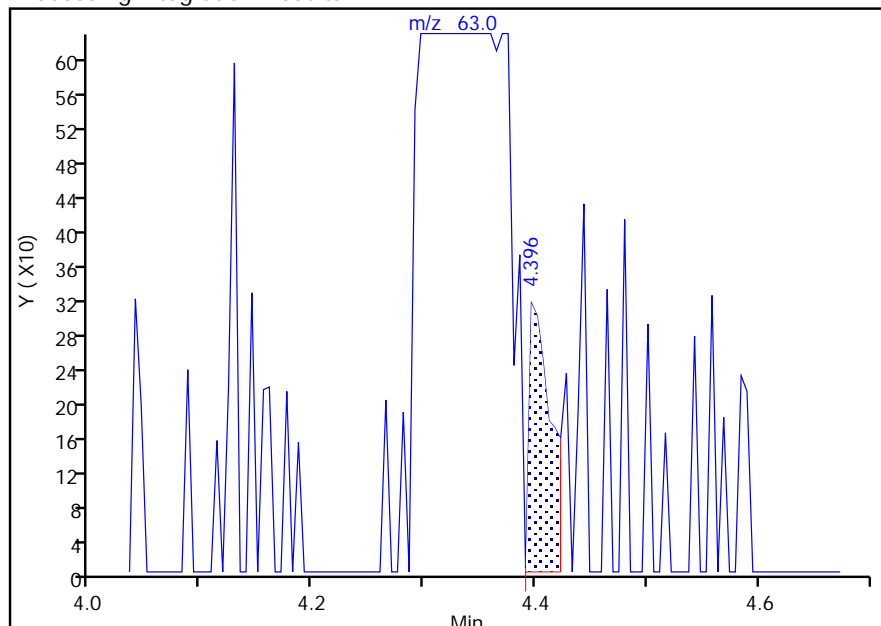
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D		
Injection Date:	11-May-2020 12:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

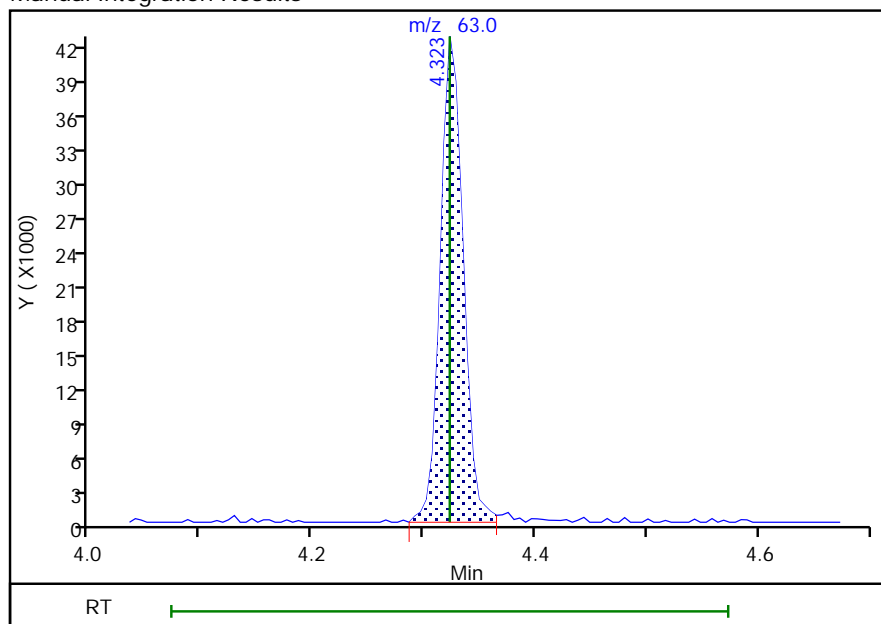
RT: 4.40
Area: 423
Amount: 0.041102
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 60217
Amount: 4.850632
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:02:12

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

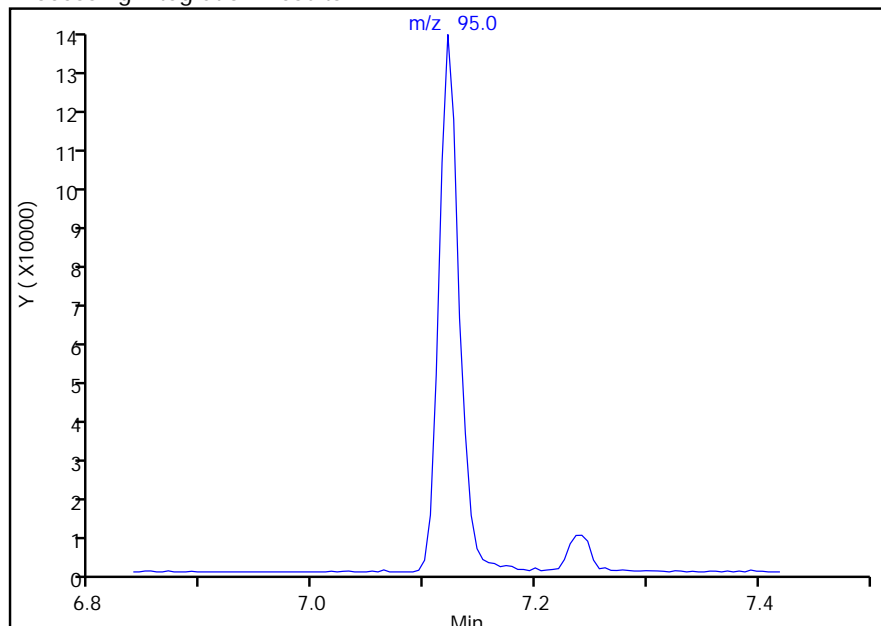
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D		
Injection Date:	11-May-2020 12:58:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

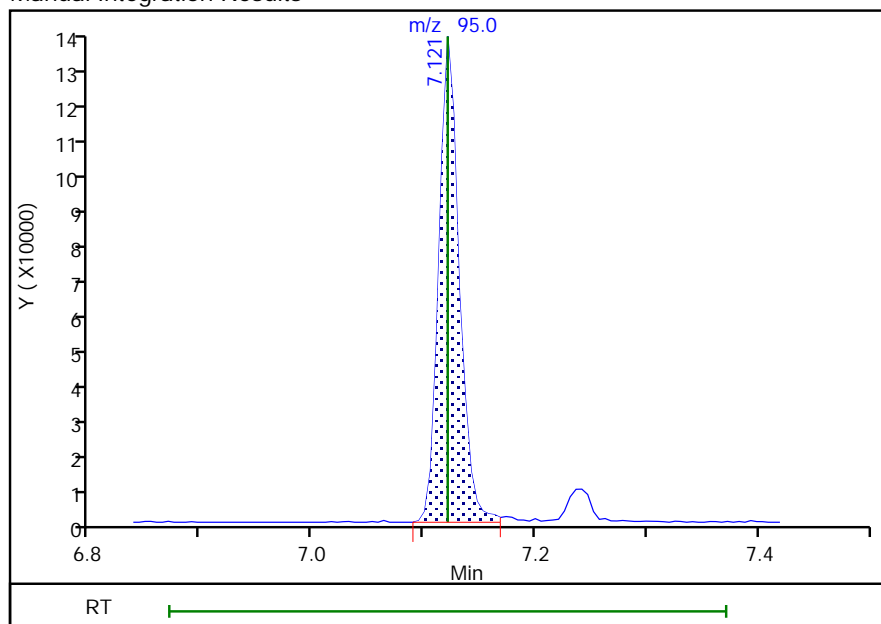
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	174673
Amount:	9.691816
Amount Units:	ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:02:01

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:52

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

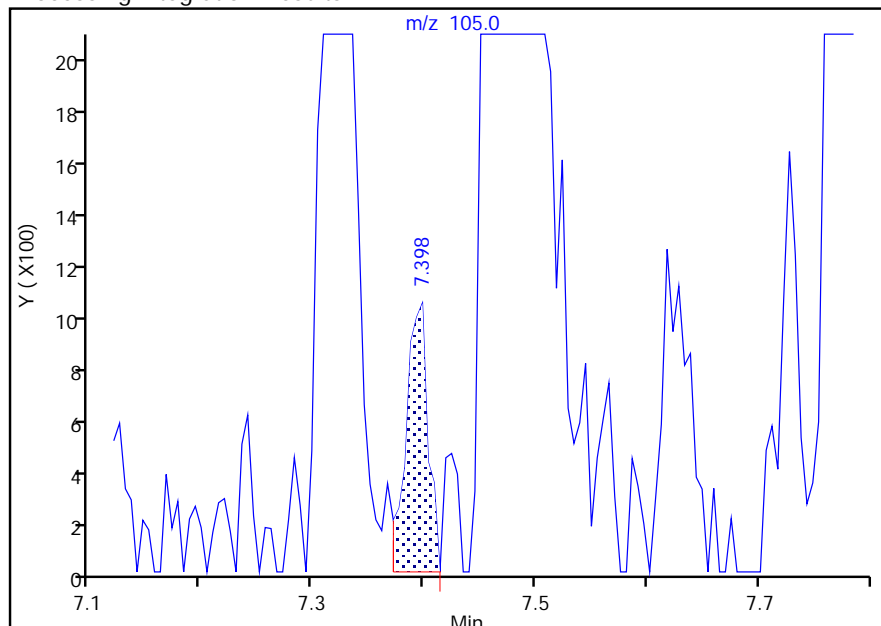
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1109.D
 Injection Date: 11-May-2020 12:58:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

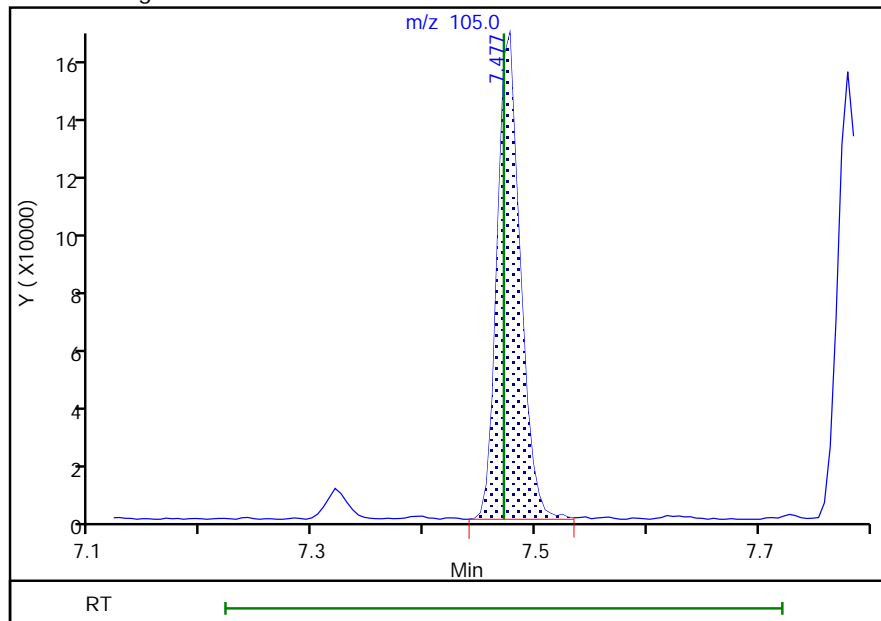
RT: 7.40
 Area: 1426
 Amount: 0.044525
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 233405
 Amount: 4.640168
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:02:18

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1110.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 11-May-2020 13:18:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-010
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:53 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 14:01:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	964762	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	476413	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	90	266568	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	214861	10.0	12.1	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	247274	10.0	9.79	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	137958	10.0	9.18	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	164461	10.0	10.8	
8 Chloromethane	50	1.253	1.253	0.000	71	159295	10.0	10.4	
10 Bromomethane	94	1.405	1.405	0.000	99	109038	10.0	11.9	
11 Chloroethane	64	1.457	1.457	0.000	99	100261	10.0	11.4	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	97	161561	10.0	10.0	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	97	137452	10.0	11.0	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	110766	10.0	11.5	
15 Acetone	58	1.896	1.896	0.000	86	50746	50.0	54.6	
16 Methylene Chloride	84	2.194	2.194	0.000	87	137243	10.0	10.0	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	121032	100.0	110.8	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	341247	10.0	9.69	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	125058	10.0	9.53	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	100	207331	10.0	9.78	
21 Isopropyl ether	45	2.681	2.681	0.000	94	247764	8.00	7.85	
22 Tert-butyl ethyl ether	59	2.927	2.927	0.000	90	281056	8.00	7.57	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	72736	50.0	48.7	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	177361	10.0	9.37	
25 2,2-Dichloropropane	77	3.063	3.063	0.000	94	179822	10.0	9.13	
26 Chlorobromomethane	130	3.225	3.225	0.000	78	76840	10.0	8.69	
27 Chloroform	83	3.287	3.287	0.000	99	212245	10.0	9.09	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	98	190328	10.0	7.54	
29 Carbon tetrachloride	117	3.518	3.518	0.000	95	173057	10.0	7.55	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	94	159741	10.0	7.41	
31 Benzene	78	3.664	3.664	0.000	95	508629	10.0	7.62	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	168042	10.0	7.91	

Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1110.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	98	253082	8.00	7.56	
34 Trichloroethene	132	4.135	4.135	0.000	94	146063	10.0	7.55	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	129548	10.0	8.33	a
36 Dibromomethane	93	4.386	4.386	0.000	91	82313	10.0	7.72	
37 Dichlorobromomethane	83	4.517	4.517	0.000	99	158359	10.0	7.51	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	94	192041	10.0	7.59	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	96	640311	50.0	44.2	
40 Toluene	92	5.092	5.092	0.000	93	397295	10.0	9.31	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	214115	10.0	9.14	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	118622	10.0	9.13	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	167732	10.0	9.28	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	93	234442	10.0	9.25	
45 2-Hexanone	43	5.594	5.594	0.000	95	446045	50.0	46.9	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	172027	10.0	9.01	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	159155	10.0	9.50	
48 Chlorobenzene	112	6.190	6.190	0.000	96	461586	10.0	9.13	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	169904	10.0	9.09	
50 Ethylbenzene	91	6.269	6.269	0.000	98	752446	10.0	9.25	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	584443	10.0	9.21	
52 o-Xylene	91	6.682	6.682	0.000	94	593975	10.0	9.03	
53 Styrene	104	6.703	6.703	0.000	97	487290	10.0	9.39	
54 Bromoform	173	6.844	6.844	0.000	98	125434	10.0	9.16	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	740753	10.0	9.07	
56 Bromobenzene	156	7.231	7.231	0.000	92	223655	10.0	9.00	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	97	188095	10.0	9.87	
58 1,2,3-Trichloropropane	110	7.278	7.278	0.000	97	57150	10.0	9.69	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	854687	10.0	9.13	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	507337	10.0	8.85	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	556165	10.0	9.14	a
62 4-Chlorotoluene	91	7.493	7.493	0.000	97	575867	10.0	8.94	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	533120	10.0	9.11	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	533242	10.0	9.39	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	760035	10.0	9.16	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	394743	10.0	9.08	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	617387	10.0	9.19	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	398546	10.0	8.88	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	452236	10.0	9.48	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	96	379467	10.0	8.86	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	93	45311	10.0	8.94	
72 1,2,4-Trichlorobenzene	180	9.721	9.721	0.000	94	184410	10.0	9.62	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	114911	10.0	9.33	
74 Naphthalene	128	9.935	9.935	0.000	99	473407	10.0	9.62	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	173745	10.0	9.61	
S 76 Xylenes, Total	1				0		20.0	18.2	
S 78 1,3-Dichloropropene, Total	1				0		20.0	16.7	

Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 1.00

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1110.D

Injection Date: 11-May-2020 13:18:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

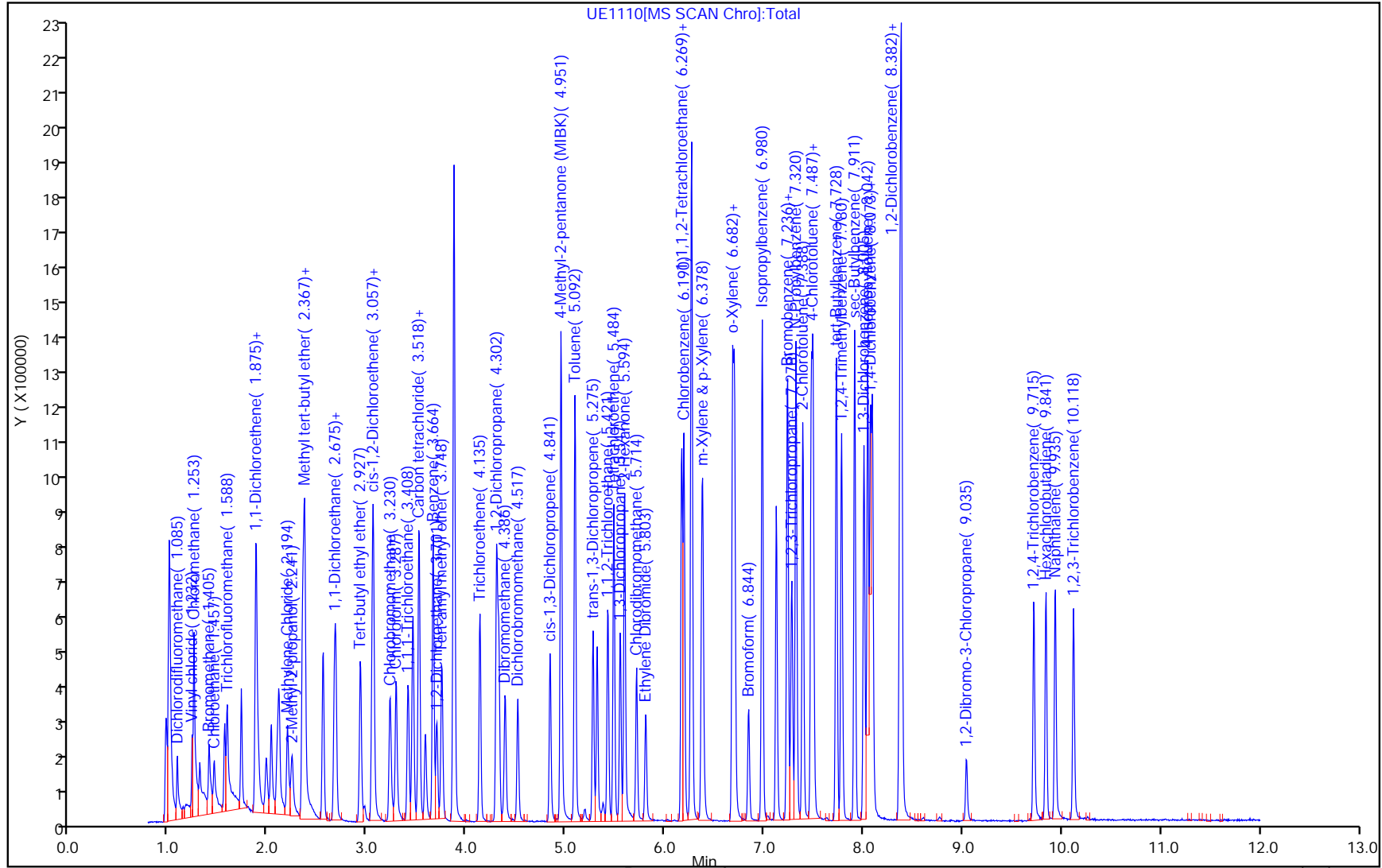
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

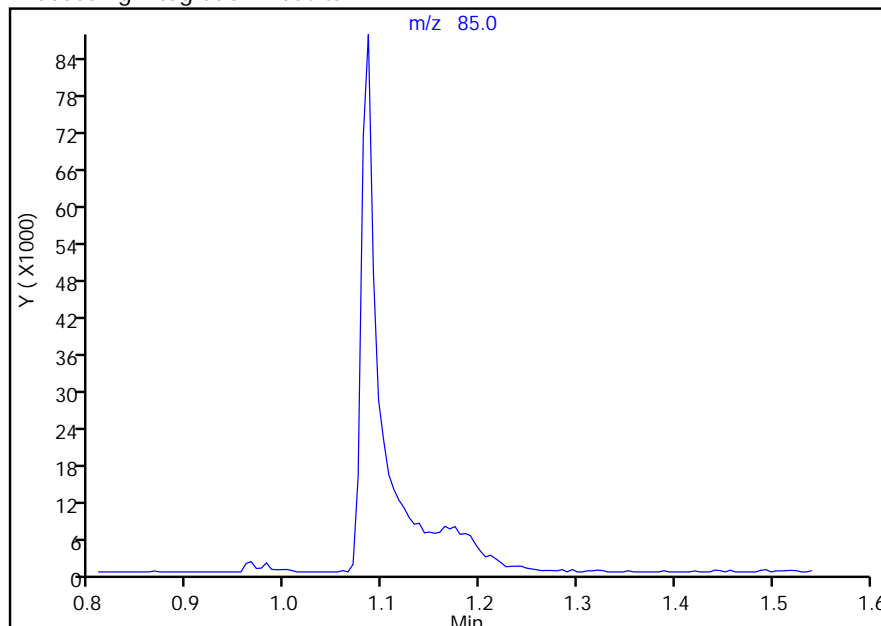
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Injection Date: 11-May-2020 13:18:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

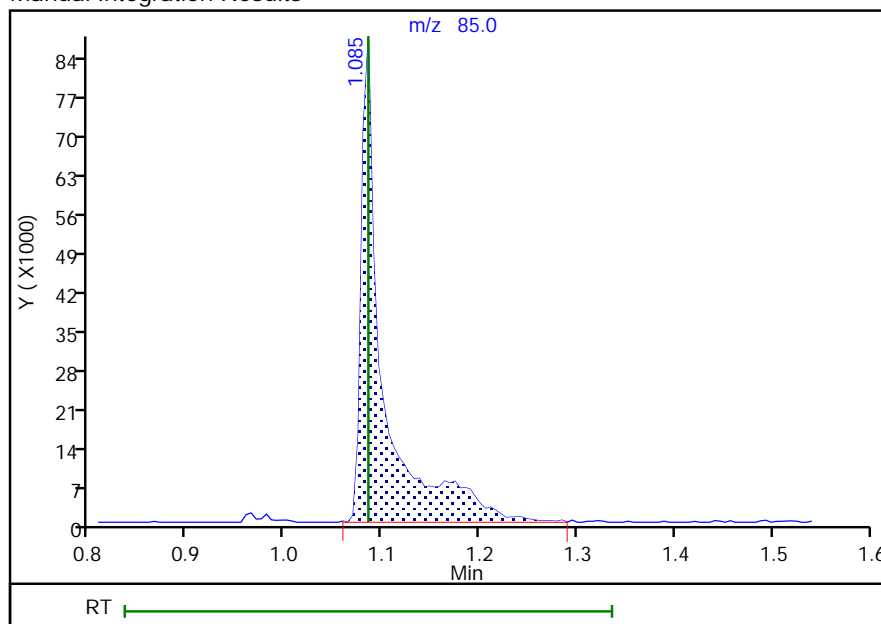
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 137958
Amount: 9.177009
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:01:44

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

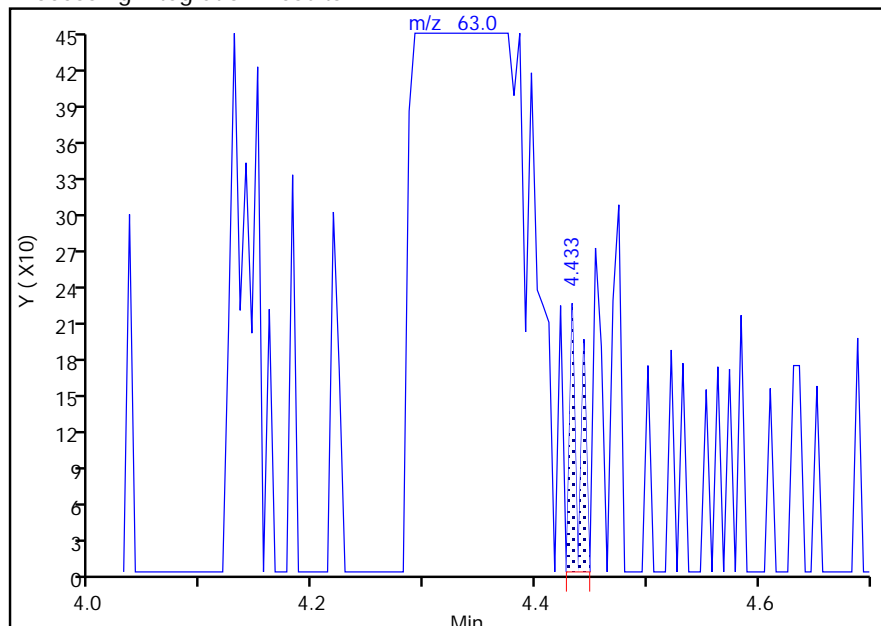
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1110.D		
Injection Date:	11-May-2020 13:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

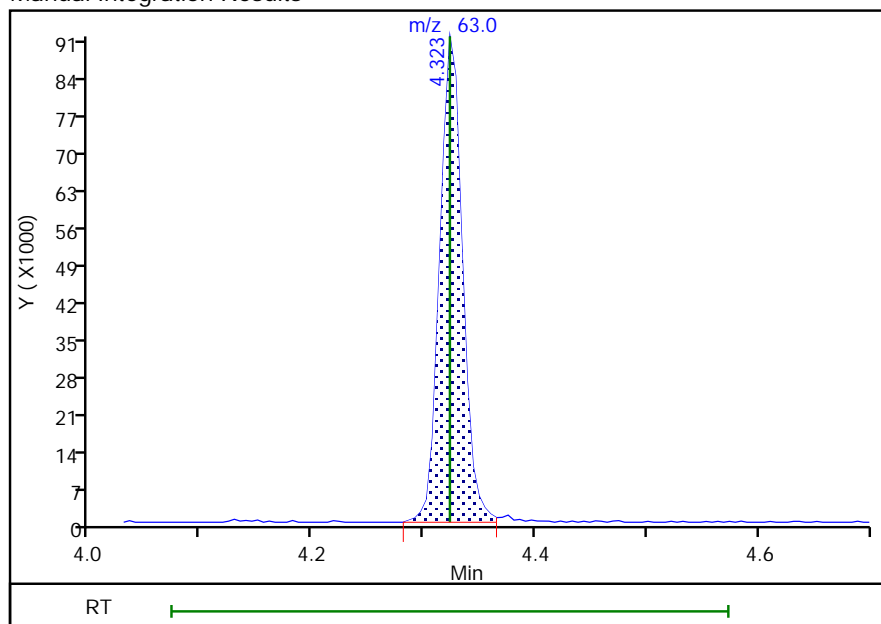
RT: 4.43
Area: 131
Amount: 0.012202
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 129548
Amount: 8.329664
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:01:48

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

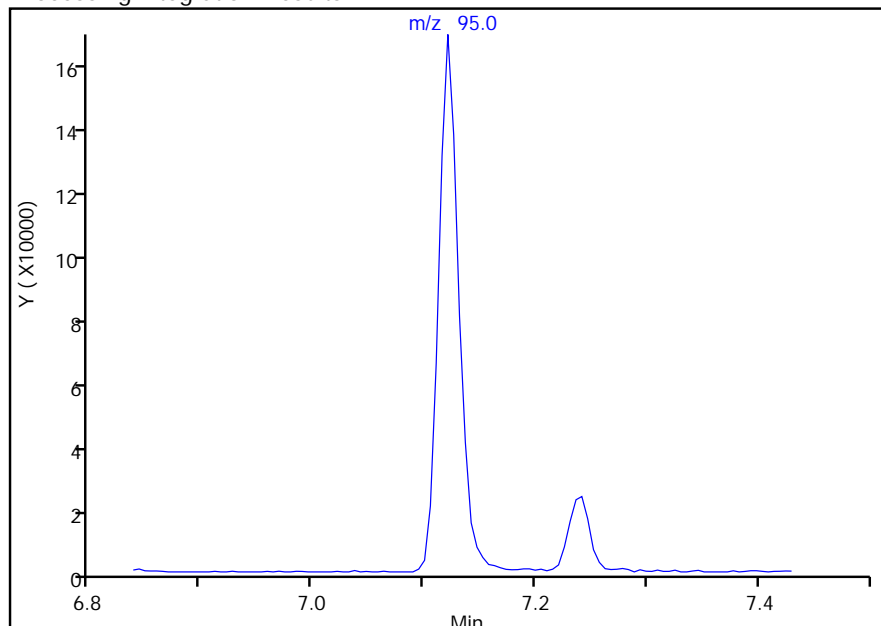
Data File:	\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1110.D		
Injection Date:	11-May-2020 13:18:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

§ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

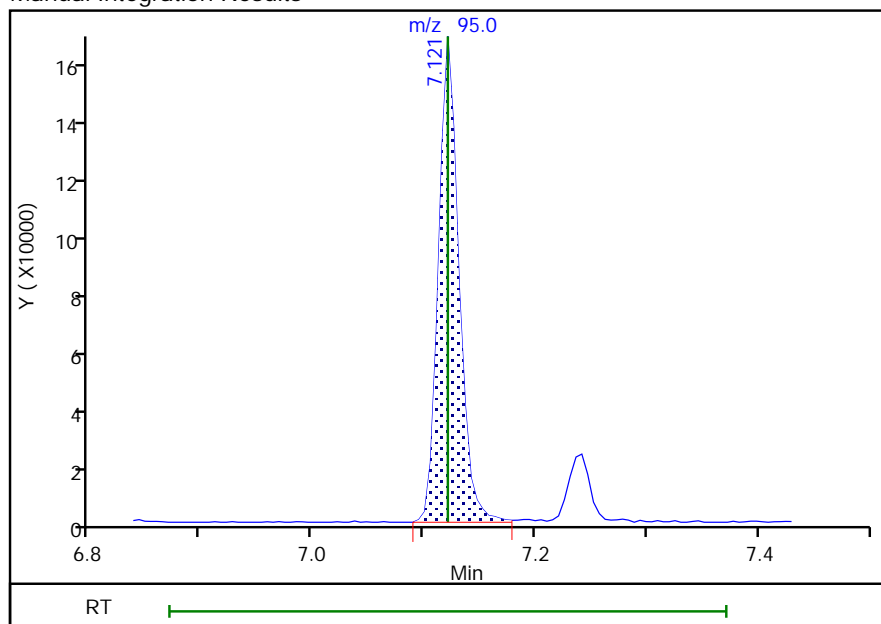
Not Detected
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT:	7.12
Area:	214861
Amount:	12.143996
Amount Units:	ug/l



Reviewer: proctors, 11-May-2020 14:01:41

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:54

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

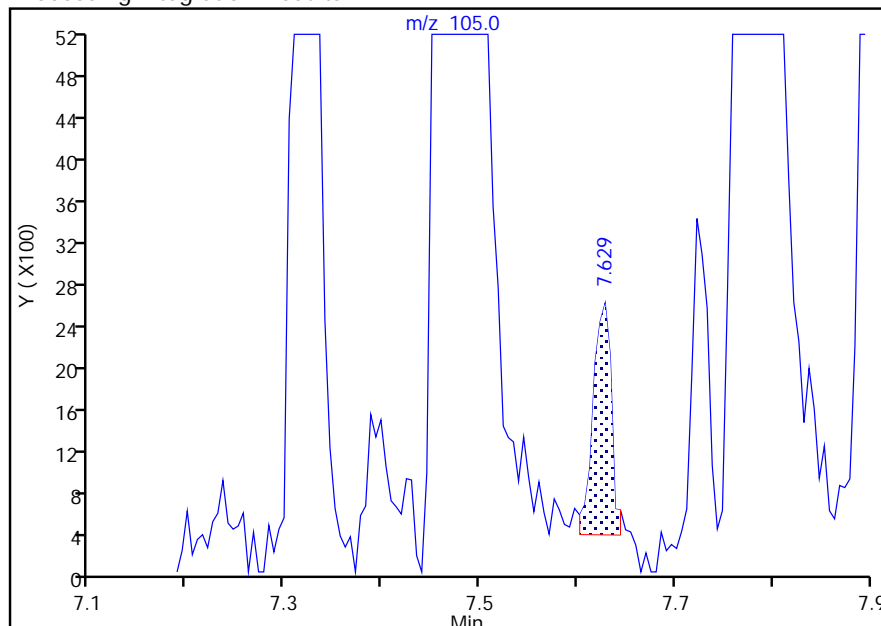
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1110.D
 Injection Date: 11-May-2020 13:18:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

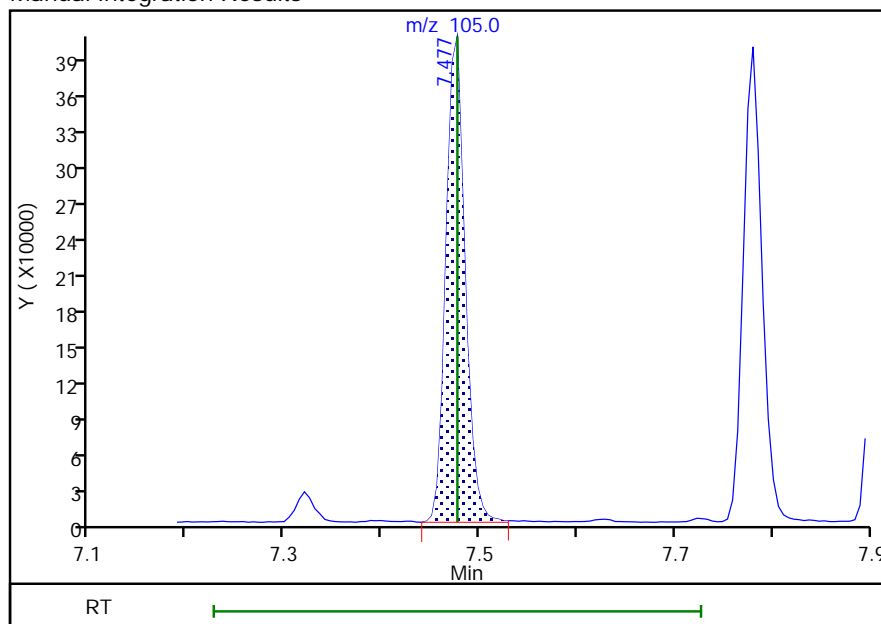
RT: 7.63
 Area: 2892
 Amount: 0.097903
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 556165
 Amount: 9.135931
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:01:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:57

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1111.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 11-May-2020 13:38:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-011
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:56 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 14:01:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	1264984	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	500731	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	89	290427	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	234761	10.0	10.1	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	269558	10.0	9.80	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	393001	20.0	19.9	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	382166	20.0	19.2	
8 Chloromethane	50	1.253	1.253	0.000	77	434717	20.0	21.6	
10 Bromomethane	94	1.404	1.404	0.000	98	241797	20.0	20.2	
11 Chloroethane	64	1.457	1.457	0.000	99	222039	20.0	19.3	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	98	373052	20.0	17.7	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	97	300007	20.0	18.4	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	238383	20.0	18.9	
15 Acetone	58	1.896	1.896	0.000	88	114780	100.0	98.1	
16 Methylene Chloride	84	2.194	2.194	0.000	86	349173	20.0	19.4	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	281243	200.0	196.4	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	917674	20.0	19.9	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	330781	20.0	19.2	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	537366	20.0	19.3	
21 Isopropyl ether	45	2.681	2.681	0.000	95	654354	16.0	15.8	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	90	766822	16.0	15.7	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	194666	100.0	99.4	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	97	476314	20.0	19.2	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	477329	20.0	18.5	
26 Chlorobromomethane	130	3.225	3.225	0.000	79	215129	20.0	18.5	
27 Chloroform	83	3.293	3.293	0.000	99	580417	20.0	19.0	
28 1,1,1-Trichloroethane	97	3.413	3.413	0.000	97	520980	20.0	19.6	
29 Carbon tetrachloride	117	3.517	3.517	0.000	98	465107	20.0	19.3	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	433943	20.0	19.1	
31 Benzene	78	3.664	3.664	0.000	94	1354611	20.0	19.3	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	98	421147	20.0	18.9	

Report Date: 12-May-2020 09:09:57

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1111.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	698487	16.0	15.9	
34 Trichloroethene	132	4.135	4.135	0.000	95	383107	20.0	18.8	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	315709	20.0	19.3	a
36 Dibromomethane	93	4.386	4.386	0.000	92	219726	20.0	19.6	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	451867	20.0	20.4	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	524633	20.0	19.7	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	95	1456379	100.0	95.6	
40 Toluene	92	5.092	5.092	0.000	93	875349	20.0	19.5	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	488629	20.0	19.8	
42 1,1,2-Trichloroethane	83	5.426	5.426	0.000	95	264550	20.0	19.4	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	358363	20.0	18.2	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	510175	20.0	19.2	
45 2-Hexanone	43	5.589	5.589	0.000	94	1002328	100.0	96.6	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	384671	20.0	18.5	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	352935	20.0	20.0	
48 Chlorobenzene	112	6.190	6.190	0.000	97	1014535	20.0	19.1	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	373677	20.0	18.3	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1679948	20.0	19.0	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	1303904	20.0	18.9	
52 o-Xylene	91	6.682	6.682	0.000	94	1347375	20.0	18.8	
53 Styrene	104	6.697	6.697	0.000	97	1112307	20.0	19.7	
54 Bromoform	173	6.844	6.844	0.000	99	288195	20.0	19.3	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1692709	20.0	19.0	
56 Bromobenzene	156	7.231	7.231	0.000	89	503821	20.0	18.6	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	97	427245	20.0	20.7	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	132540	20.0	20.7	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1937436	20.0	19.0	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	1153450	20.0	18.5	
61 1,3,5-Trimethylbenzene	105	7.471	7.471	0.000	93	1254043	20.0	18.9	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	1329996	20.0	18.9	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1214946	20.0	19.0	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1188424	20.0	19.2	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1720361	20.0	19.0	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	894787	20.0	18.9	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1399039	20.0	19.1	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	905190	20.0	18.5	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	95	866992	20.0	18.6	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	1024478	20.0	19.7	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	111907	20.0	20.5	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	414889	20.0	19.9	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	266739	20.0	20.2	
74 Naphthalene	128	9.930	9.930	0.000	99	1106152	20.0	20.9	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	385254	20.0	19.7	
S 76 Xylenes, Total	1				0		40.0	37.7	
S 78 1,3-Dichloropropene, Total	1				0		40.0	39.6	

Report Date: 12-May-2020 09:09:57

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 2.00

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:57

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1111.D

Injection Date: 11-May-2020 13:38:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ics

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

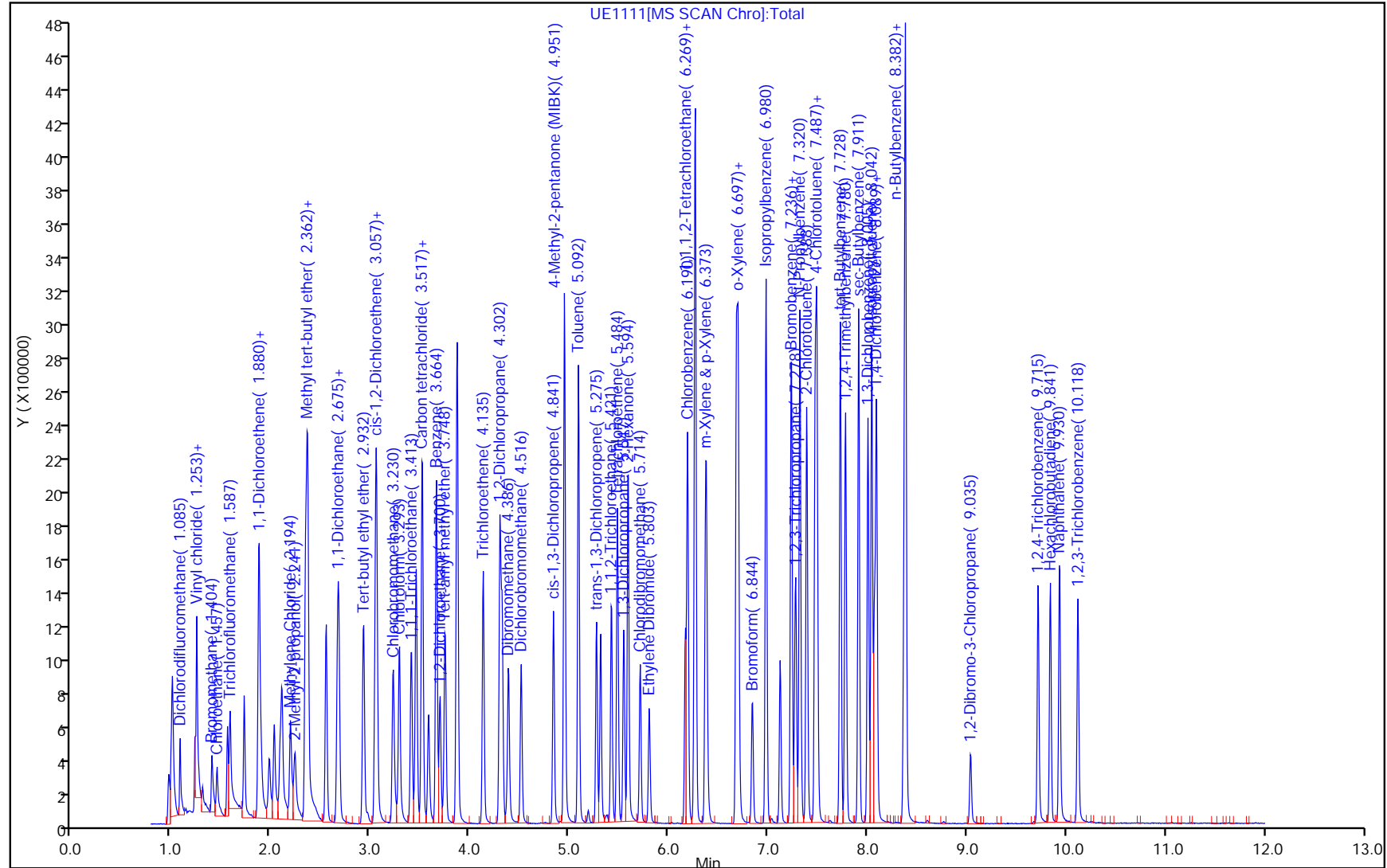
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:57

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

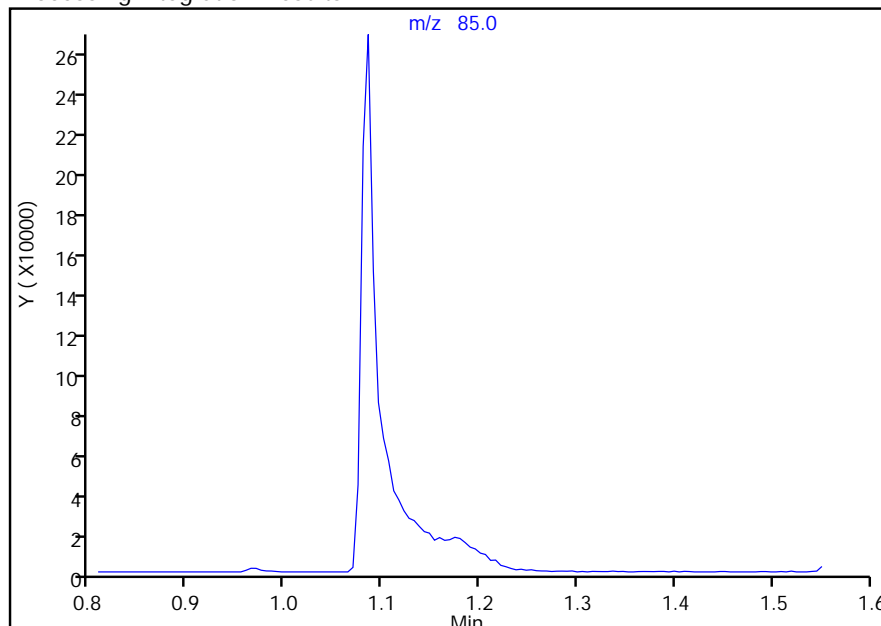
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Injection Date:	11-May-2020 13:38:30	Instrument ID:	CMSU
Lims ID:	icis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	11

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

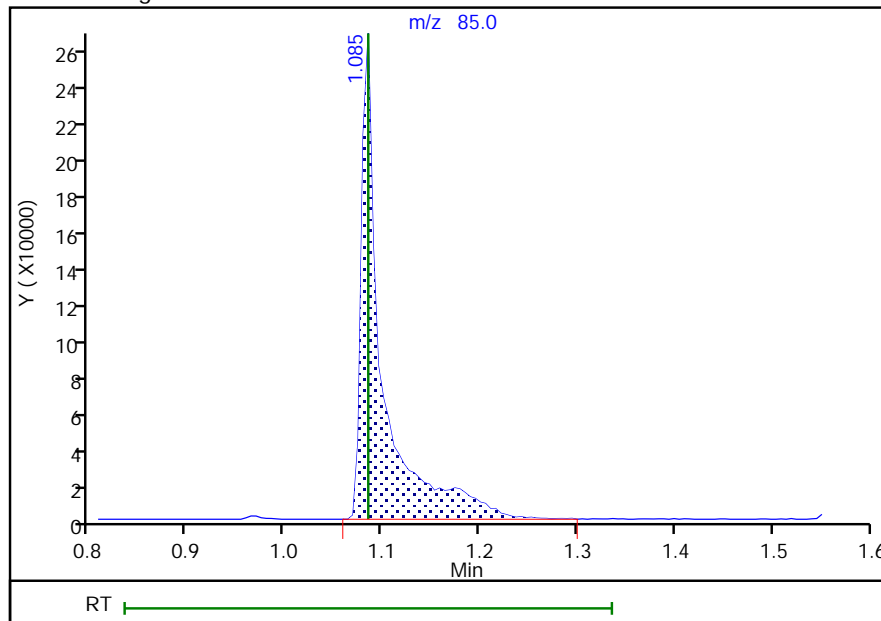
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 393001
Amount: 19.938068
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:01:02

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:57

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

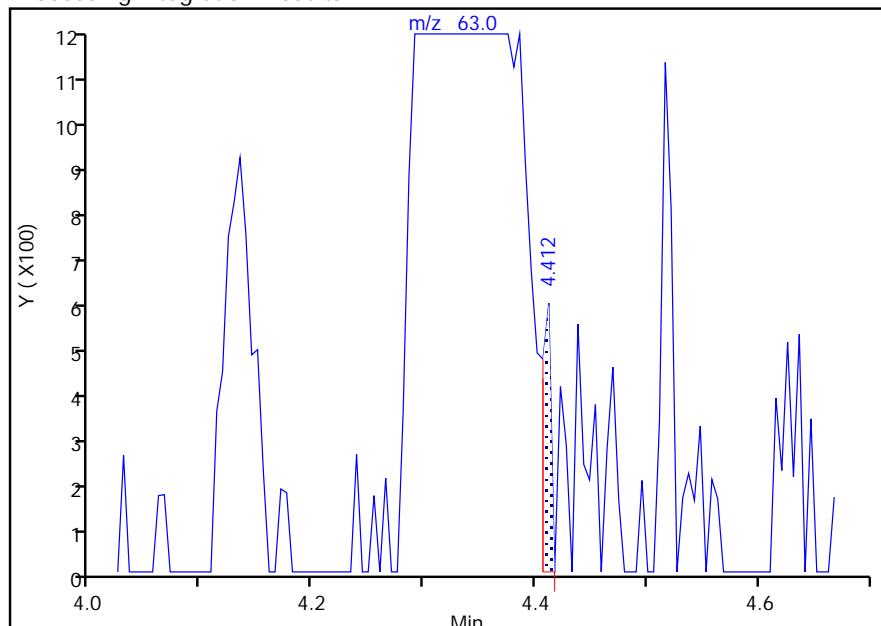
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1111.D
 Injection Date: 11-May-2020 13:38:30 Instrument ID: CMSU
 Lims ID: icis
 Client ID:
 Operator ID: rd ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

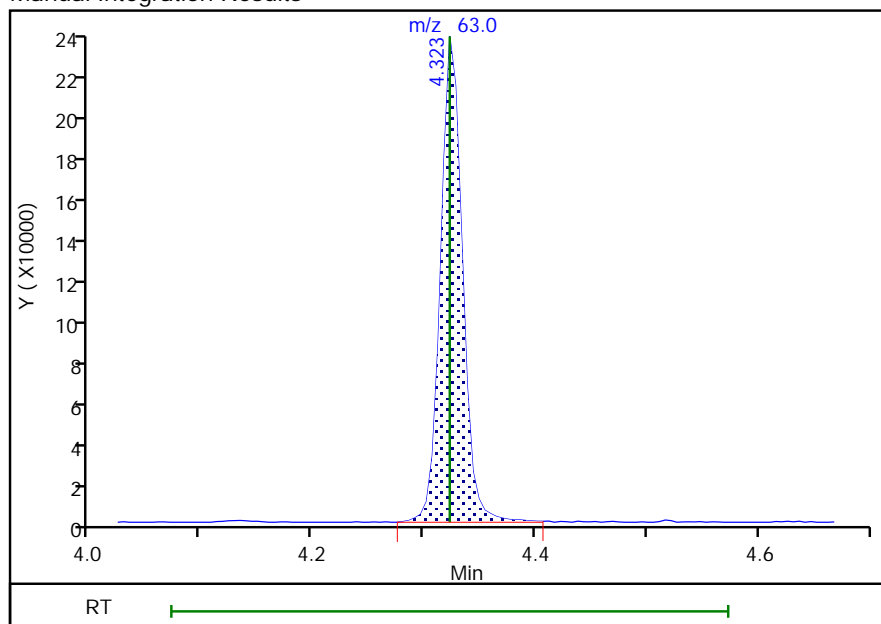
RT: 4.41
 Area: 319
 Amount: 0.036853
 Amount Units: ug/l

Processing Integration Results



RT: 4.32
 Area: 315709
 Amount: 19.313583
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:00:56

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:57

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

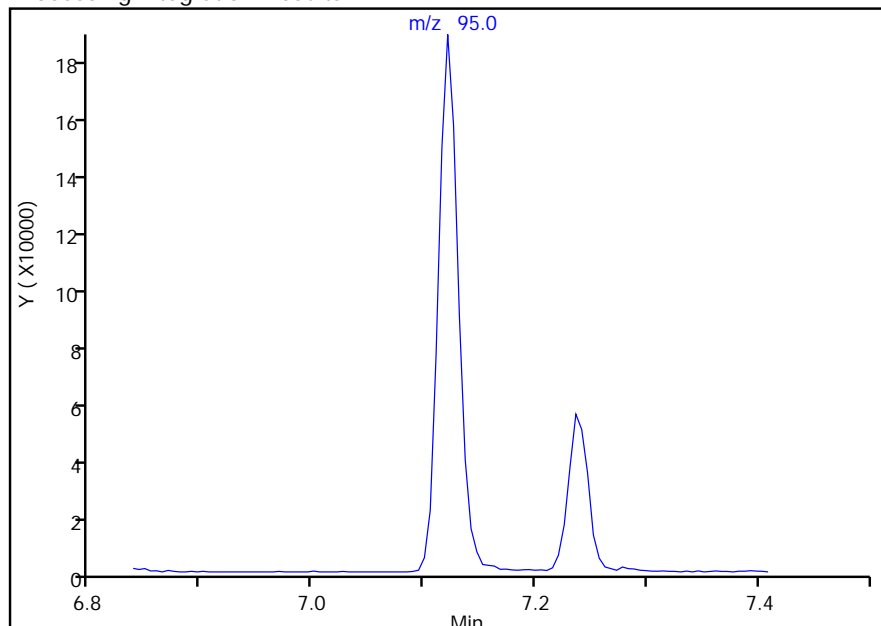
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1111.D		
Injection Date:	11-May-2020 13:38:30	Instrument ID:	CMSU
Lims ID:	icis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	11

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

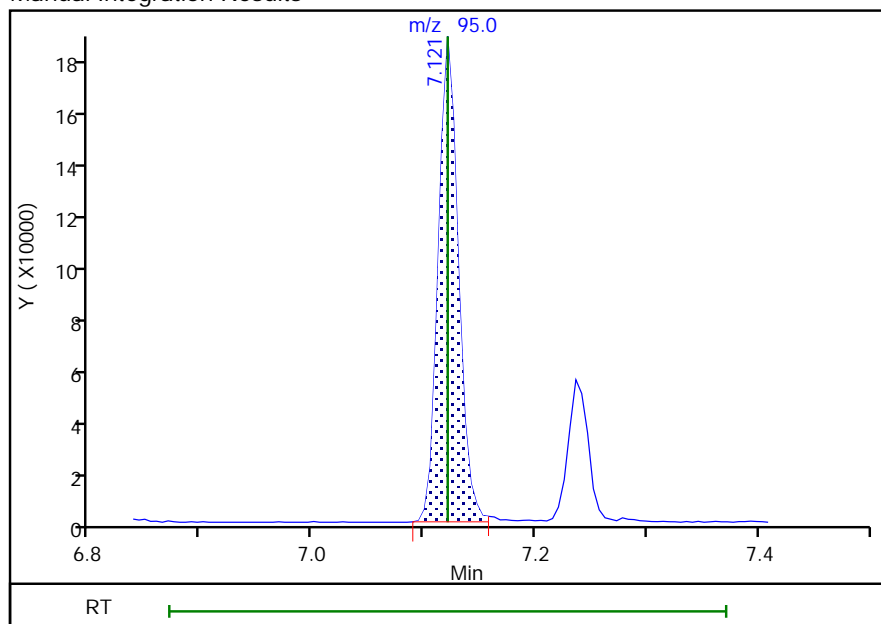
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 234761
Amount: 10.119641
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:01:08

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:57

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1111.D

Injection Date: 11-May-2020 13:38:30

Instrument ID: CMSU

Lims ID: icis

Client ID:

Operator ID: rd

ALS Bottle#:

11

Worklist Smp#:

11

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: U524.2

Limit Group:

524.2

Column: Rtx-624 (0.18 mm)

Detector

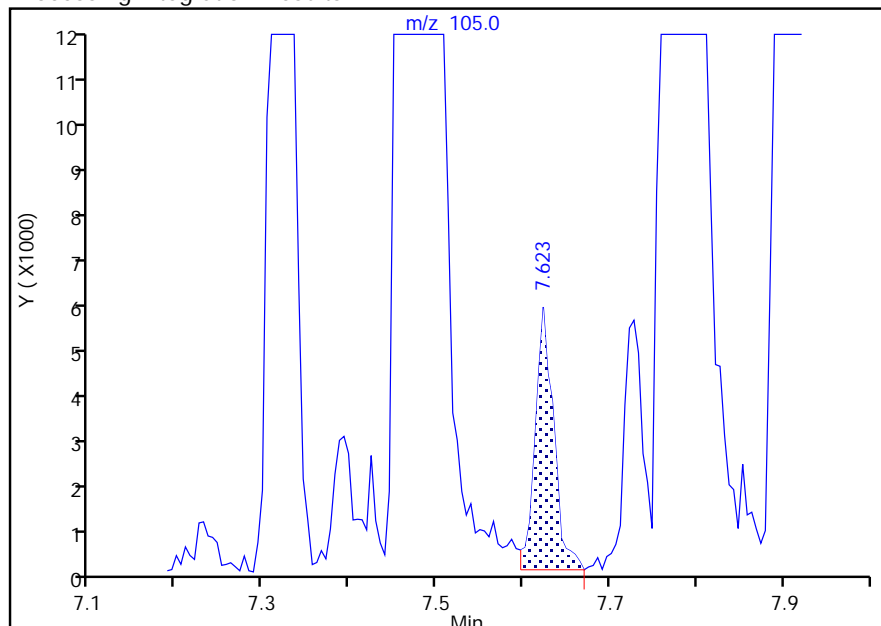
MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

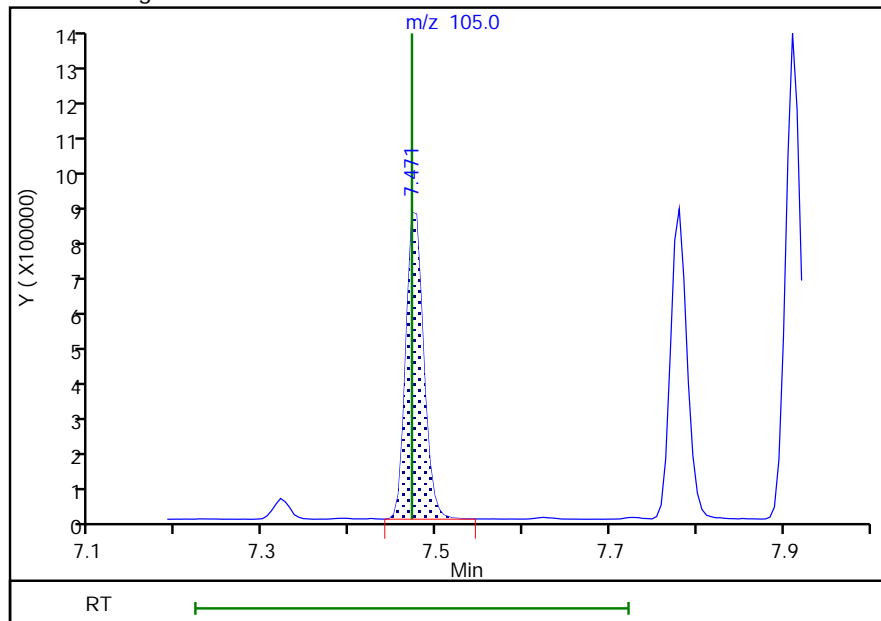
RT: 7.62
 Area: 7987
 Amount: 0.366383
 Amount Units: ug/l

Processing Integration Results



RT: 7.47
 Area: 1254043
 Amount: 18.907435
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:00:50

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:59

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1112.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 11-May-2020 13:59:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-012
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:09:59 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 14:18:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	96	1315875	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	532846	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	88	304217	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	255623	10.0	10.6	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	85	283515	10.0	9.84	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	981219	50.0	47.9	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	954007	50.0	46.0	
8 Chloromethane	50	1.253	1.253	0.000	74	946926	50.0	45.3	
10 Bromomethane	94	1.404	1.404	0.000	99	604864	50.0	48.9	
11 Chloroethane	64	1.457	1.457	0.000	99	573457	50.0	48.0	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	97	966333	50.0	44.1	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	96	756504	50.0	44.5	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	537952	50.0	41.0	
15 Acetone	58	1.896	1.896	0.000	86	273880	250.0	250.3	
16 Methylene Chloride	84	2.194	2.194	0.000	87	847463	50.0	45.4	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	680168	500.0	456.6	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	2259850	50.0	47.1	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	833262	50.0	46.5	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	1331270	50.0	46.1	
21 Isopropyl ether	45	2.681	2.681	0.000	94	1660227	40.0	38.6	
22 Tert-butyl ethyl ether	59	2.926	2.932	-0.006	89	1934144	40.0	38.2	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	480603	250.0	236.0	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	1213763	50.0	47.0	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	95	1212337	50.0	45.1	
26 Chlorobromomethane	130	3.225	3.225	0.000	80	591248	50.0	49.0	
27 Chloroform	83	3.287	3.293	-0.006	99	1454885	50.0	45.7	
28 1,1,1-Trichloroethane	97	3.408	3.413	-0.005	97	1321822	50.0	46.8	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	1200738	50.0	46.8	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	98	1139891	50.0	47.3	
31 Benzene	78	3.664	3.664	0.000	94	3496274	50.0	46.8	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	98	1049767	50.0	44.2	

Report Date: 12-May-2020 09:09:59

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1112.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	1752437	40.0	38.4	
34 Trichloroethene	132	4.135	4.135	0.000	95	982806	50.0	45.4	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	802577	50.0	46.1	a
36 Dibromomethane	93	4.386	4.386	0.000	90	537950	50.0	45.1	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	1122983	50.0	47.6	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	1344833	50.0	47.5	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	96	3770848	250.0	232.6	
40 Toluene	92	5.092	5.092	0.000	92	2252746	50.0	47.2	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	1249823	50.0	47.7	
42 1,1,2-Trichloroethane	83	5.421	5.426	-0.005	95	655039	50.0	45.1	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	915624	50.0	44.4	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	1284740	50.0	45.3	
45 2-Hexanone	43	5.589	5.589	0.000	95	2607196	250.0	240.0	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	990251	50.0	45.5	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	885342	50.0	47.3	
48 Chlorobenzene	112	6.190	6.190	0.000	97	2619236	50.0	46.3	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	965667	50.0	45.3	
50 Ethylbenzene	91	6.269	6.269	0.000	98	4416021	50.0	47.6	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	3427794	50.0	47.3	
52 o-Xylene	91	6.682	6.682	0.000	94	3537388	50.0	47.1	
53 Styrene	104	6.697	6.697	0.000	97	2881303	50.0	48.7	
54 Bromoform	173	6.844	6.844	0.000	99	751083	50.0	48.1	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	4528355	50.0	48.6	
56 Bromobenzene	156	7.231	7.231	0.000	90	1279634	50.0	45.1	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	1062596	50.0	49.6	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	326529	50.0	49.5	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	5209025	50.0	48.8	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	3040222	50.0	46.5	
61 1,3,5-Trimethylbenzene	105	7.472	7.471	0.001	93	3303104	50.0	47.5	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	97	3475724	50.0	47.3	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	3231518	50.0	48.4	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	3154392	50.0	48.6	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	4620083	50.0	48.8	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	2327938	50.0	46.9	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	3772148	50.0	49.2	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	2312040	50.0	45.2	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	2779640	50.0	51.1	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	2224962	50.0	45.5	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	92	289875	50.0	51.0	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	1077621	50.0	50.2	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	678352	50.0	50.1	
74 Naphthalene	128	9.930	9.930	0.000	99	2820207	50.0	51.2	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	1002905	50.0	50.3	
S 76 Xylenes, Total	1				0		100.0	94.4	
S 77 Trihalomethanes, Total	1				0			186.8	
S 78 1,3-Dichloropropene, Total	1				0		100.0	95.2	

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QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 5.00

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:59

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Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1112.D

Injection Date: 11-May-2020 13:59:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

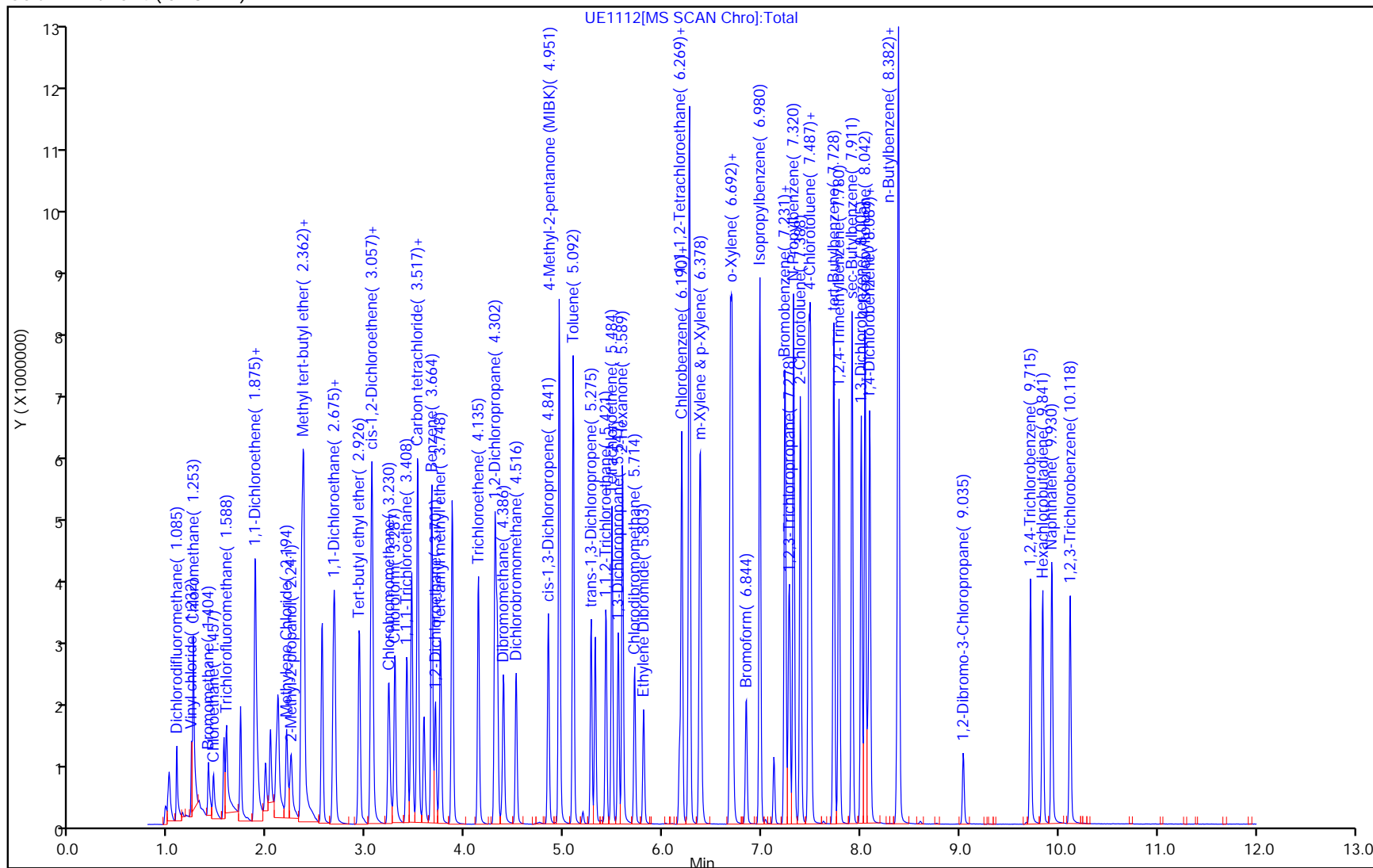
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:59

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

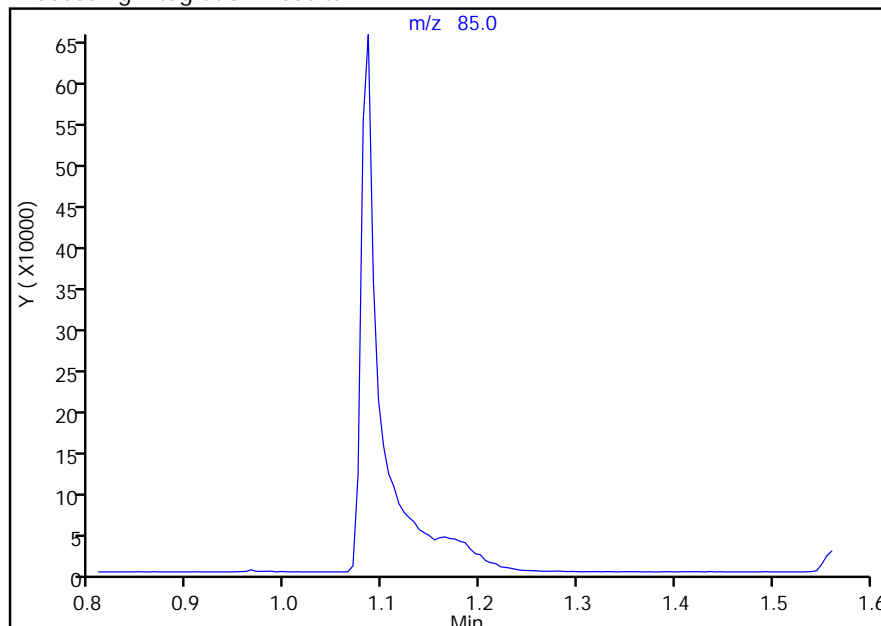
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Injection Date: 11-May-2020 13:59:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

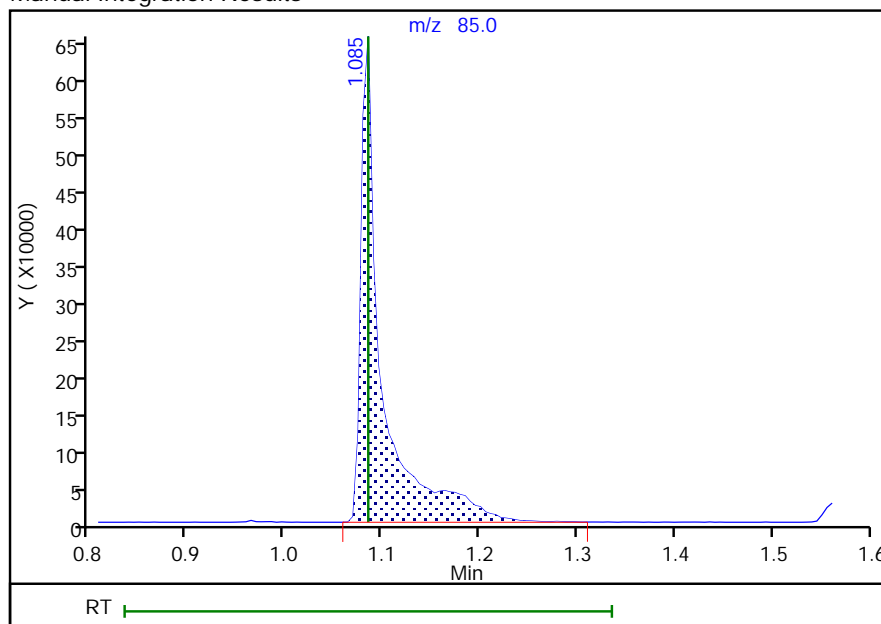
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 981219
Amount: 47.854829
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:17:28

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

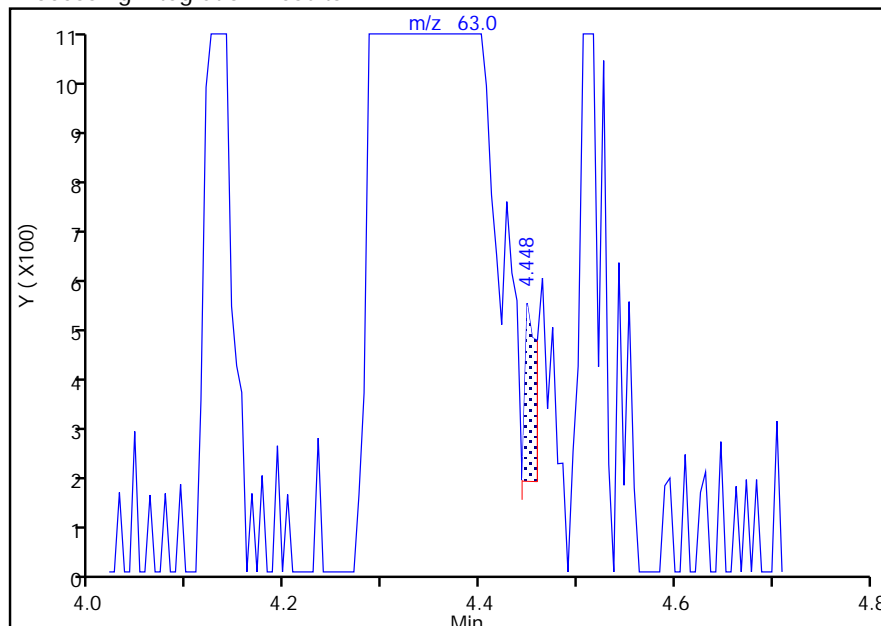
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1112.D		
Injection Date:	11-May-2020 13:59:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	12

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

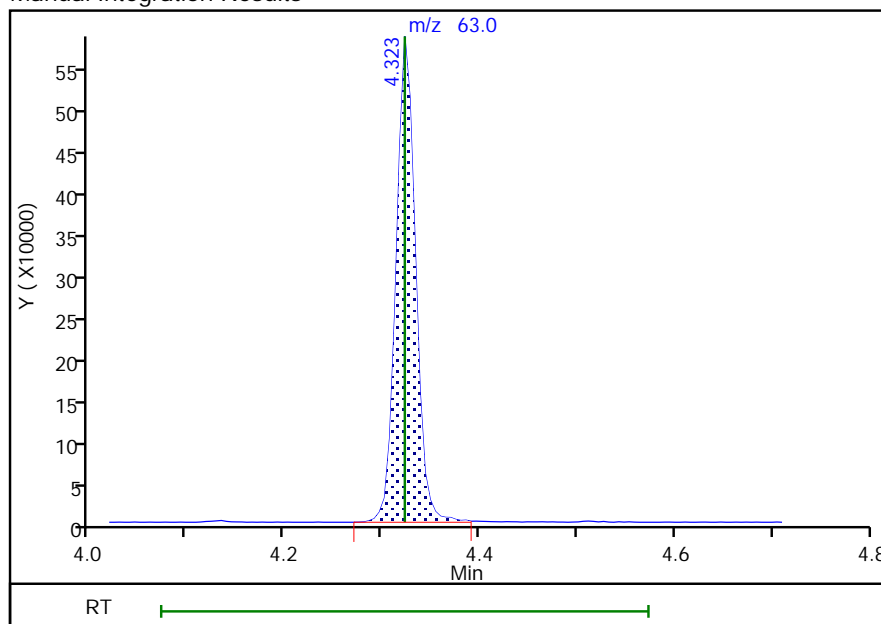
RT: 4.45
Area: 284
Amount: 0.019248
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 802577
Amount: 46.138702
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:17:35

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

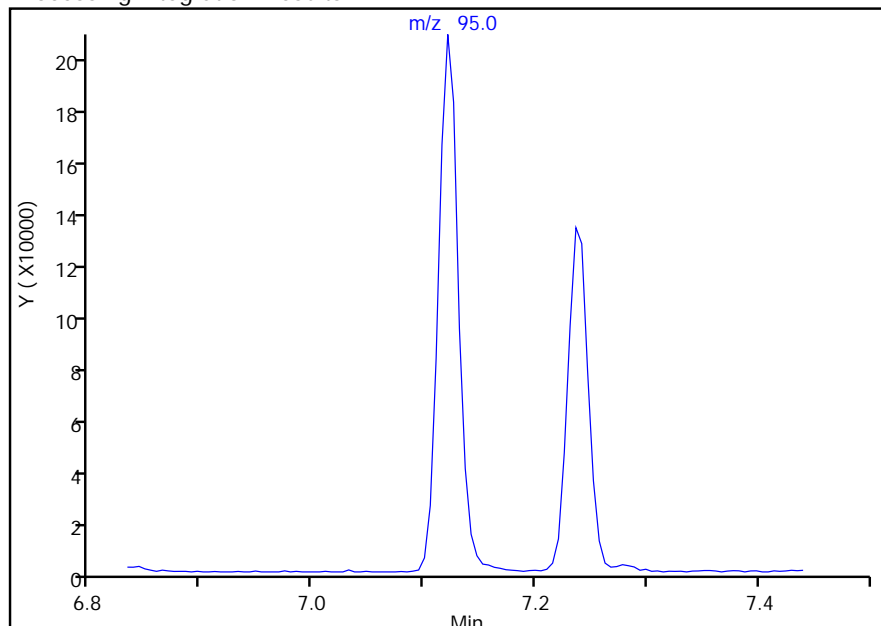
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Injection Date:	11-May-2020 13:59:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	12

§ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

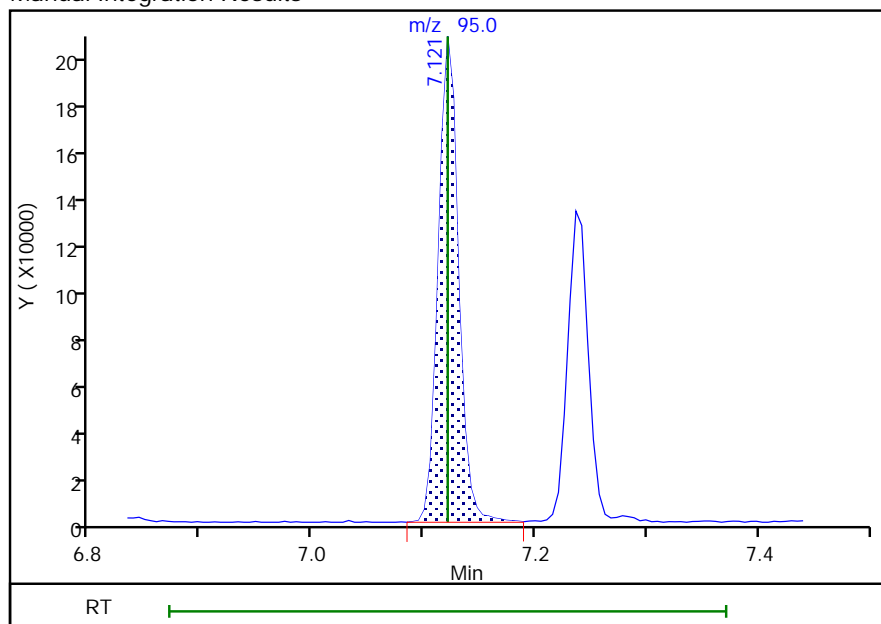
Not Detected
Expected RT: 7.12

Processing Integration Results



RT:	7.12
Area:	255623
Amount:	10.592769
Amount Units:	ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:17:25

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:59

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

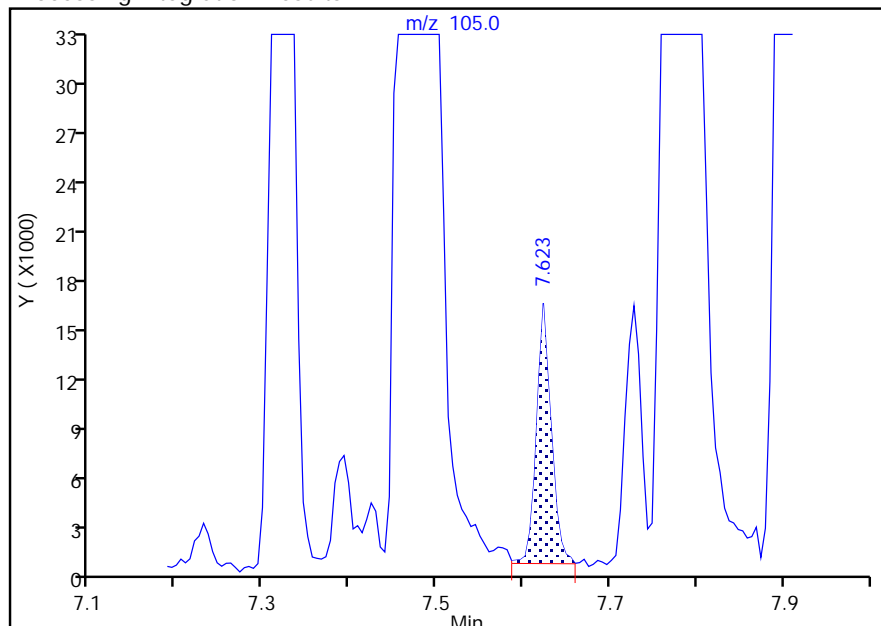
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1112.D
 Injection Date: 11-May-2020 13:59:30 Instrument ID: CMSU
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

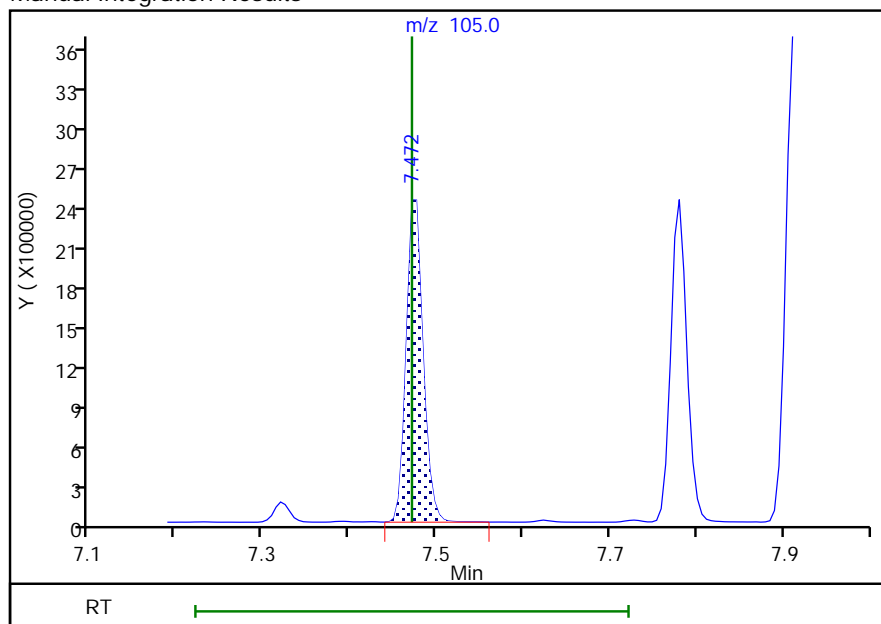
RT: 7.62
 Area: 18787
 Amount: 0.317889
 Amount Units: ug/l

Processing Integration Results



RT: 7.47
 Area: 3303104
 Amount: 47.544025
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:17:40

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 11-May-2020 14:19:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-013
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:10:02 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: proctors

Date: 11-May-2020 14:56:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1338525	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	535257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	83	306996	10.0	10.0	a
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	249021	10.0	10.1	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	86	284777	10.0	9.79	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	1974238	100.0	94.7	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	1922104	100.0	91.2	
8 Chloromethane	50	1.253	1.253	0.000	99	2401703	100.0	112.9	
10 Bromomethane	94	1.404	1.404	0.000	99	1251094	100.0	99.6	
11 Chloroethane	64	1.457	1.457	0.000	99	1138447	100.0	93.7	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	97	1888673	100.0	84.7	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	96	1490983	100.0	86.3	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	986249	100.0	73.8	
15 Acetone	58	1.896	1.896	0.000	87	464674	500.0	499.9	
16 Methylene Chloride	84	2.194	2.194	0.000	87	1725001	100.0	90.8	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	1404167	1000.0	926.6	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	4715531	100.0	96.5	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	1700003	100.0	93.3	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	2786458	100.0	94.8	
21 Isopropyl ether	45	2.681	2.681	0.000	96	3509227	80.0	80.2	
22 Tert-butyl ethyl ether	59	2.932	2.932	0.000	89	4076317	80.0	79.1	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	975186	500.0	470.8	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	2478319	100.0	94.4	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	95	2459068	100.0	90.0	
26 Chlorobromomethane	130	3.225	3.225	-0.001	80	1224860	100.0	99.8	
27 Chloroform	83	3.287	3.293	-0.006	100	2960414	100.0	91.4	
28 1,1,1-Trichloroethane	97	3.408	3.413	-0.005	97	2684869	100.0	94.6	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	2456675	100.0	95.3	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	98	2350536	100.0	97.0	
31 Benzene	78	3.664	3.664	0.000	94	7309734	100.0	97.5	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	98	2151387	100.0	90.1	

Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	3656548	80.0	78.7	
34 Trichloroethene	132	4.135	4.135	0.000	95	2019630	100.0	92.9	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	1637948	100.0	93.7	a
36 Dibromomethane	93	4.386	4.386	0.000	92	1093237	100.0	91.2	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	2328081	100.0	98.3	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	91	2844926	100.0	100.1	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	0.000	96	7849500	500.0	482.0	
40 Toluene	92	5.092	5.092	0.000	92	4728404	100.0	98.7	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	96	2650082	100.0	100.6	
42 1,1,2-Trichloroethane	83	5.421	5.426	-0.005	96	1332612	100.0	91.3	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	1865763	100.0	89.6	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	2663300	100.0	93.6	
45 2-Hexanone	43	5.589	5.589	0.000	95	5422504	500.0	494.6	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	2058397	100.0	93.7	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	1813765	100.0	96.4	
48 Chlorobenzene	112	6.190	6.190	0.000	97	5412945	100.0	95.3	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	1953179	100.0	90.7	
50 Ethylbenzene	91	6.269	6.269	-0.001	98	9127481	100.0	97.4	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	7048185	100.0	96.4	
52 o-Xylene	91	6.682	6.682	0.000	94	7288655	100.0	96.2	
53 Styrene	104	6.697	6.697	0.000	98	5986044	100.0	100.2	
54 Bromoform	173	6.844	6.844	0.000	99	1548442	100.0	98.2	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	9301781	100.0	98.9	
56 Bromobenzene	156	7.231	7.231	0.000	90	2581574	100.0	90.2	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	2118952	100.0	100.1	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	648755	100.0	100.1	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	10658962	100.0	98.9	e
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	6190650	100.0	93.8	
61 1,3,5-Trimethylbenzene	105	7.477	7.471	0.006	93	6838450	100.0	97.5	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	7122505	100.0	96.0	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	6605990	100.0	98.0	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	6472605	100.0	98.9	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	9531676	100.0	99.7	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	4696290	100.0	93.8	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	99	7781947	100.0	100.5	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	4738704	100.0	91.7	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	99	4479128	100.0	90.8	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	5769467	100.0	105.0	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	91	573742	100.0	100.3	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	2111282	100.0	100.0	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	1323176	100.0	100.0	
74 Naphthalene	128	9.930	9.930	0.000	99	5481860	100.0	98.8	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	1930826	100.0	99.9	
S 76 Xylenes, Total	1				0		200.0	192.6	
S 77 Trihalomethanes, Total	1				0			381.5	
S 78 1,3-Dichloropropene, Total	1				0		200.0	200.7	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 10.00

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D

Injection Date: 11-May-2020 14:19:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ic

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

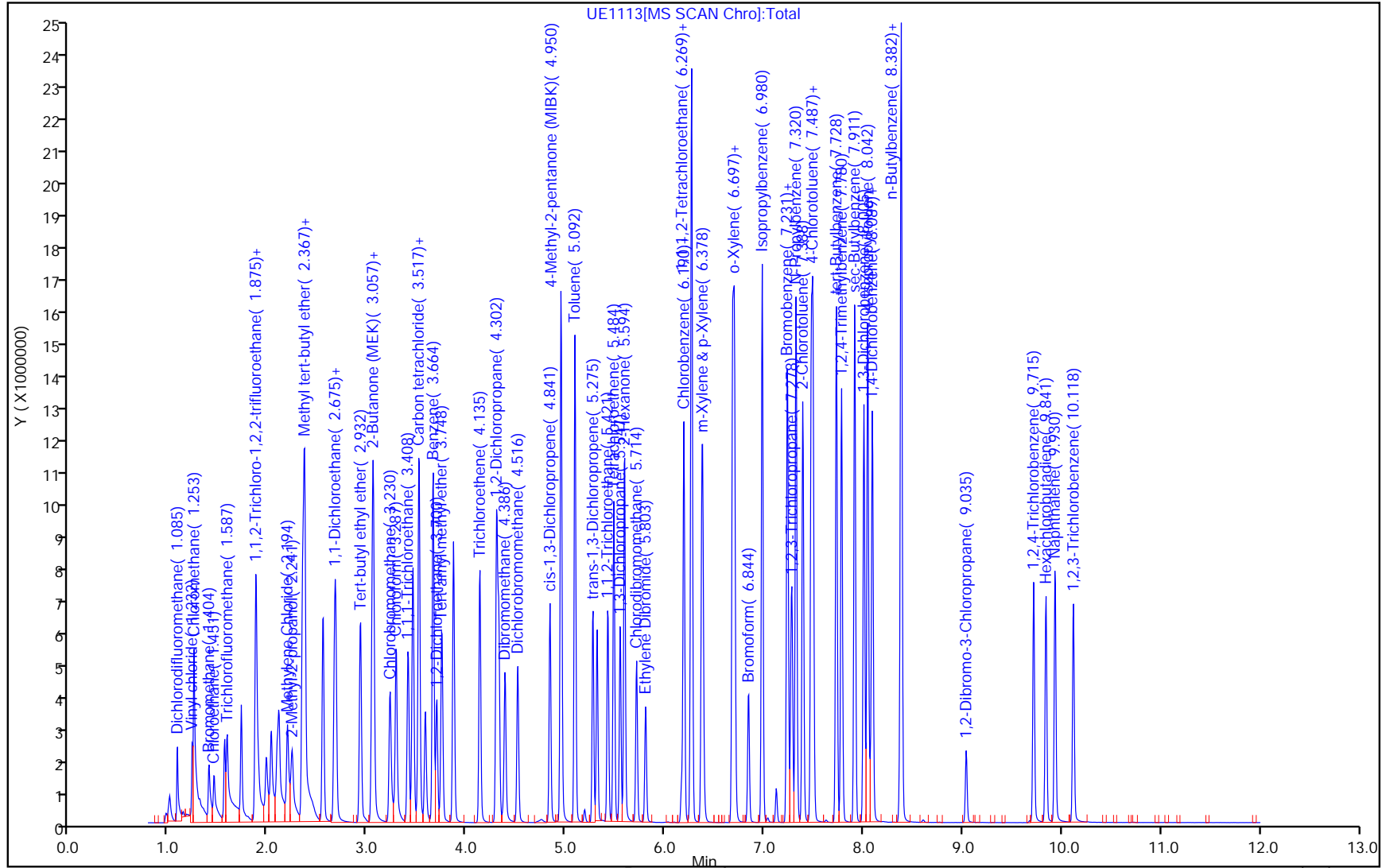
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

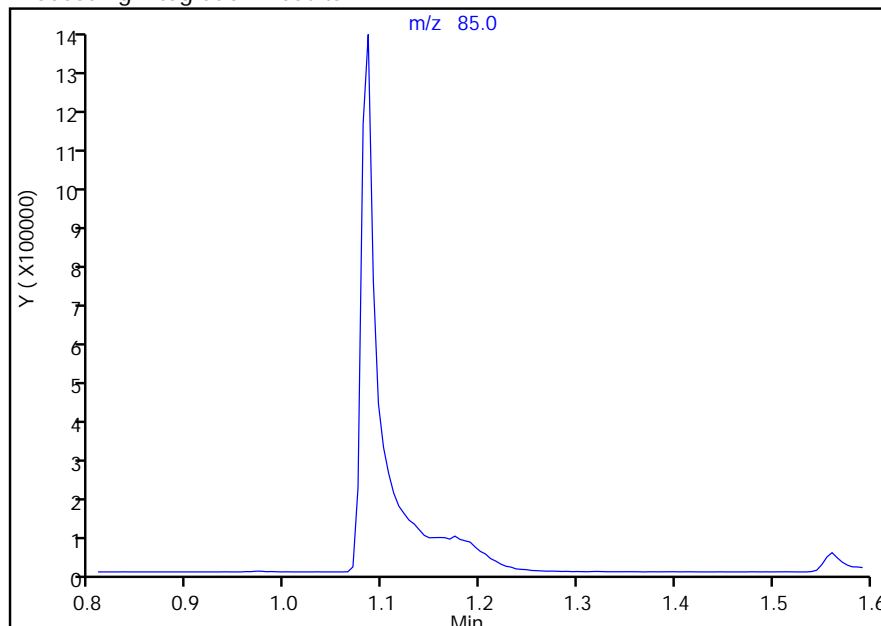
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D		
Injection Date:	11-May-2020 14:19:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

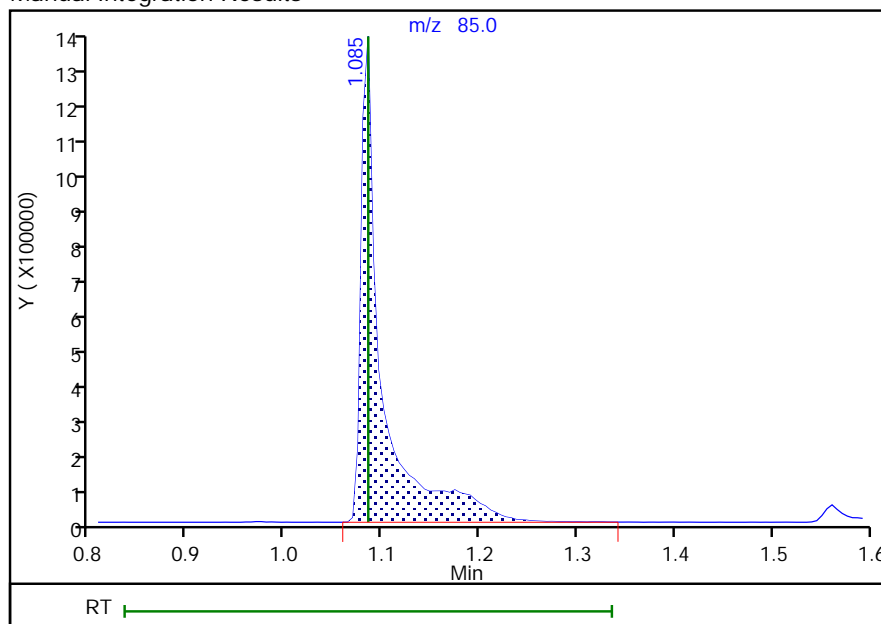
Not Detected
Expected RT: 1.09

Processing Integration Results



RT: 1.09
Area: 1974238
Amount: 94.655854
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:54:55

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

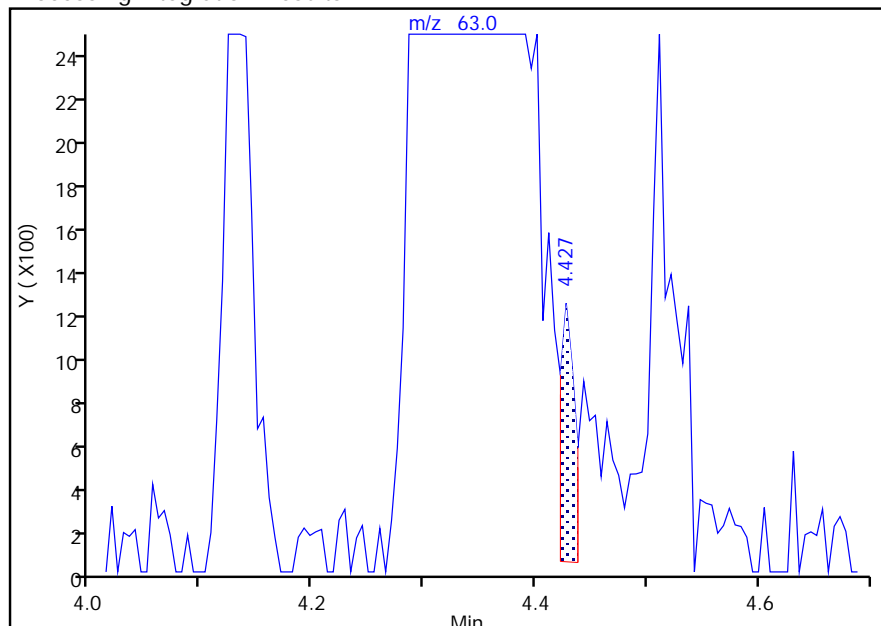
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D		
Injection Date:	11-May-2020 14:19:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	13

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

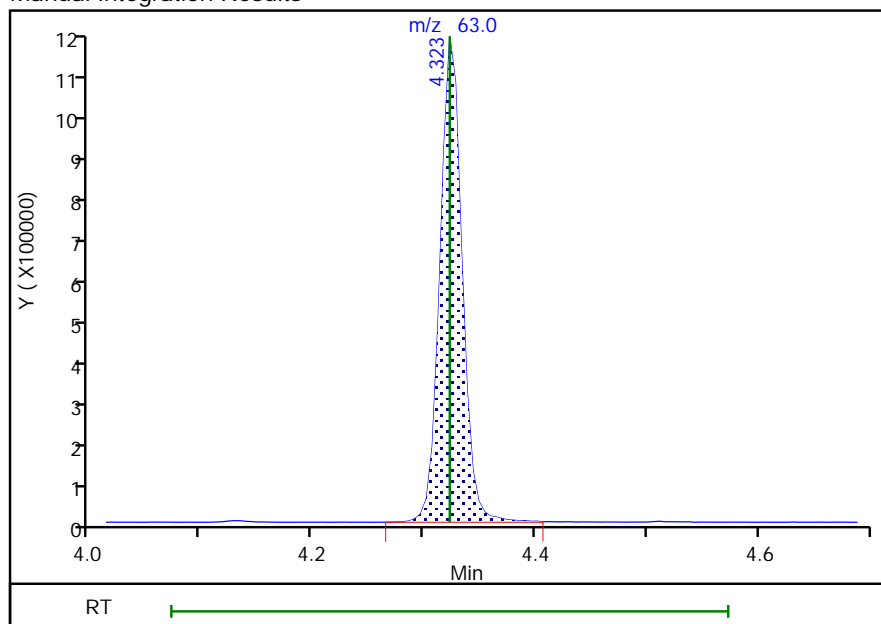
RT: 4.43
Area: 1062
Amount: 0.070870
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 1637948
Amount: 93.738528
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:55:25

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:10:03

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

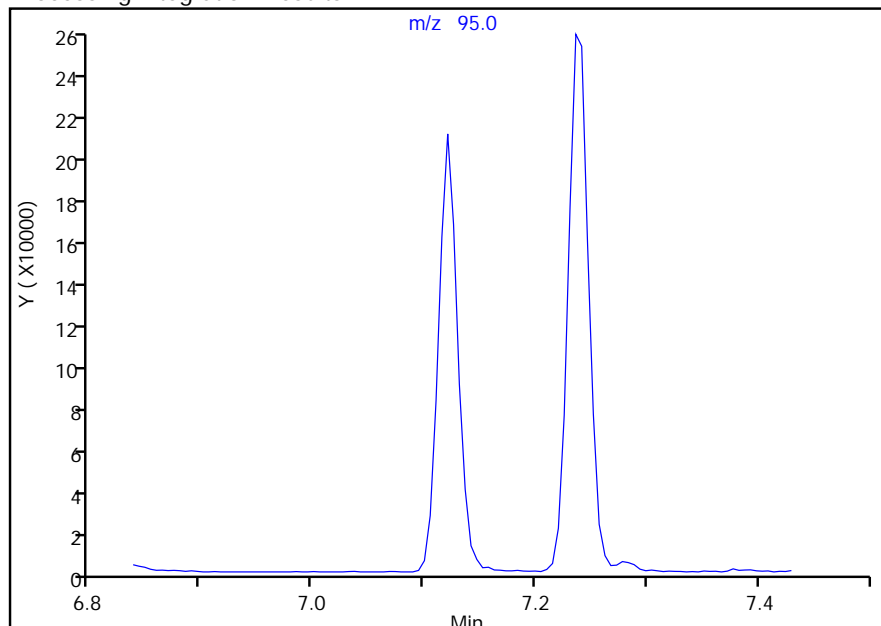
Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
Injection Date: 11-May-2020 14:19:30 Instrument ID: CMSU
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector MS SCAN

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

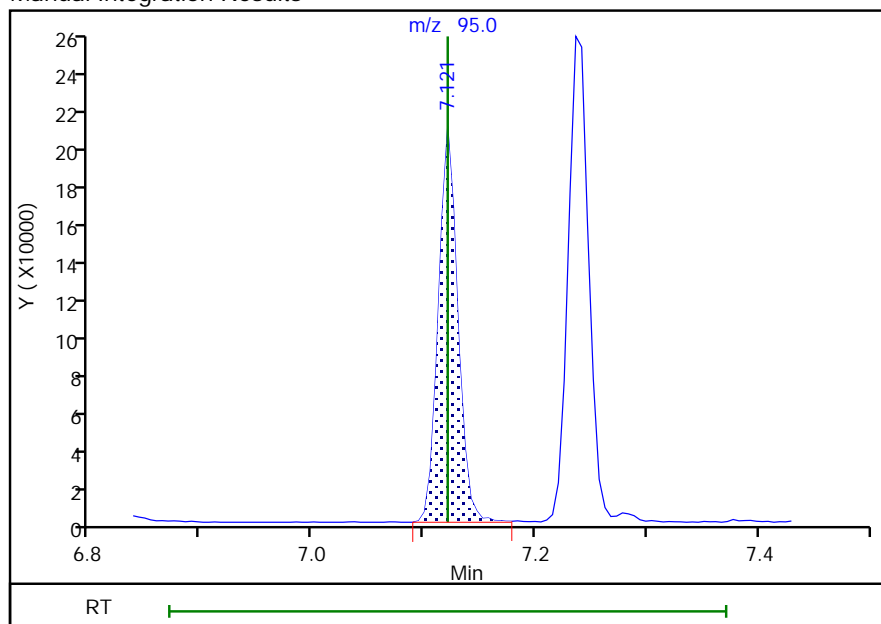
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 249021
Amount: 10.144571
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:54:52

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D

Injection Date: 11-May-2020 14:19:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

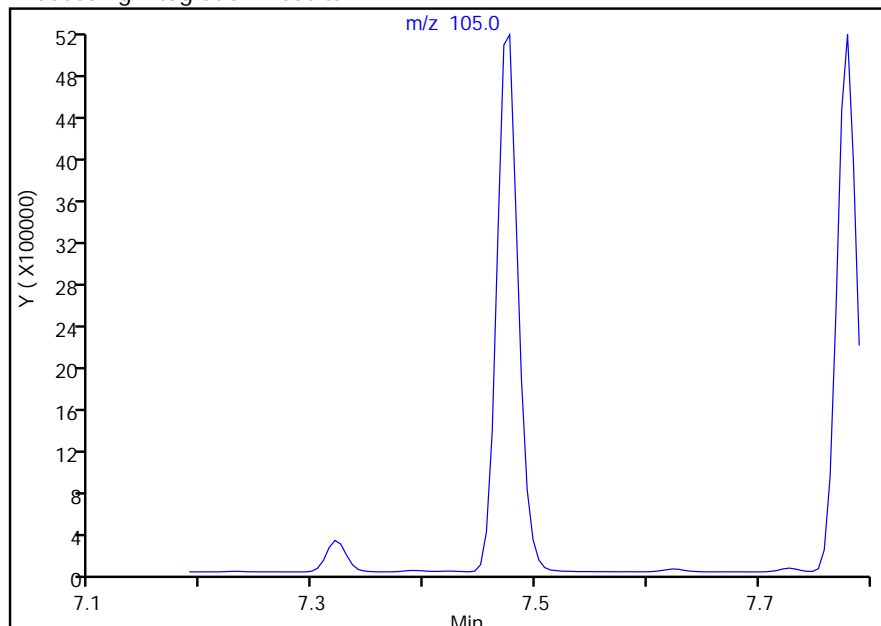
61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

Not Detected

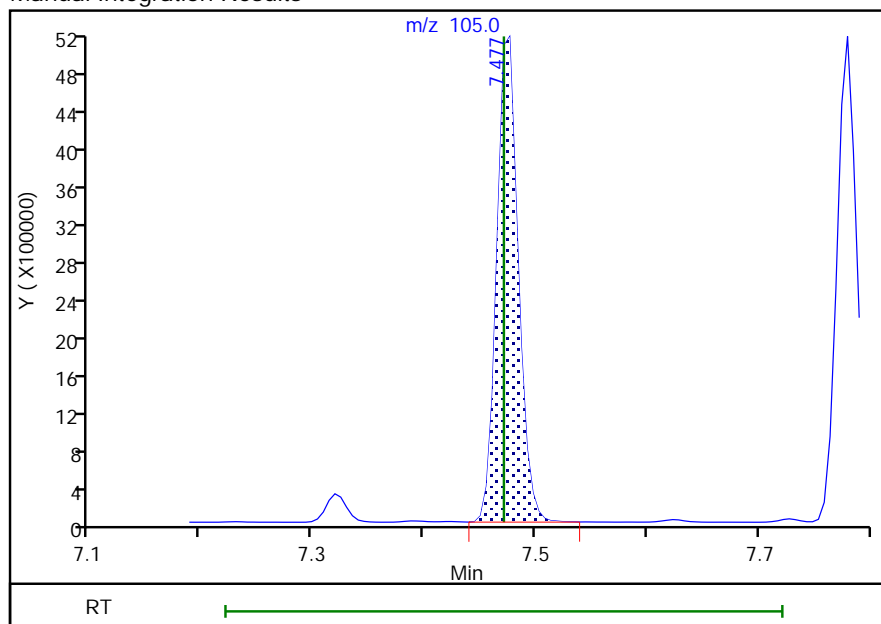
Expected RT: 7.47

Processing Integration Results



Manual Integration Results

RT: 7.48
 Area: 6838450
 Amount: 97.539862
 Amount Units: ug/l



Reviewer: proctors, 11-May-2020 14:55:30

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:10:03

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D

Injection Date: 11-May-2020 14:19:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: rd

ALS Bottle#:

13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

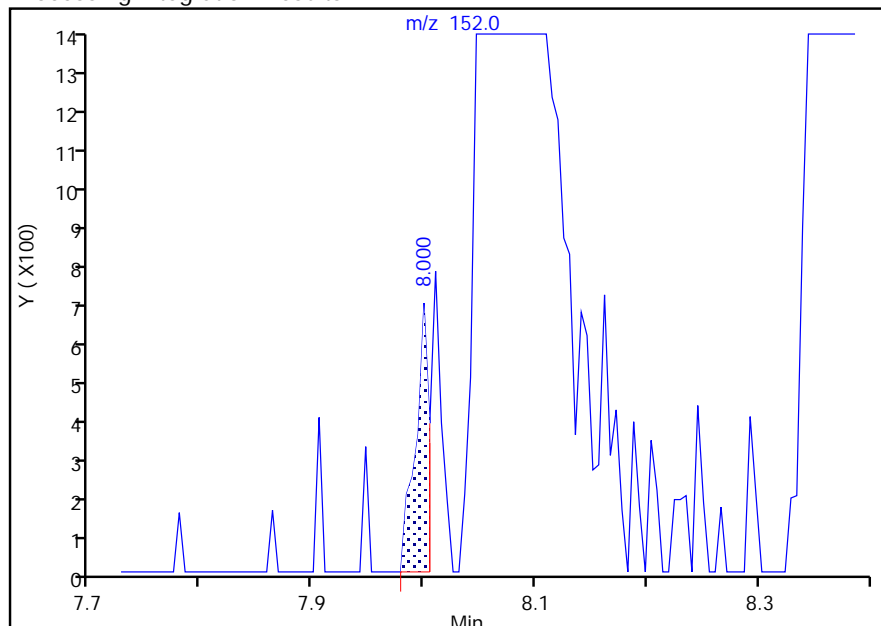
Detector: MS SCAN

* 3 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

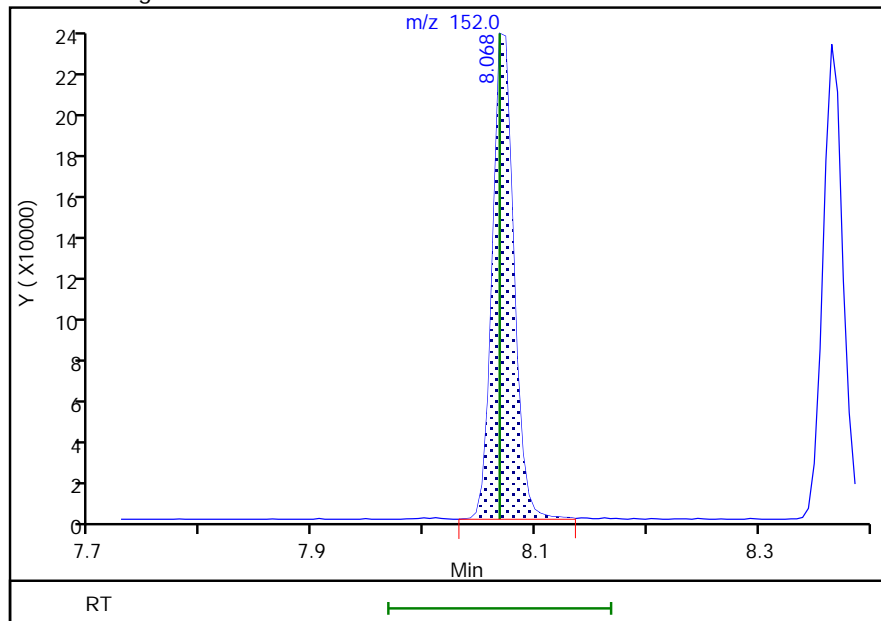
RT: 8.00
Area: 578
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results



RT: 8.07
Area: 306996
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 11-May-2020 14:55:46

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: ICV 680-618210/15 Calibration Date: 05/11/2020 14:59
 Instrument ID: CMSU Calib Start Date: 05/11/2020 11:58
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 05/11/2020 14:19
 Lab File ID: UE1115.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3116	0.2898		18.6	20.0	-7.0	30.0
Vinyl chloride	Ave	0.3150	0.2882		18.3	20.0	-8.5	30.0
Chloromethane	Ave	0.3179	0.3338		21.0	20.0	5.0	30.0
Bromomethane	Lin1		0.1983		21.0	20.0	5.0	30.0
Chloroethane	Ave	0.1816	0.1716		18.9	20.0	-5.5	30.0
Trichlorofluoromethane	Ave	0.3334	0.3253		19.5	20.0	-2.4	30.0
Freon 113	Ave	0.2581	0.2328		18.0	20.0	-9.8	30.0
1,1-Dichloroethene	Ave	0.1996	0.1873		18.8	20.0	-6.1	30.0
Acetone	Qua		0.0172		92.5	100	-7.5	30.0
Methylene Chloride	Ave	0.2840	0.2687		18.9	20.0	-5.4	30.0
tert-Butyl alcohol	Ave	0.0226	0.0224		197	200	-1.3	30.0
Methyl tert-butyl ether	Ave	0.7298	0.7269		19.9	20.0	-0.4	30.0
trans-1,2-Dichloroethene	Ave	0.2722	0.2537		18.6	20.0	-6.8	30.0
1,1-Dichloroethane	Ave	0.4393	0.4088		18.6	20.0	-6.9	30.0
2-Butanone (MEK)	Ave	0.0309	0.0296		95.6	100	-4.4	30.0
cis-1,2-Dichloroethene	Ave	0.3924	0.3596		18.3	20.0	-8.4	30.0
2,2-Dichloropropane	Ave	0.4081	0.3437		16.8	20.0	-15.8	30.0
Chlorobromomethane	Ave	0.1834	0.1585		17.3	20.0	-13.6	30.0
Chloroform	Ave	0.4842	0.4263		17.6	20.0	-12.0	30.0
1,1,1-Trichloroethane	Ave	0.5301	0.4608		17.4	20.0	-13.1	30.0
Carbon tetrachloride	Ave	0.4814	0.4132		17.2	20.0	-14.2	30.0
1,1-Dichloropropene	Ave	0.4526	0.3851		17.0	20.0	-14.9	30.0
Benzene	Ave	1.401	1.226		17.5	20.0	-12.4	30.0
1,2-Dichloroethane	Ave	0.4460	0.4066		18.2	20.0	-8.8	30.0
Trichloroethene	Ave	0.4061	0.3377		16.6	20.0	-16.8	30.0
1,2-Dichloropropane	Ave	0.3265	0.2800		17.2	20.0	-14.2	30.0
Dibromomethane	Ave	0.2238	0.2018		18.0	20.0	-9.8	30.0
Dichlorobromomethane	Ave	0.4426	0.4015		18.1	20.0	-9.3	30.0
cis-1,3-Dichloropropene	Ave	0.5309	0.4630		17.4	20.0	-12.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3043	0.2723		89.5	100	-10.5	30.0
Toluene	Ave	0.8954	0.7848		17.5	20.0	-12.3	30.0
trans-1,3-Dichloropropene	Ave	0.4920	0.4507		18.3	20.0	-8.4	30.0
1,1,2-Trichloroethane	Ave	0.2728	0.2503		18.4	20.0	-8.2	30.0
Tetrachloroethene	Ave	0.6782	0.5881		17.3	20.0	-13.3	30.0
1,3-Dichloropropane	Ave	0.5319	0.4751		17.9	20.0	-10.7	30.0
2-Hexanone	Ave	0.3572	0.3273		91.6	100	-8.4	30.0
Chlorodibromomethane	Ave	0.7159	0.6275		17.5	20.0	-12.4	30.0
Ethylene Dibromide	Ave	0.3516	0.3301		18.8	20.0	-6.1	30.0
Chlorobenzene	Ave	1.061	0.9396		17.7	20.0	-11.4	30.0
1,1,1,2-Tetrachloroethane	Ave	0.7014	0.6103		17.4	20.0	-13.0	30.0
Ethylbenzene	Ave	3.052	2.603		17.1	20.0	-14.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: ICV 680-618210/15 Calibration Date: 05/11/2020 14:59
 Instrument ID: CMSU Calib Start Date: 05/11/2020 11:58
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 05/11/2020 14:19
 Lab File ID: UE1115.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
m-Xylene & p-Xylene	Ave	2.381	2.041		17.1	20.0	-14.3	30.0
o-Xylene	Ave	2.467	2.174		17.6	20.0	-11.9	30.0
Styrene	Ave	1.946	1.835		18.9	20.0	-5.7	30.0
Bromoform	Ave	0.5136	0.4798		18.7	20.0	-6.6	30.0
Isopropylbenzene	Ave	3.065	2.671		17.4	20.0	-12.9	30.0
Bromobenzene	Ave	0.9320	0.8618		18.5	20.0	-7.5	30.0
1,1,2,2-Tetrachloroethane	QuaF		0.7181		20.2	20.0	0.8	30.0
1,2,3-Trichloropropane	QuaF		0.2234		20.3	20.0	1.5	30.0
N-Propylbenzene	Ave	3.511	3.128		17.8	20.0	-10.9	30.0
2-Chlorotoluene	Ave	2.151	1.854		17.2	20.0	-13.8	30.0
1,3,5-Trimethylbenzene	Ave	2.284	1.960		17.2	20.0	-14.2	30.0
4-Chlorotoluene	Ave	2.417	2.088		17.3	20.0	-13.6	30.0
tert-Butylbenzene	Ave	2.196	1.925		17.5	20.0	-12.3	30.0
1,2,4-Trimethylbenzene	Ave	2.131	1.893		17.8	20.0	-11.2	30.0
sec-Butylbenzene	Ave	3.114	2.623		16.8	20.0	-15.8	30.0
1,3-Dichlorobenzene	Ave	1.632	1.444		17.7	20.0	-11.5	30.0
4-Isopropyltoluene	Ave	2.521	2.212		17.5	20.0	-12.3	30.0
1,4-Dichlorobenzene	Ave	1.683	1.472		17.5	20.0	-12.6	30.0
1,2-Dichlorobenzene	Ave	1.607	1.402		17.4	20.0	-12.8	30.0
n-Butylbenzene	Ave	1.789	1.577		17.6	20.0	-11.9	30.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1804		19.2	20.0	-4.0	30.0
1,2,4-Trichlorobenzene	Qua		0.6285		17.5	20.0	-12.4	30.0
Hexachlorobutadiene	Qua		0.4328		19.0	20.0	-5.1	30.0
Naphthalene	Lin1		1.720		18.9	20.0	-5.7	30.0
1,2,3-Trichlorobenzene	Qua		0.6316		18.8	20.0	-6.1	30.0
4-Bromofluorobenzene	Ave	0.3668	0.3705		10.1	10.0	1.0	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9472	0.9132		9.64	10.0	-3.6	30.0

Report Date: 12-May-2020 09:09:33

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1115.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 11-May-2020 14:59:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-015
 Operator ID: rd Instrument ID: CMSU
 Sublist:
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:05:09 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: bryand

Date: 11-May-2020 15:23:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1110446	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	455823	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	89	258845	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	205705	10.0	10.1	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	236388	10.0	9.64	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	321761	20.0	18.6	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	320073	20.0	18.3	
8 Chloromethane	50	1.253	1.253	0.000	72	370629	20.0	21.0	
10 Bromomethane	94	1.404	1.404	0.000	98	220245	20.0	21.0	
11 Chloroethane	64	1.457	1.457	0.000	99	190555	20.0	18.9	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	98	361260	20.0	19.5	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	97	258503	20.0	18.0	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	208004	20.0	18.8	
15 Acetone	58	1.896	1.896	0.000	87	95367	100.0	92.5	
16 Methylene Chloride	84	2.194	2.194	0.000	86	298362	20.0	18.9	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	248189	200.0	197.4	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	807178	20.0	19.9	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	281675	20.0	18.6	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	453923	20.0	18.6	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	164195	100.0	95.6	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	399349	20.0	18.3	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	381688	20.0	16.8	
26 Chlorobromomethane	130	3.225	3.225	0.000	80	175949	20.0	17.3	
27 Chloroform	83	3.287	3.293	-0.006	99	473326	20.0	17.6	
28 1,1,1-Trichloroethane	97	3.413	3.413	0.000	98	420086	20.0	17.4	
29 Carbon tetrachloride	117	3.517	3.517	0.000	96	376722	20.0	17.2	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	98	351076	20.0	17.0	
31 Benzene	78	3.664	3.664	0.000	95	1118042	20.0	17.5	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	98	370699	20.0	18.2	
34 Trichloroethene	132	4.135	4.135	0.000	95	307854	20.0	16.6	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	255233	20.0	17.2	a

Report Date: 12-May-2020 09:09:33

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1115.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	91	183962	20.0	18.0	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	366040	20.0	18.1	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	93	422119	20.0	17.4	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.001	96	1241045	100.0	89.5	
40 Toluene	92	5.092	5.092	0.000	93	715477	20.0	17.5	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	410843	20.0	18.3	
42 1,1,2-Trichloroethane	83	5.421	5.426	-0.005	95	228226	20.0	18.4	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	304449	20.0	17.3	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	93	433132	20.0	17.9	
45 2-Hexanone	43	5.594	5.589	0.005	95	847225	100.0	91.6	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	324854	20.0	17.5	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	300927	20.0	18.8	
48 Chlorobenzene	112	6.190	6.190	0.000	97	856560	20.0	17.7	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	315942	20.0	17.4	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1347511	20.0	17.1	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	1056424	20.0	17.1	
52 o-Xylene	91	6.682	6.682	0.000	95	1125604	20.0	17.6	
53 Styrene	104	6.697	6.697	0.000	97	950129	20.0	18.9	
54 Bromoform	173	6.844	6.844	0.000	98	248386	20.0	18.7	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1382826	20.0	17.4	
56 Bromobenzene	156	7.231	7.231	0.000	88	446132	20.0	18.5	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	97	371771	20.0	20.2	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	97	115645	20.0	20.3	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1619145	20.0	17.8	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	959669	20.0	17.2	
61 1,3,5-Trimethylbenzene	105	7.477	7.471	0.006	93	1014719	20.0	17.2	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	1080735	20.0	17.3	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	996700	20.0	17.5	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	979770	20.0	17.8	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1357895	20.0	16.8	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	747664	20.0	17.7	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1145258	20.0	17.5	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	761853	20.0	17.5	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	816517	20.0	17.6	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	91	726054	20.0	17.4	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	93369	20.0	19.2	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	325355	20.0	17.5	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	224029	20.0	19.0	
74 Naphthalene	128	9.935	9.930	0.005	99	890653	20.0	18.9	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	326959	20.0	18.8	
S 76 Xylenes, Total	1				0		40.0	34.8	
S 78 1,3-Dichloropropene, Total	1				0		40.0	35.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix2nd_00123

Amount Added: 2.00

Units: uL

524 ISSU/2016_00090

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 12-May-2020 09:09:33

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1115.D

Injection Date: 11-May-2020 14:59:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: icv

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

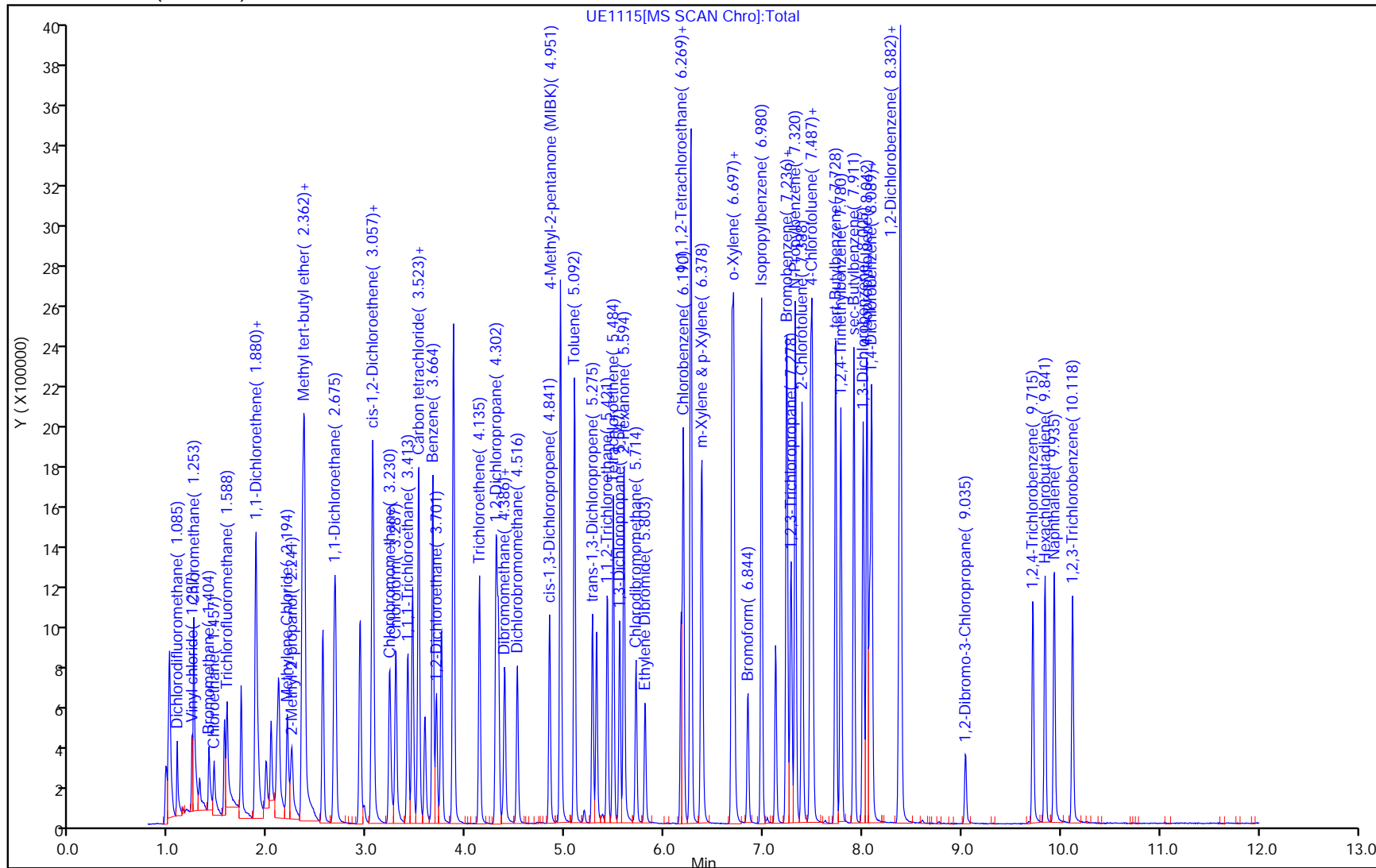
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 12-May-2020 09:09:33

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

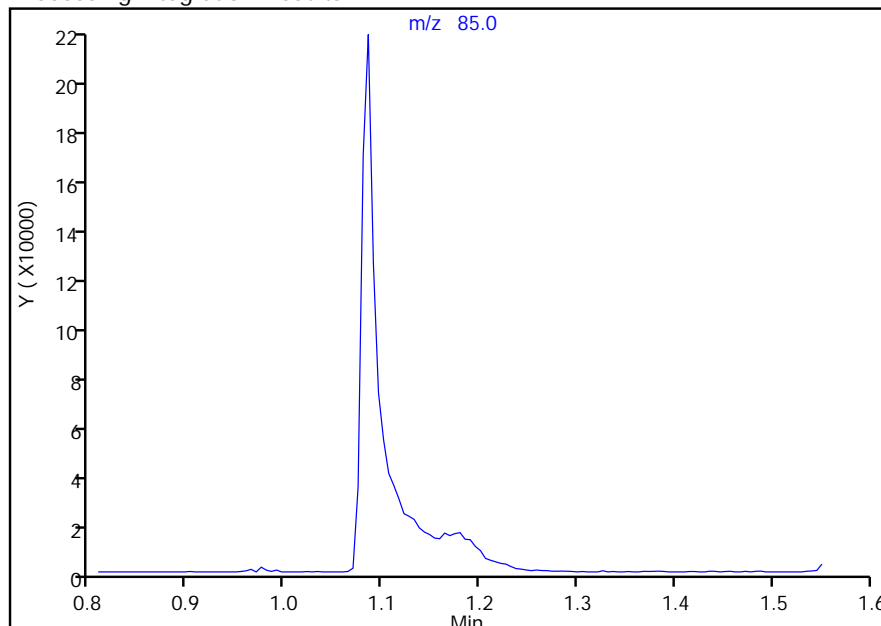
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Injection Date: 11-May-2020 14:59:30 Instrument ID: CMSU
Lims ID: icv
Client ID:
Operator ID: rd ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

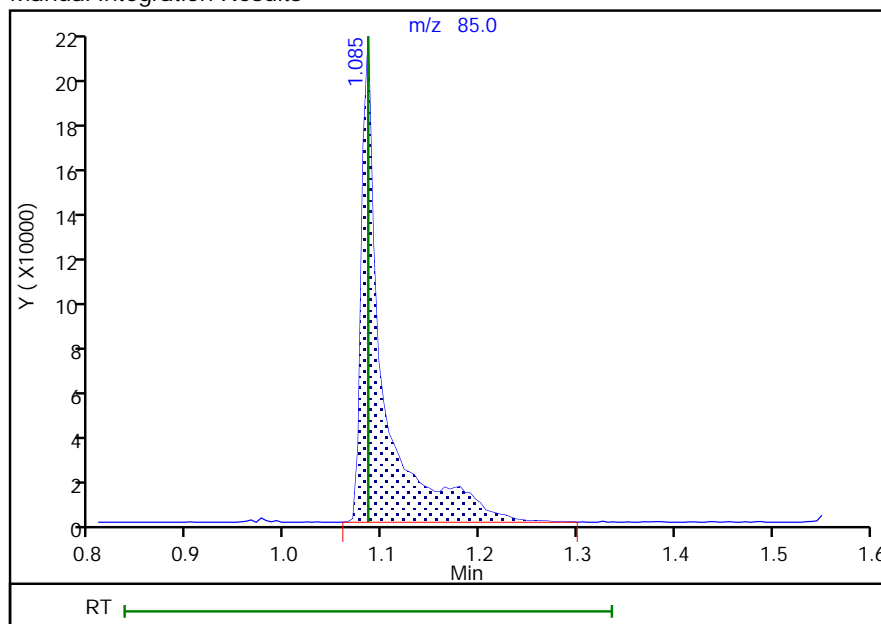
Signal: 1

Not Detected
Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 321761
Amount: 18.595609
Amount Units: ug/l

Manual Integration Results



Reviewer: bryand, 11-May-2020 15:23:24

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 12-May-2020 09:09:33

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

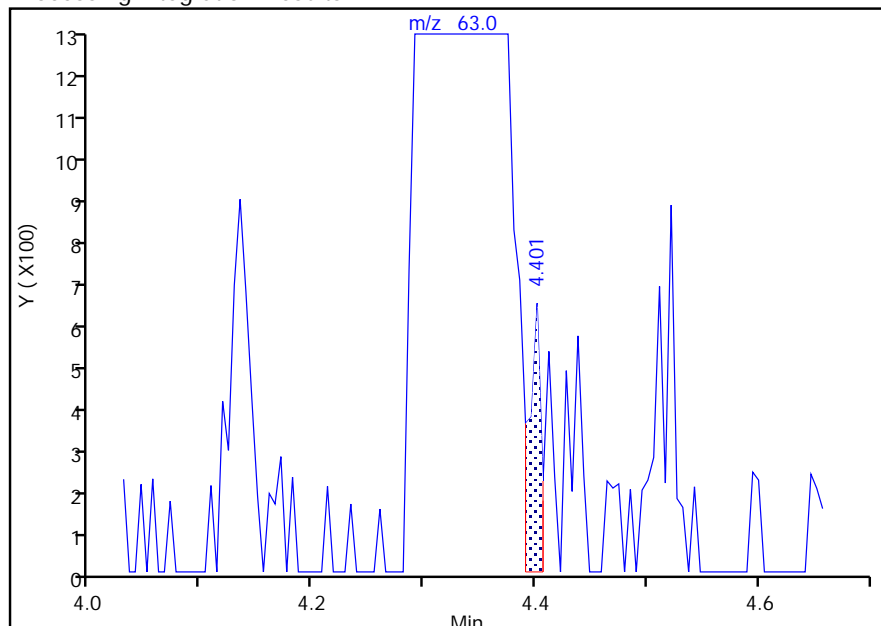
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Injection Date:	11-May-2020 14:59:30	Instrument ID:	CMSU
Lims ID:	icv		
Client ID:			
Operator ID:	rd	ALS Bottle#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	15

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

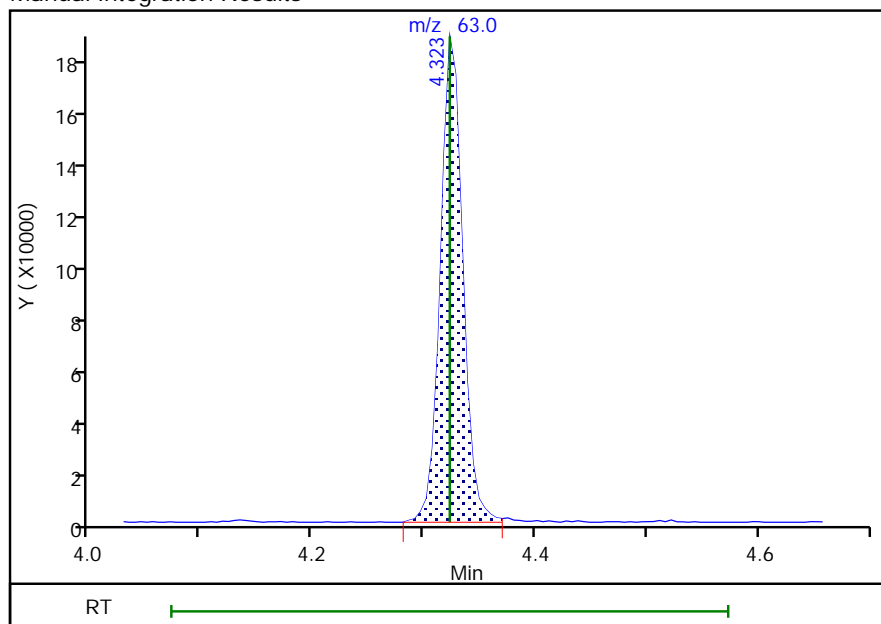
RT: 4.40
Area: 497
Amount: 0.033400
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 255233
Amount: 17.152245
Amount Units: ug/l

Manual Integration Results



Reviewer: bryand, 11-May-2020 15:23:29

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:33

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

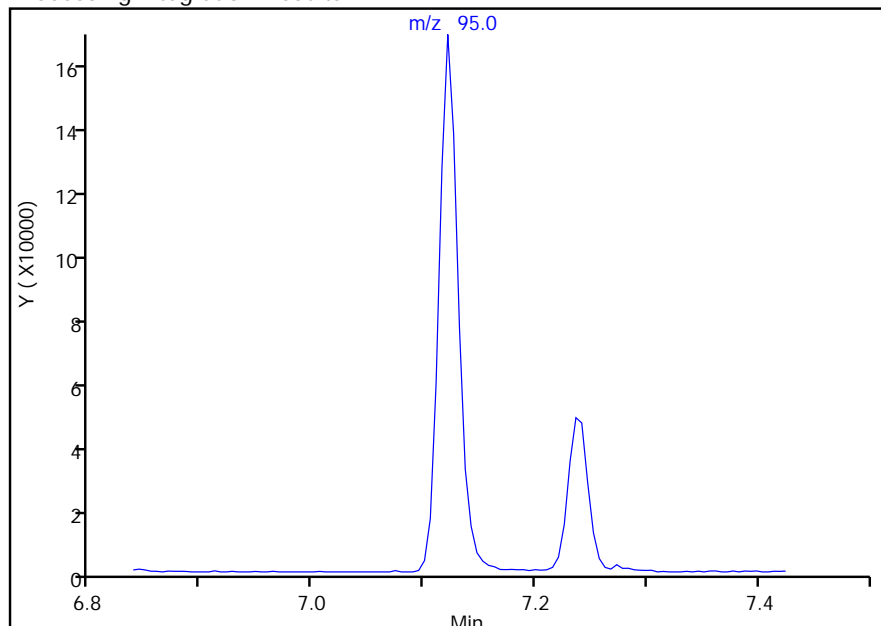
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Injection Date:	11-May-2020 14:59:30	Instrument ID:	CMSU
Lims ID:	icv		
Client ID:			
Operator ID:	rd	ALS Bottle#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	15

\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

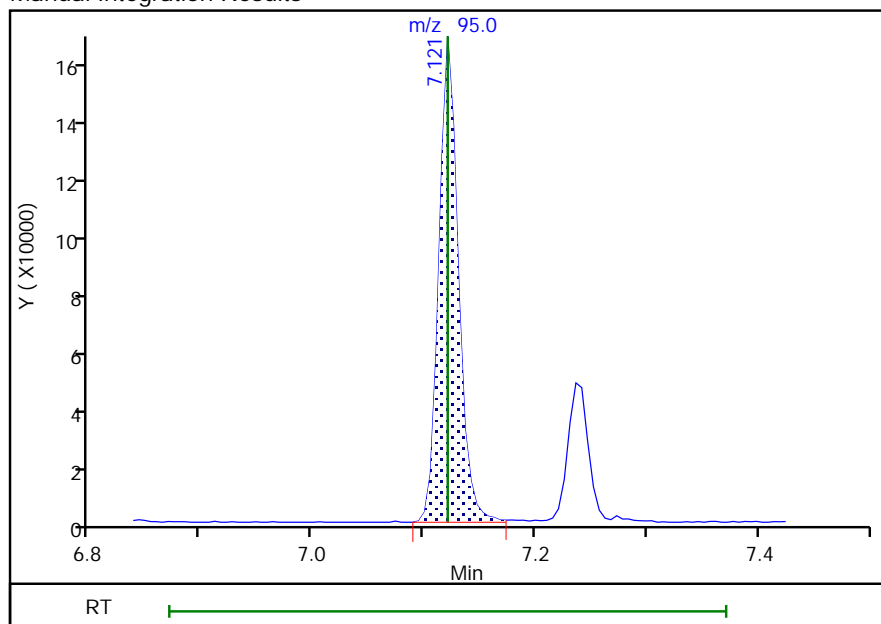
Not Detected
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
Area: 205705
Amount: 10.101168
Amount Units: ug/l



Reviewer: bryand, 11-May-2020 15:23:21

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 12-May-2020 09:09:33

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

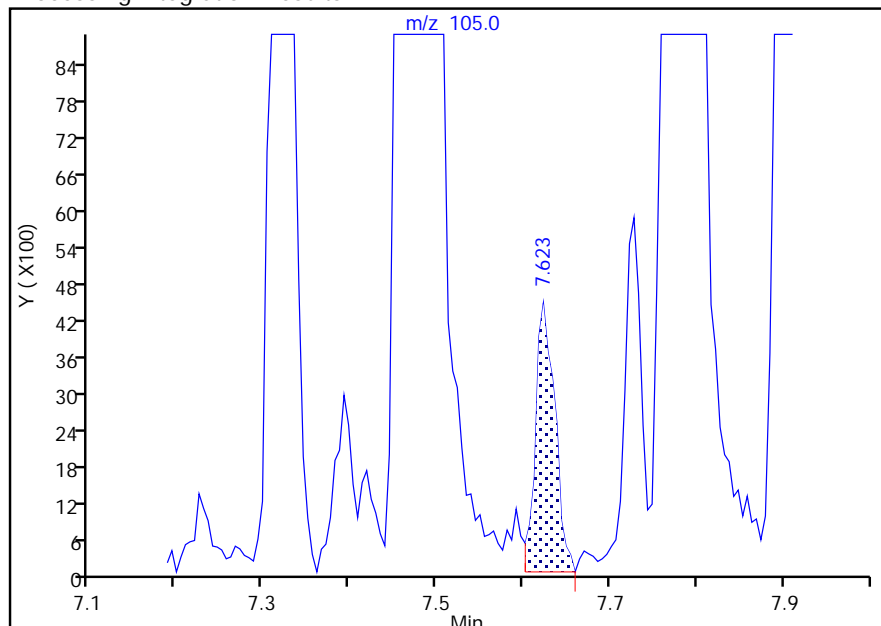
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Injection Date:	11-May-2020 14:59:30	Instrument ID:	CMSU
Lims ID:	icv		
Client ID:			
Operator ID:	rd	ALS Bottle#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	15

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

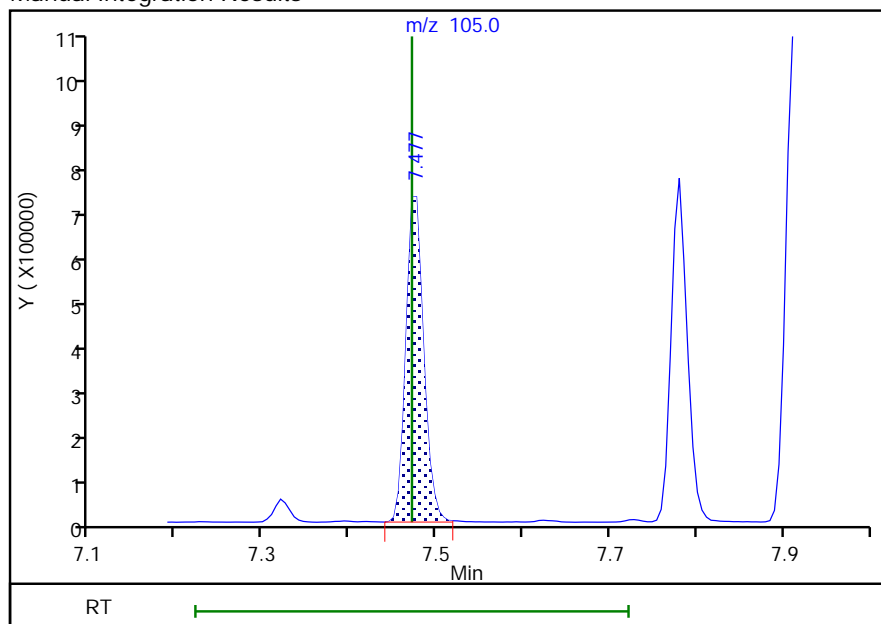
RT: 7.62
Area: 6865
Amount: 0.116134
Amount Units: ug/l

Processing Integration Results



RT: 7.48
Area: 1014719
Amount: 17.165766
Amount Units: ug/l

Manual Integration Results



Reviewer: bryand, 11-May-2020 15:23:35

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-618502/3 Calibration Date: 05/13/2020 10:36
 Instrument ID: CMSU Calib Start Date: 05/11/2020 11:58
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 05/11/2020 14:19
 Lab File ID: UE1303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3116	0.2358		15.1	20.0	-24.3	30.0
Vinyl chloride	Ave	0.3150	0.2471		15.7	20.0	-21.5	30.0
Chloromethane	Ave	0.3179	0.2855		18.0	20.0	-10.2	30.0
Bromomethane	Lin1		0.1568		16.6	20.0	-17.2	30.0
Chloroethane	Ave	0.1816	0.1478		16.3	20.0	-18.6	30.0
Trichlorofluoromethane	Ave	0.3334	0.3035		18.2	20.0	-9.0	30.0
Freon 113	Ave	0.2581	0.1819		14.1	20.0	-29.5	30.0
1,1-Dichloroethene	Ave	0.1996	0.1816		18.2	20.0	-9.0	30.0
Acetone	Qua		0.0164		87.9	100	-12.1	30.0
Methylene Chloride	Ave	0.2840	0.2404		16.9	20.0	-15.4	30.0
tert-Butyl alcohol	Ave	0.0226	0.0190		168	200	-16.2	30.0
Methyl tert-butyl ether	Ave	0.7298	0.6175		16.9	20.0	-15.4	30.0
trans-1,2-Dichloroethene	Ave	0.2722	0.2178		16.0	20.0	-20.0	30.0
1,1-Dichloroethane	Ave	0.4393	0.3635		16.5	20.0	-17.3	30.0
Diisopropyl ether	Ave	0.6541	0.5800		14.2	16.0	-11.3	30.0
Tert-butyl ethyl ether	Ave	0.7702	0.6655		13.8	16.0	-13.6	30.0
2-Butanone (MEK)	Ave	0.0309	0.0257		83.0	100	-17.0	30.0
cis-1,2-Dichloroethene	Ave	0.3924	0.3234		16.5	20.0	-17.6	30.0
2,2-Dichloropropane	Ave	0.4081	0.3216		15.8	20.0	-21.2	30.0
Chlorobromomethane	Ave	0.1834	0.1302		14.2	20.0	-29.0	30.0
Chloroform	Ave	0.4842	0.3940		16.3	20.0	-18.6	30.0
1,1,1-Trichloroethane	Ave	0.5301	0.4092		15.4	20.0	-22.8	30.0
Carbon tetrachloride	Ave	0.4814	0.3586		14.9	20.0	-25.5	30.0
1,1-Dichloropropene	Ave	0.4526	0.3568		15.8	20.0	-21.2	30.0
Benzene	Ave	1.401	1.153		16.5	20.0	-17.7	30.0
1,2-Dichloroethane	Ave	0.4460	0.3608		16.2	20.0	-19.1	30.0
Tert-amyl methyl ether	Ave	0.6942	0.6053		14.0	16.0	-12.8	30.0
Trichloroethene	Ave	0.4061	0.3196		15.7	20.0	-21.3	30.0
1,2-Dichloropropane	Ave	0.3265	0.2812		17.2	20.0	-13.9	30.0
Dibromomethane	Ave	0.2238	0.1870		16.7	20.0	-16.5	30.0
Dichlorobromomethane	Ave	0.4426	0.3763		17.0	20.0	-15.0	30.0
cis-1,3-Dichloropropene	Ave	0.5309	0.4612		17.4	20.0	-13.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3043	0.2459		80.8	100	-19.2	30.0
Toluene	Ave	0.8954	0.7430		16.6	20.0	-17.0	30.0
trans-1,3-Dichloropropene	Ave	0.4920	0.4239		17.2	20.0	-13.8	30.0
1,1,2-Trichloroethane	Ave	0.2728	0.2263		16.6	20.0	-17.0	30.0
Tetrachloroethene	Ave	0.6782	0.5265		15.5	20.0	-22.4	30.0
1,3-Dichloropropane	Ave	0.5319	0.4469		16.8	20.0	-16.0	30.0
2-Hexanone	Ave	0.3572	0.3059		85.6	100	-14.4	30.0
Chlorodibromomethane	Ave	0.7159	0.6096		17.0	20.0	-14.9	30.0
Ethylene Dibromide	Ave	0.3516	0.3006		17.1	20.0	-14.5	30.0

FORM VII 524.2

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-618502/3 Calibration Date: 05/13/2020 10:36
 Instrument ID: CMSU Calib Start Date: 05/11/2020 11:58
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 05/11/2020 14:19
 Lab File ID: UE1303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorobenzene	Ave	1.061	0.8708		16.4	20.0	-17.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.7014	0.5864		16.7	20.0	-16.4	30.0
Ethylbenzene	Ave	3.052	2.555		16.7	20.0	-16.3	30.0
m-Xylene & p-Xylene	Ave	2.381	1.998		16.8	20.0	-16.1	30.0
o-Xylene	Ave	2.467	2.084		16.9	20.0	-15.5	30.0
Styrene	Ave	1.946	1.741		17.9	20.0	-10.5	30.0
Bromoform	Ave	0.5136	0.4464		17.4	20.0	-13.1	30.0
Isopropylbenzene	Ave	3.065	2.518		16.4	20.0	-17.9	30.0
Bromobenzene	Ave	0.9320	0.7638		16.4	20.0	-18.0	30.0
1,1,2,2-Tetrachloroethane	QuaF		0.6617		18.6	20.0	-7.2	30.0
1,2,3-Trichloropropane	QuaF		0.2092		19.0	20.0	-5.0	30.0
N-Propylbenzene	Ave	3.511	2.905		16.5	20.0	-17.3	30.0
2-Chlorotoluene	Ave	2.151	1.776		16.5	20.0	-17.4	30.0
1,3,5-Trimethylbenzene	Ave	2.284	1.861		16.3	20.0	-18.5	30.0
4-Chlorotoluene	Ave	2.417	2.056		17.0	20.0	-14.9	30.0
tert-Butylbenzene	Ave	2.196	1.776		16.2	20.0	-19.1	30.0
1,2,4-Trimethylbenzene	Ave	2.131	1.760		16.5	20.0	-17.4	30.0
sec-Butylbenzene	Ave	3.114	2.496		16.0	20.0	-19.8	30.0
1,3-Dichlorobenzene	Ave	1.632	1.365		16.7	20.0	-16.3	30.0
4-Isopropyltoluene	Ave	2.521	2.046		16.2	20.0	-18.9	30.0
1,4-Dichlorobenzene	Ave	1.683	1.395		16.6	20.0	-17.1	30.0
1,2-Dichlorobenzene	Ave	1.607	1.326		16.5	20.0	-17.5	30.0
n-Butylbenzene	Ave	1.789	1.471		16.4	20.0	-17.8	30.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1698		18.1	20.0	-9.7	30.0
1,2,4-Trichlorobenzene	Qua		0.6224		17.4	20.0	-13.2	30.0
Hexachlorobutadiene	Qua		0.3807		16.7	20.0	-16.7	30.0
Naphthalene	Lin1		1.676		18.4	20.0	-8.2	30.0
1,2,3-Trichlorobenzene	Qua		0.5954		17.7	20.0	-11.5	30.0
4-Bromofluorobenzene	Ave	0.3668	0.3669		10.0	10.0	0.0	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9472	0.9368		9.89	10.0	-1.1	30.0

Report Date: 13-May-2020 15:31:58

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 13-May-2020 10:36:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-003
 Operator ID: rd Instrument ID: CMSU
 Sublist: chrom-U524.2*sub6
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 15:31:58 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 10:57:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1259121	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	502378	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	90	274597	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	231008	10.0	10.0	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	257237	10.0	9.89	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	296947	20.0	15.1	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	311171	20.0	15.7	
8 Chloromethane	50	1.253	1.253	0.000	79	359469	20.0	18.0	
10 Bromomethane	94	1.404	1.404	0.000	99	197469	20.0	16.6	
11 Chloroethane	64	1.457	1.457	0.000	99	186071	20.0	16.3	M
12 Trichlorofluoromethane	101	1.588	1.588	0.000	98	382182	20.0	18.2	M
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	96	229086	20.0	14.1	M
13 1,1-Dichloroethene	96	1.880	1.880	0.000	97	228699	20.0	18.2	M
15 Acetone	58	1.896	1.896	0.000	87	103221	100.0	87.9	
16 Methylene Chloride	84	2.194	2.194	0.000	87	302635	20.0	16.9	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	238832	200.0	167.5	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	777476	20.0	16.9	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	274273	20.0	16.0	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	457652	20.0	16.5	
21 Isopropyl ether	45	2.681	2.681	0.000	95	584192	16.0	14.2	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	90	670365	16.0	13.8	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	161776	100.0	83.0	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	407163	20.0	16.5	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	404893	20.0	15.8	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	163884	20.0	14.2	
27 Chloroform	83	3.287	3.287	0.000	99	496139	20.0	16.3	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	411142	20.0	15.4	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	360307	20.0	14.9	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	358469	20.0	15.8	
31 Benzene	78	3.664	3.664	0.000	94	1158614	20.0	16.5	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	362493	20.0	16.2	

Report Date: 13-May-2020 15:31:58

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	609734	16.0	14.0	
34 Trichloroethene	132	4.135	4.135	0.000	96	321137	20.0	15.7	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	282560	20.0	17.2	a
36 Dibromomethane	93	4.386	4.386	0.000	90	187901	20.0	16.7	
37 Dichlorobromomethane	83	4.516	4.516	0.000	98	378108	20.0	17.0	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	91	463413	20.0	17.4	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	96	1235384	100.0	80.8	
40 Toluene	92	5.092	5.092	0.000	93	746544	20.0	16.6	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	425874	20.0	17.2	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	227362	20.0	16.6	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	289160	20.0	15.5	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	449041	20.0	16.8	
45 2-Hexanone	43	5.589	5.589	0.000	94	839940	100.0	85.6	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	334785	20.0	17.0	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	302061	20.0	17.1	
48 Chlorobenzene	112	6.190	6.190	0.000	97	874955	20.0	16.4	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	322033	20.0	16.7	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1403226	20.0	16.7	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	100	1097019	20.0	16.8	
52 o-Xylene	91	6.682	6.682	0.000	94	1144386	20.0	16.9	
53 Styrene	104	6.697	6.697	0.000	97	956375	20.0	17.9	
54 Bromoform	173	6.844	6.844	0.000	98	245163	20.0	17.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1382653	20.0	16.4	
56 Bromobenzene	156	7.231	7.231	0.000	91	419455	20.0	16.4	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	363373	20.0	18.6	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	114891	20.0	19.0	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1595418	20.0	16.5	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	975334	20.0	16.5	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	1022273	20.0	16.3	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	1129160	20.0	17.0	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	975586	20.0	16.2	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	966849	20.0	16.5	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1370743	20.0	16.0	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	749741	20.0	16.7	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1123648	20.0	16.2	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	765971	20.0	16.6	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	807618	20.0	16.4	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	98	728256	20.0	16.5	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	93245	20.0	18.1	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	341797	20.0	17.4	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	209097	20.0	16.7	
74 Naphthalene	128	9.930	9.930	0.000	99	920500	20.0	18.4	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	327012	20.0	17.7	
S 76 Xylenes, Total	1				0		40.0	33.7	
S 78 1,3-Dichloropropene, Total	1				0		40.0	34.6	

Report Date: 13-May-2020 15:31:58

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 2.00

Units: uL

524 ISSU/2016_00091

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 13-May-2020 15:31:58

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D

Injection Date: 13-May-2020 10:36:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: ccvis

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

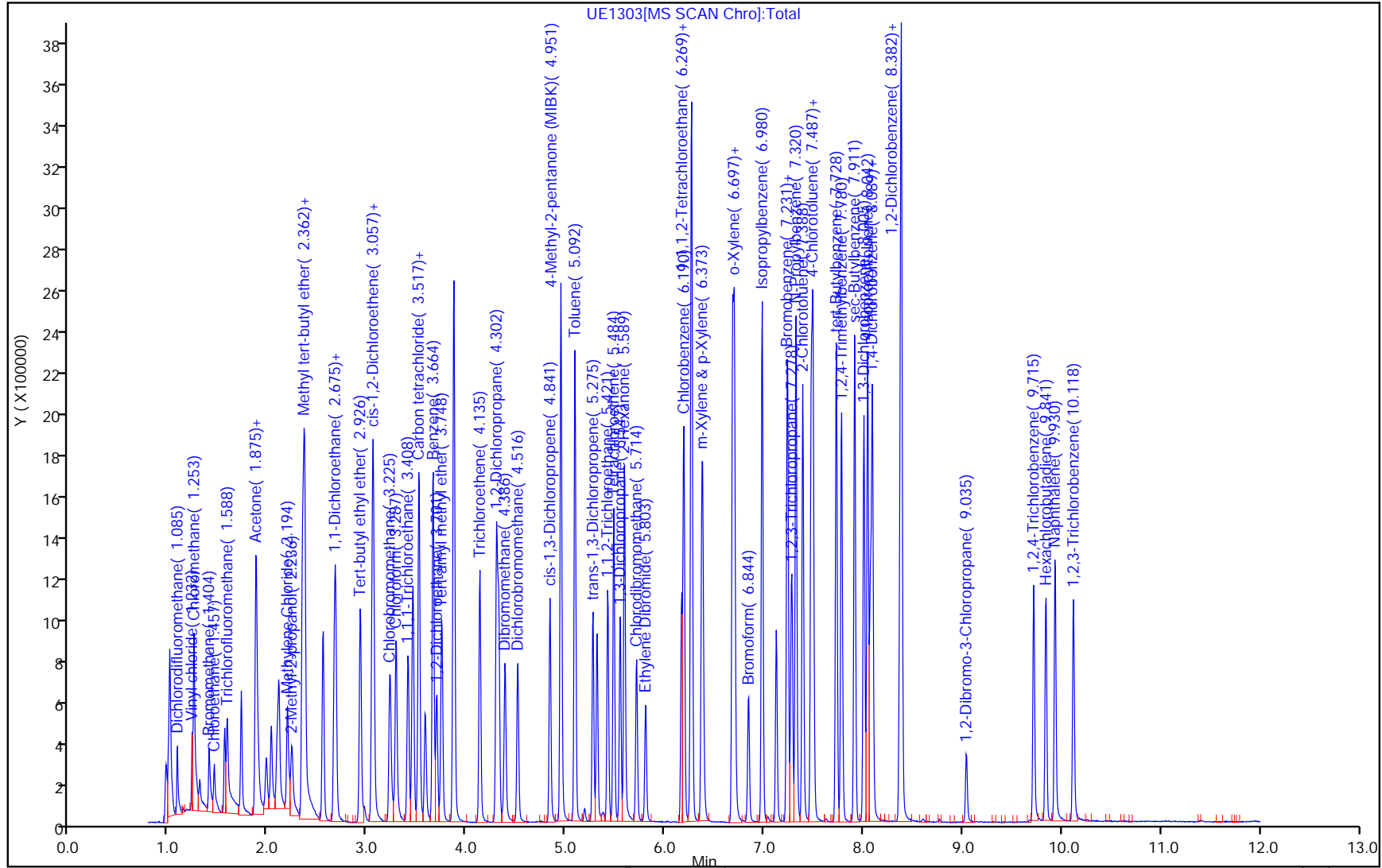
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

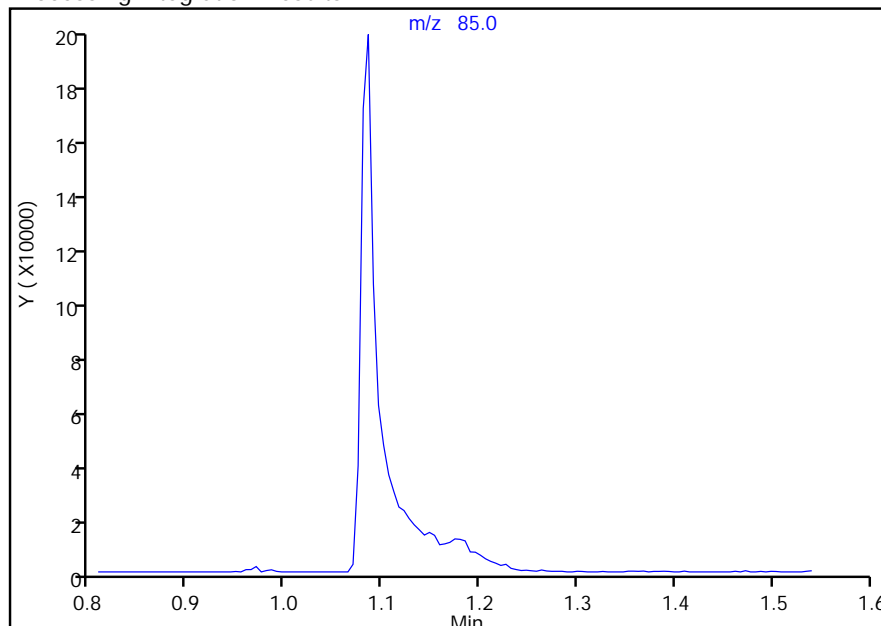
Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D
Injection Date: 13-May-2020 10:36:30 Instrument ID: CMSU
Lims ID: ccvis
Client ID:
Operator ID: rd ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: U524.2 Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

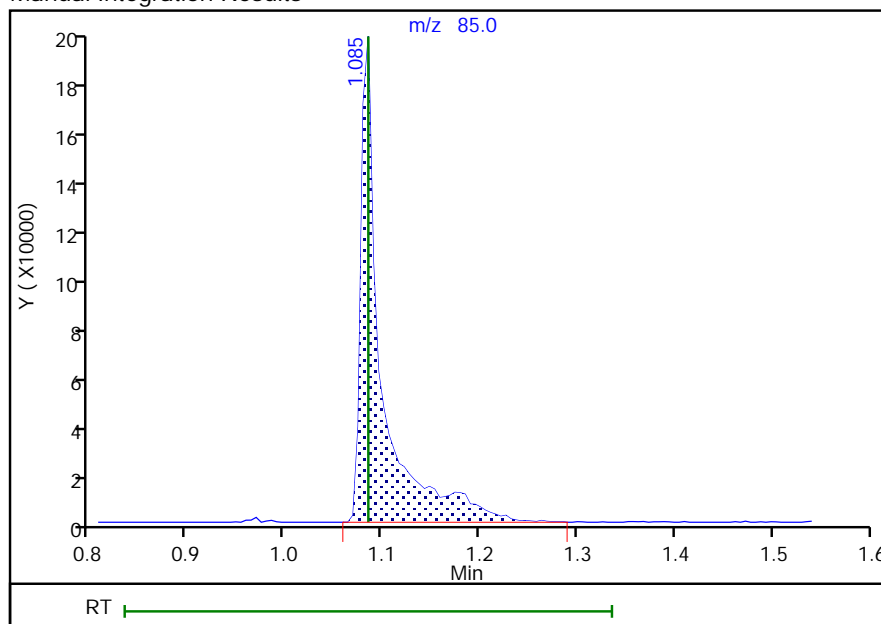
Signal: 1

Not Detected
Expected RT: 1.09

Processing Integration Results

RT: 1.09
Area: 296947
Amount: 15.135122
Amount Units: ug/l

Manual Integration Results



Reviewer: diogor, 13-May-2020 10:57:43

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

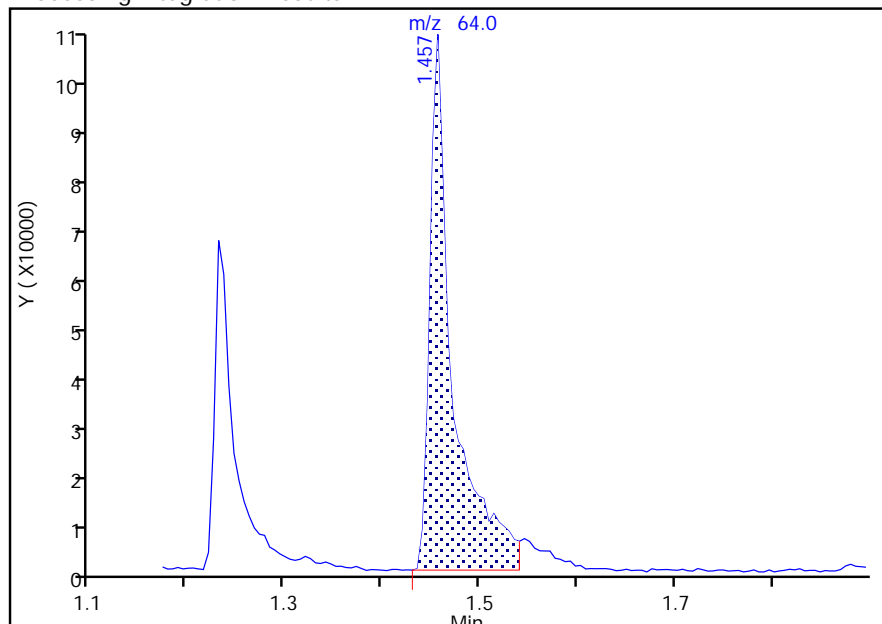
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D		
Injection Date:	13-May-2020 10:36:30	Instrument ID:	CMSU
Lims ID:	ccvis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	3

11 Chloroethane, CAS: 75-00-3

Signal: 1

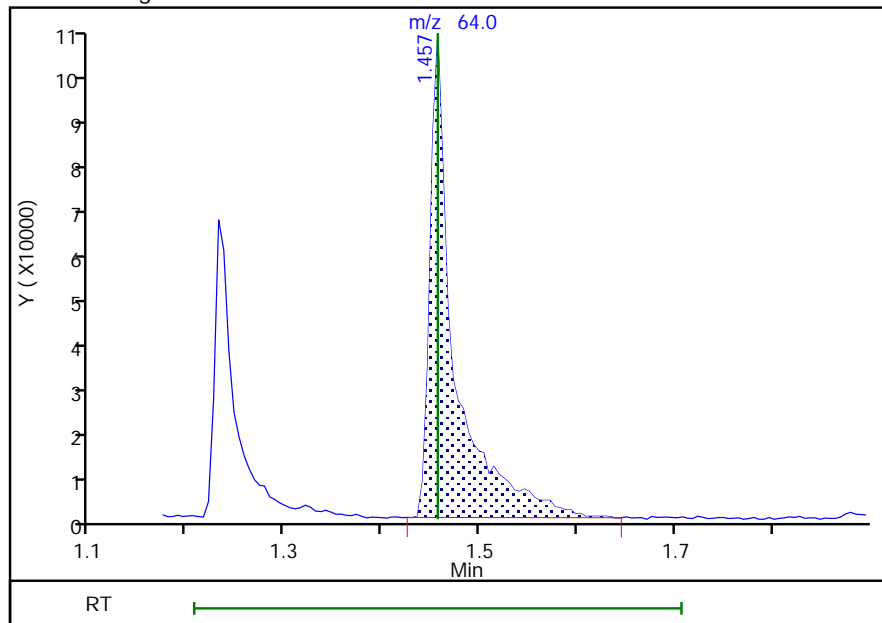
RT: 1.46
 Area: 173949
 Amount: 15.217599
 Amount Units: ug/l

Processing Integration Results



RT: 1.46
 Area: 186071
 Amount: 16.278069
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 13-May-2020 15:26:08
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

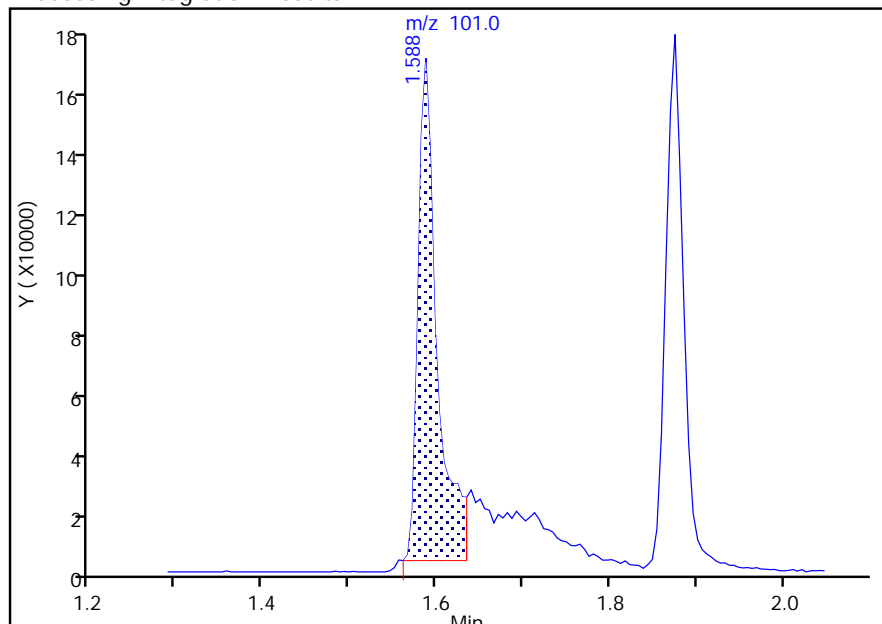
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D		
Injection Date:	13-May-2020 10:36:30	Instrument ID:	CMSU
Lims ID:	ccvis		
Client ID:			
Operator ID:	rd	ALS Bottle#:	3
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	3

12 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

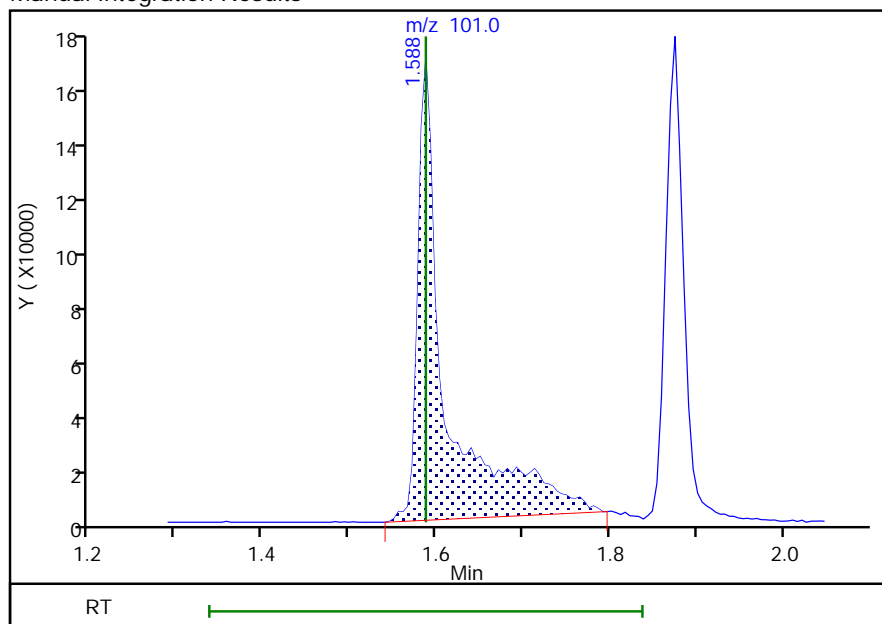
RT: 1.59
 Area: 253398
 Amount: 12.073686
 Amount Units: ug/l

Processing Integration Results



RT: 1.59
 Area: 382182
 Amount: 18.209873
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 13-May-2020 15:25:52
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

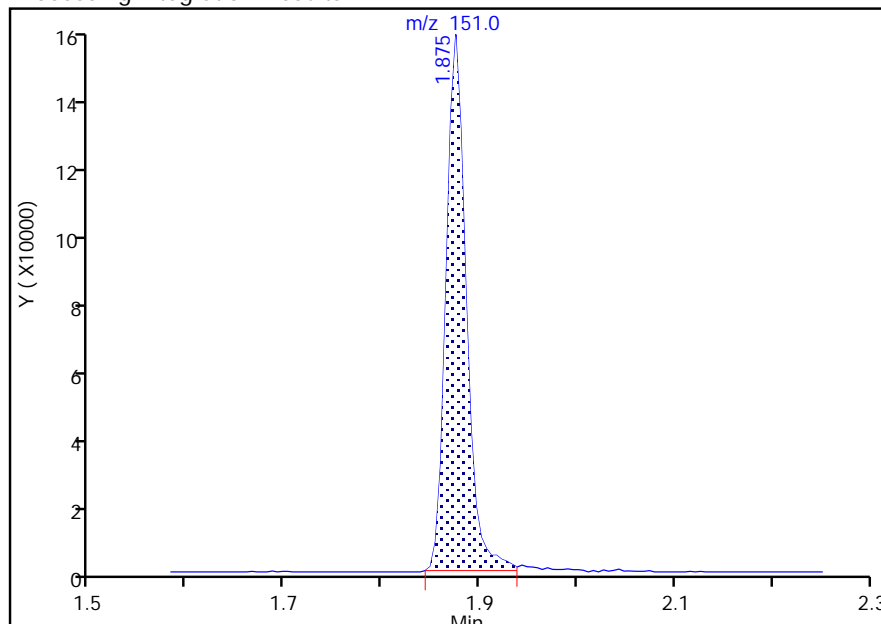
Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D
 Injection Date: 13-May-2020 10:36:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

14 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

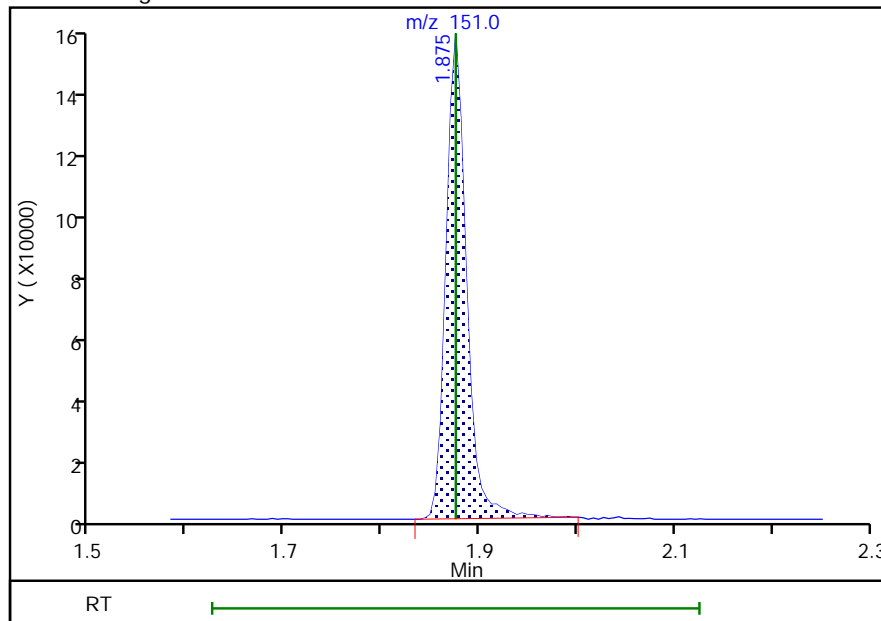
RT: 1.88
 Area: 226212
 Amount: 13.919566
 Amount Units: ug/l

Processing Integration Results



RT: 1.88
 Area: 229086
 Amount: 14.096412
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 13-May-2020 15:25:56

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

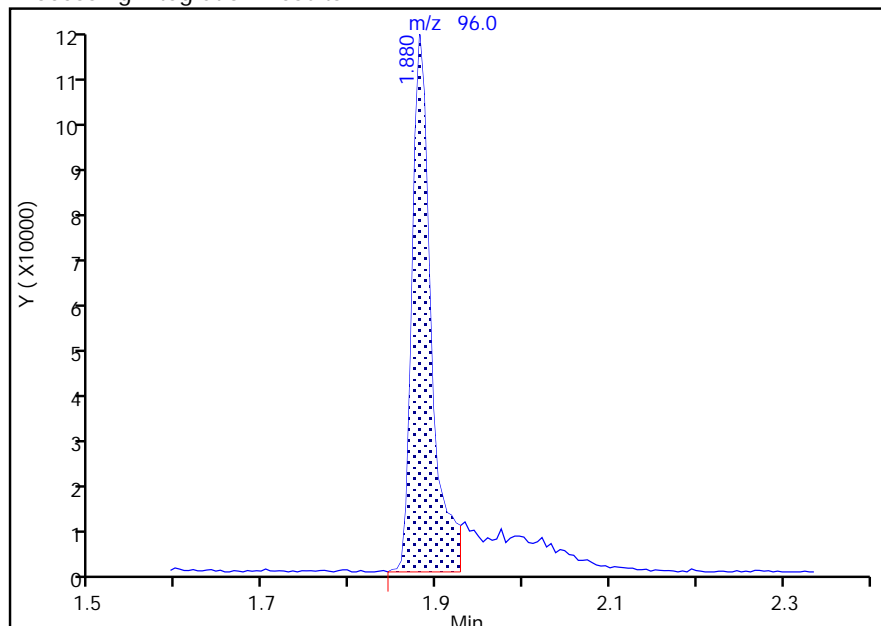
Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D
 Injection Date: 13-May-2020 10:36:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

13 1,1-Dichloroethene, CAS: 75-35-4

Signal: 1

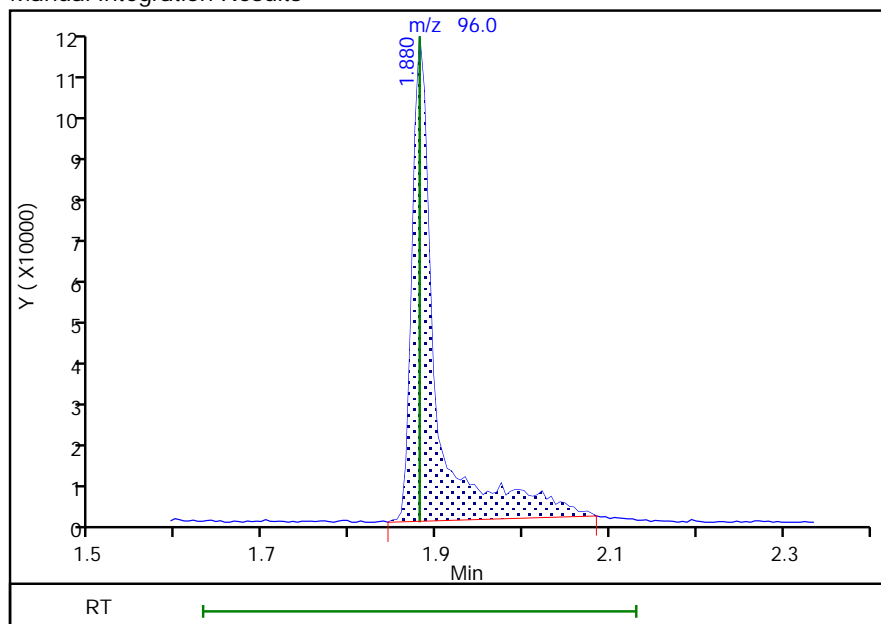
RT: 1.88
 Area: 182101
 Amount: 14.494554
 Amount Units: ug/l

Processing Integration Results



RT: 1.88
 Area: 228699
 Amount: 18.203579
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 13-May-2020 15:26:02

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

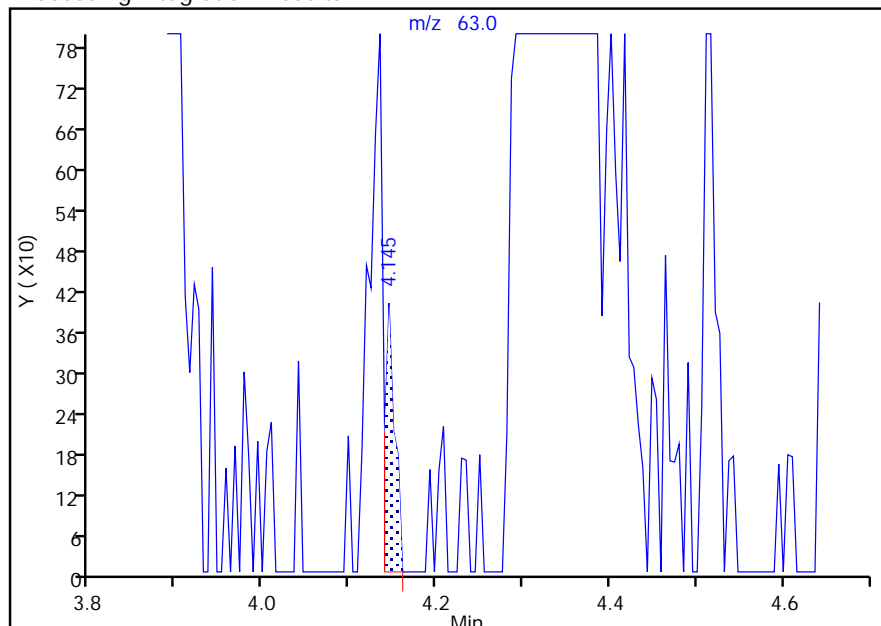
Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D
 Injection Date: 13-May-2020 10:36:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

35 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

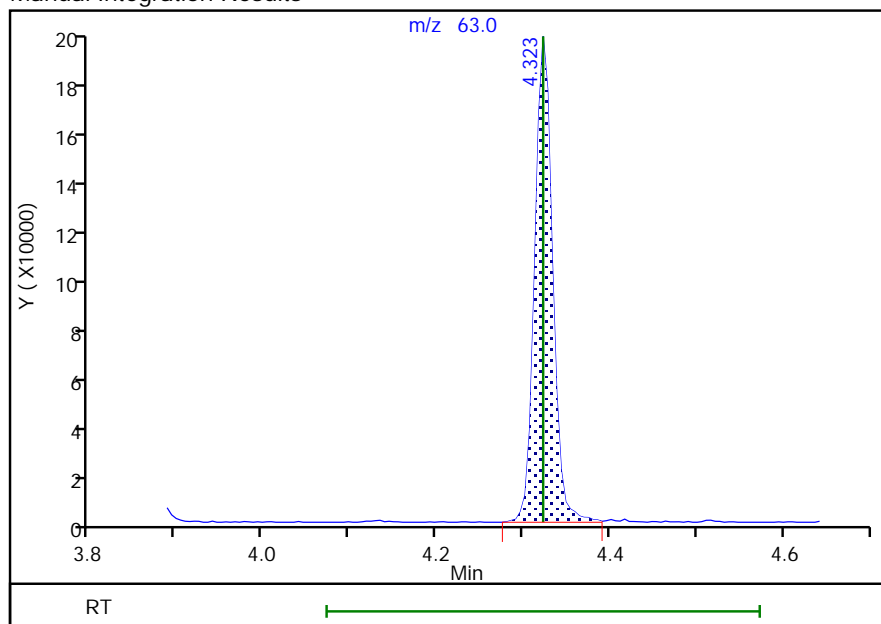
RT: 4.15
 Area: 311
 Amount: 0.018963
 Amount Units: ug/l

Processing Integration Results



RT: 4.32
 Area: 282560
 Amount: 17.229015
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 13-May-2020 15:26:17

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

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September 2020

Report Date: 13-May-2020 15:31:58

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D

Injection Date: 13-May-2020 10:36:30

Instrument ID: CMSU

Lims ID: ccvis

Client ID:

Operator ID: rd

ALS Bottle#:

3

Worklist Smp#: 3

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

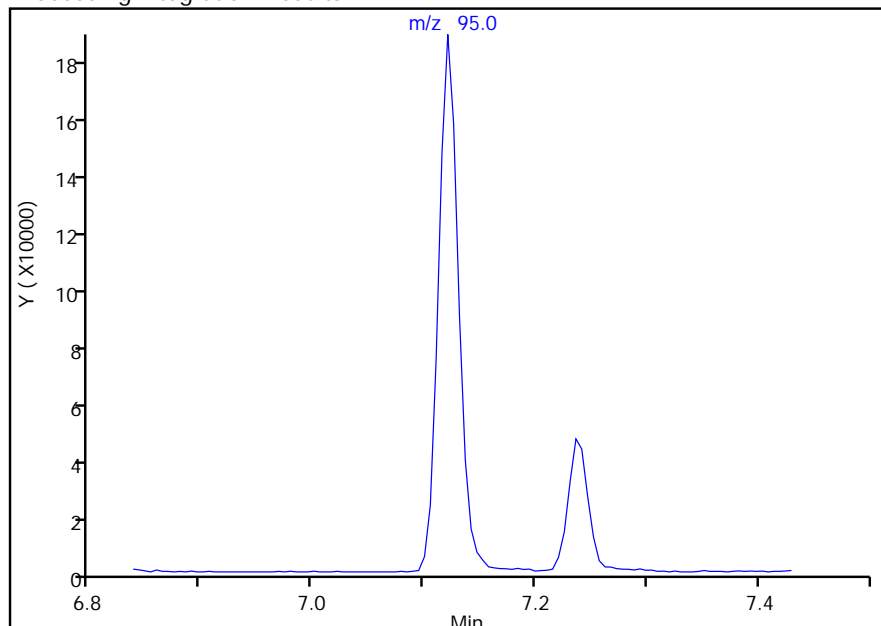
\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

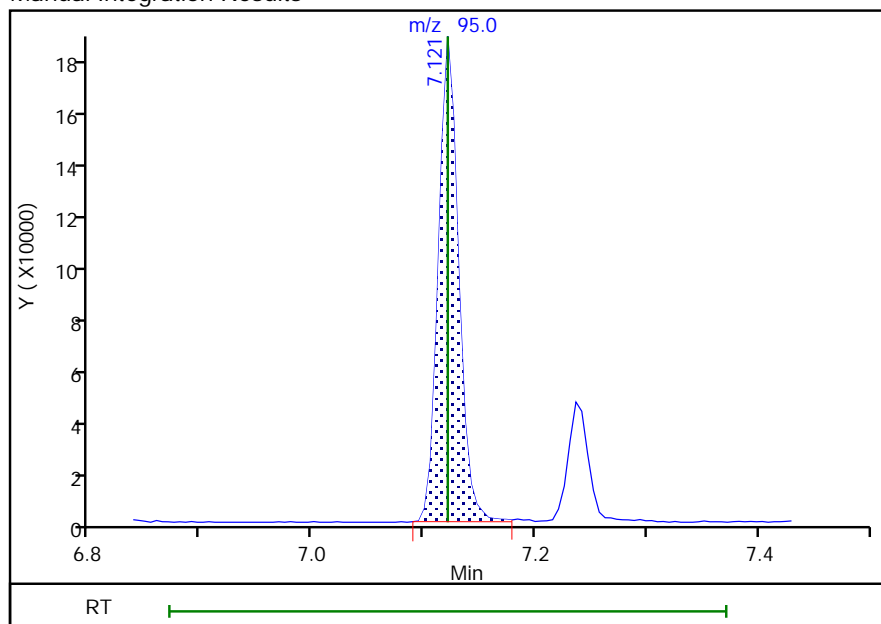
Not Detected

Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
Area: 231008
Amount: 10.004232
Amount Units: ug/l

Reviewer: diogor, 13-May-2020 10:57:37

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 13-May-2020 15:31:59

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

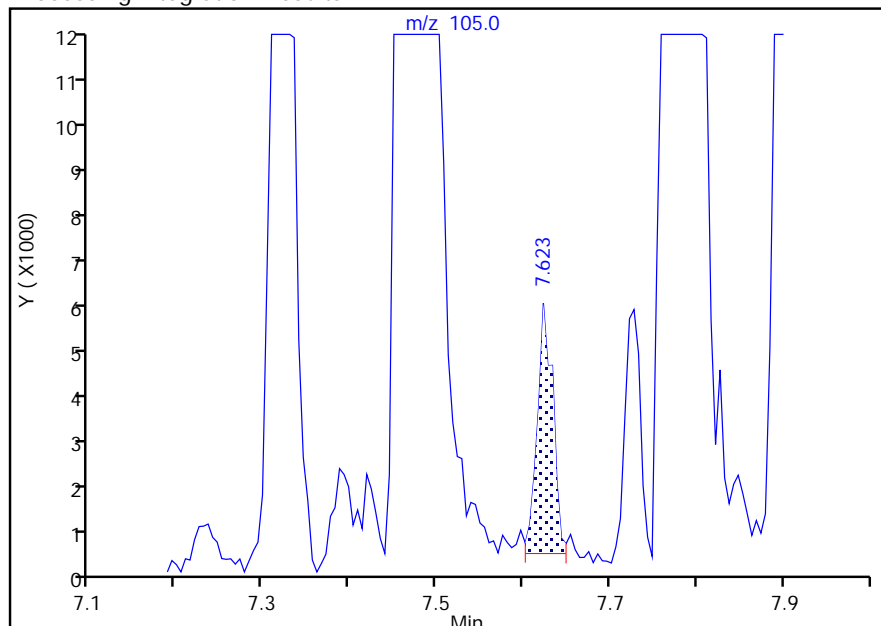
Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1303.D
 Injection Date: 13-May-2020 10:36:30 Instrument ID: CMSU
 Lims ID: ccvis
 Client ID:
 Operator ID: rd ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: U524.2 Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

61 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

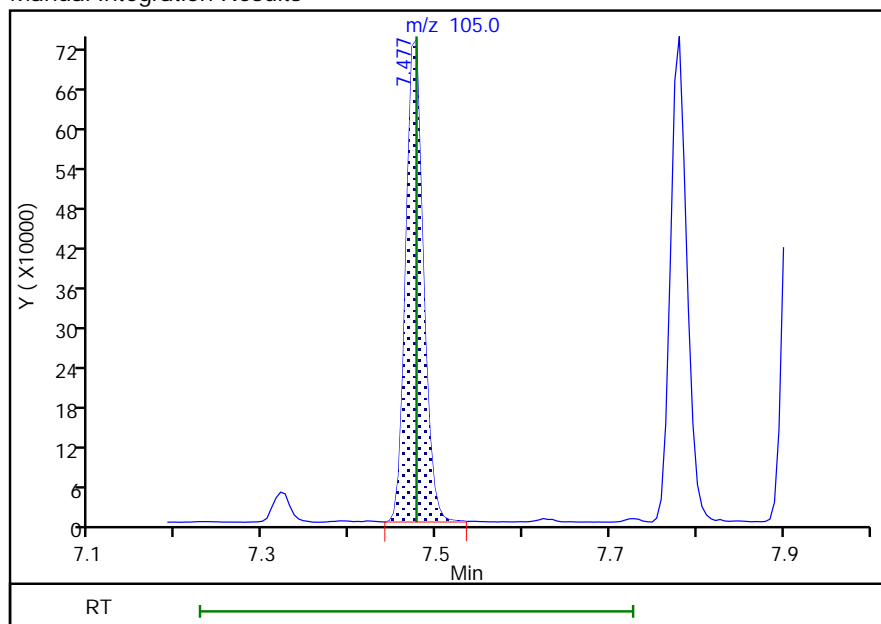
RT: 7.62
 Area: 6439
 Amount: 0.102679
 Amount Units: ug/l

Processing Integration Results



RT: 7.48
 Area: 1022273
 Amount: 16.301527
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 13-May-2020 15:26:28

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

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05/15/2020

September 2020

Report Date: 12-May-2020 09:10:05

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1101.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 11-May-2020 10:07:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0063660-001
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\U524.2.m
 Limit Group: 524.2
 Last Update: 12-May-2020 09:10:04 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1002

First Level Reviewer: diogor

Date: 11-May-2020 10:21:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

Reagents:

VM_bfb_00217

Amount Added: 1.00

Units: uL

Report Date: 12-May-2020 09:10:05

Chrom Revision: 2.3 05-May-2020 17:48:18
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1101.D

Injection Date: 11-May-2020 10:07:30

Instrument ID: CMSU

Lims ID: bfb

Client ID:

Operator ID: rd

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 5.0 mL

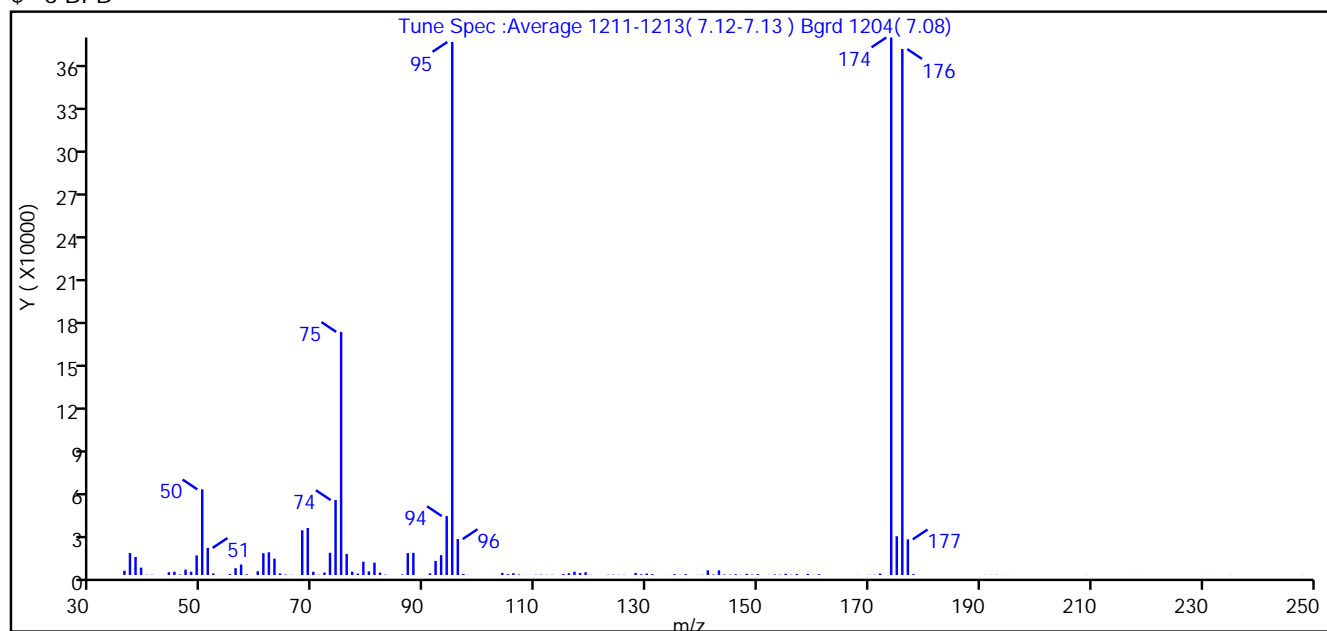
Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	16.1
75	30-80% of mass 95	45.6
96	5-9% of mass 95	6.7
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	100.8
175	5-9% of mass 174	7.3 (7.2)
176	>95% but <101% of mass 174	98.7 (97.8)
177	5-9% of mass 176	6.7 (6.8)

Report Date: 12-May-2020 09:10:05

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1101.D\U524.2.rslt\spectra.d
 Injection Date: 11-May-2020 10:07:30
 Spectrum: Tune Spec :Average 1211-1213(7.12-7.13) Bgrd 1204(7.08)
 Base Peak: 174.00
 Minimum % Base Peak: 0
 Number of Points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2936	71.00	174	111.00	261	148.00	812
37.00	15309	72.00	1705	112.00	129	149.00	304
38.00	12582	73.00	15479	113.00	180	150.00	625
39.00	5115	74.00	52184	115.00	673	152.00	126
40.00	201	75.00	169280	116.00	1209	153.00	381
41.00	183	76.00	14661	117.00	2305	154.00	195
44.00	1918	77.00	2259	118.00	1403	155.00	838
45.00	2272	78.00	975	119.00	1883	156.00	195
46.00	323	79.00	9225	120.00	83	157.00	697
47.00	3737	80.00	2501	123.00	175	159.00	745
48.00	2291	81.00	8627	124.00	245	160.00	78
49.00	13619	82.00	1655	125.00	143	161.00	542
50.00	59640	83.00	265	126.00	133	168.00	61
51.00	18880	86.00	368	128.00	1402	170.00	116
52.00	1090	87.00	15187	129.00	492	171.00	171
53.00	73	88.00	15431	130.00	1009	172.00	984
54.00	56	91.00	1144	131.00	614	174.00	374336
55.00	644	92.00	9813	133.00	50	175.00	26968
56.00	4760	93.00	13829	134.00	55	176.00	366272
57.00	7284	94.00	41008	135.00	582	177.00	24824
58.00	478	95.00	371200	136.00	67	178.00	616
60.00	2568	96.00	25016	137.00	614	191.00	94
61.00	15193	97.00	729	139.00	84	192.00	59
62.00	15802	103.00	69	140.00	145	193.00	118
63.00	11406	104.00	1456	141.00	3221	194.00	50
64.00	1120	105.00	576	142.00	332	195.00	50
65.00	318	106.00	1247	143.00	3215	209.00	86
66.00	124	107.00	385	144.00	307	218.00	51
68.00	31136	108.00	72	145.00	241	231.00	58
69.00	32736	109.00	51	146.00	550	235.00	67
70.00	2263	110.00	171	147.00	97	248.00	65

Report Date: 12-May-2020 09:10:05

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1101.D

Injection Date: 11-May-2020 10:07:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

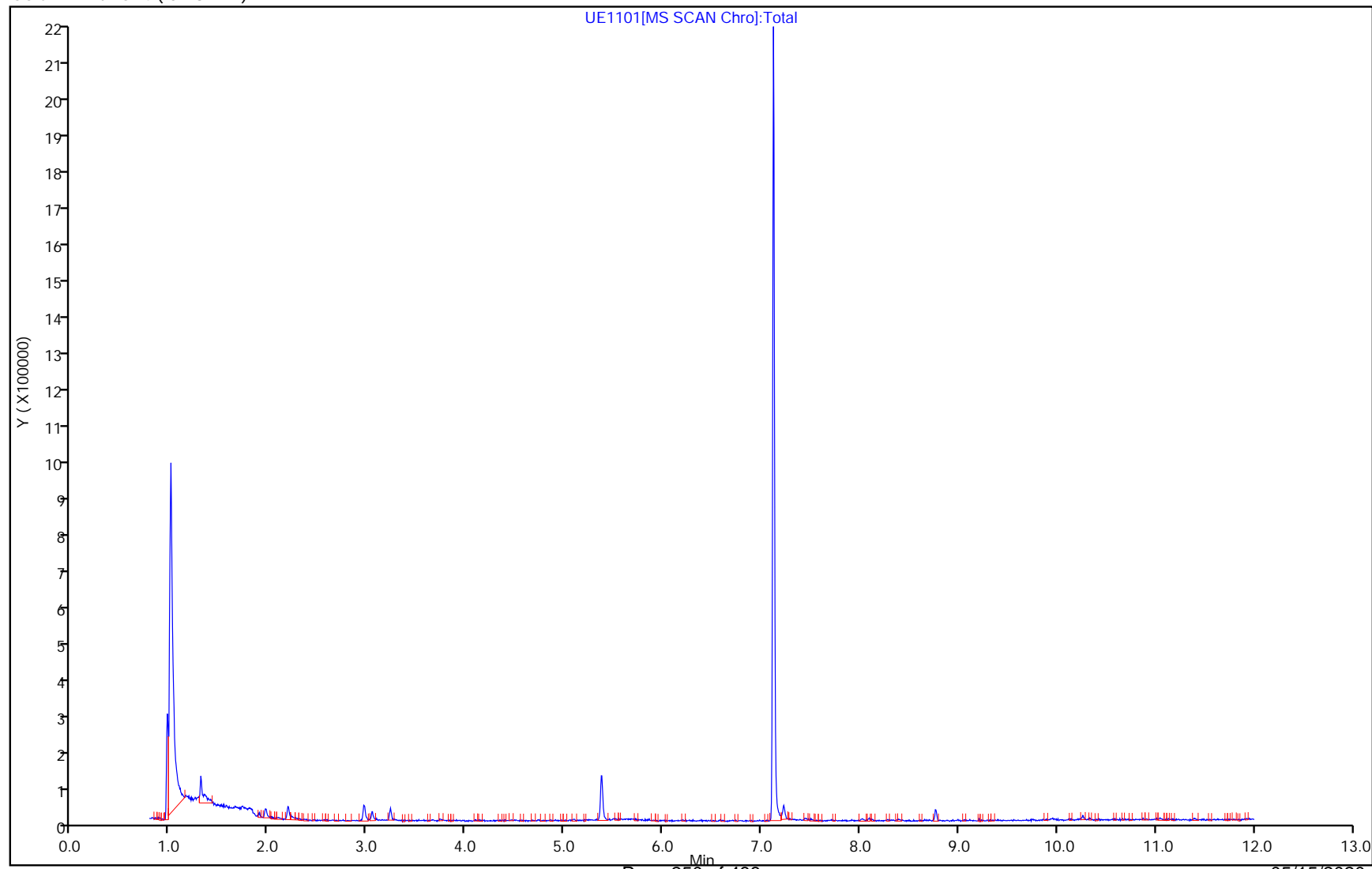
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 13-May-2020 15:32:14

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1301.D
 Lims ID: bfb
 Client ID: J
 Sample Type: BFB
 Inject. Date: 13-May-2020 09:47:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-001
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 15:32:14 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 10:02:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

Reagents:

VM_bfb_00217

Amount Added: 2.00

Units: uL

Report Date: 13-May-2020 15:32:14

Chrom Revision: 2.3 05-May-2020 17:48:18
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1301.D

Injection Date: 13-May-2020 09:47:30

Instrument ID: CMSU

Lims ID: bfb

Client ID: J

Operator ID: rd

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 5.0 mL

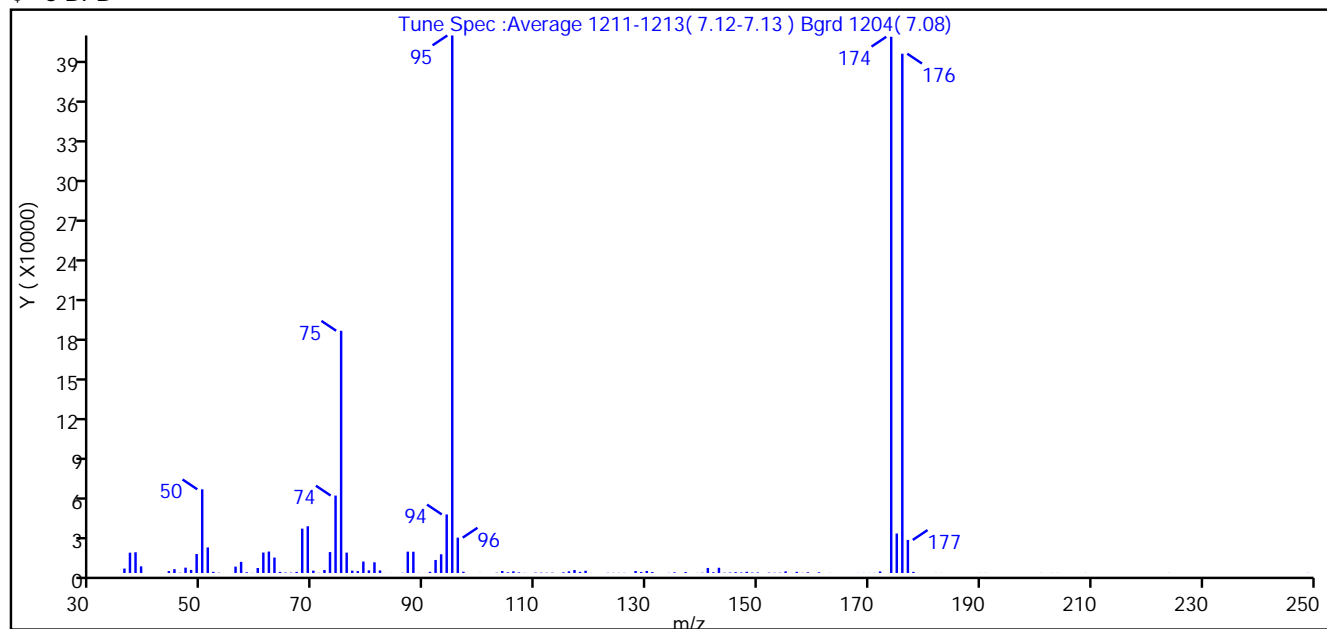
Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	15.6
75	30-80% of mass 95	45.1
96	5-9% of mass 95	6.6
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	99.8
175	5-9% of mass 174	7.3 (7.4)
176	>95% but <101% of mass 174	96.6 (96.8)
177	5-9% of mass 176	6.2 (6.4)

Report Date: 13-May-2020 15:32:14

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1301.D\U524.2.rslt\spectra.d
 Injection Date: 13-May-2020 09:47:30
 Spectrum: Tune Spec :Average 1211-1213(7.12-7.13) Bgrd 1204(7.08)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3308	73.00	15563	111.00	286	150.00	384
37.00	15112	74.00	57632	112.00	196	152.00	266
38.00	15429	75.00	180288	113.00	272	153.00	188
39.00	4959	76.00	15161	115.00	507	154.00	219
44.00	1404	77.00	1746	116.00	1254	155.00	1194
45.00	2824	78.00	1390	117.00	2235	156.00	61
46.00	199	79.00	8519	118.00	827	157.00	860
47.00	3969	80.00	1966	119.00	1664	158.00	113
48.00	2278	81.00	7952	120.00	55	159.00	535
49.00	14131	82.00	1915	123.00	142	161.00	531
50.00	62272	83.00	29	124.00	141	163.00	68
51.00	19008	84.00	52	125.00	121	168.00	60
52.00	846	86.00	146	126.00	114	169.00	63
53.00	199	87.00	15884	128.00	1490	170.00	57
56.00	4747	88.00	15811	129.00	709	171.00	73
57.00	8300	89.00	53	130.00	1491	172.00	1159
58.00	516	91.00	853	131.00	696	174.00	399104
59.00	76	92.00	9699	134.00	123	175.00	29368
60.00	3710	93.00	13935	135.00	479	176.00	386496
61.00	15197	94.00	43592	137.00	649	177.00	24608
62.00	15967	95.00	400064	139.00	61	178.00	824
63.00	11480	96.00	26304	140.00	185	182.00	55
64.00	798	97.00	927	141.00	3742	183.00	53
65.00	319	100.00	56	142.00	559	190.00	54
66.00	255	103.00	191	143.00	3904	191.00	65
67.00	825	104.00	1483	144.00	242	201.00	53
68.00	32984	105.00	490	145.00	349	203.00	60
69.00	34760	106.00	1230	146.00	627	204.00	64
70.00	1749	107.00	450	147.00	369	209.00	57
71.00	126	108.00	106	148.00	893	224.00	57
72.00	2209	110.00	267	149.00	336	249.00	86

Report Date: 13-May-2020 15:32:14

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1301.D

Injection Date: 13-May-2020 09:47:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID: J

Injection Vol: 5.0 mL

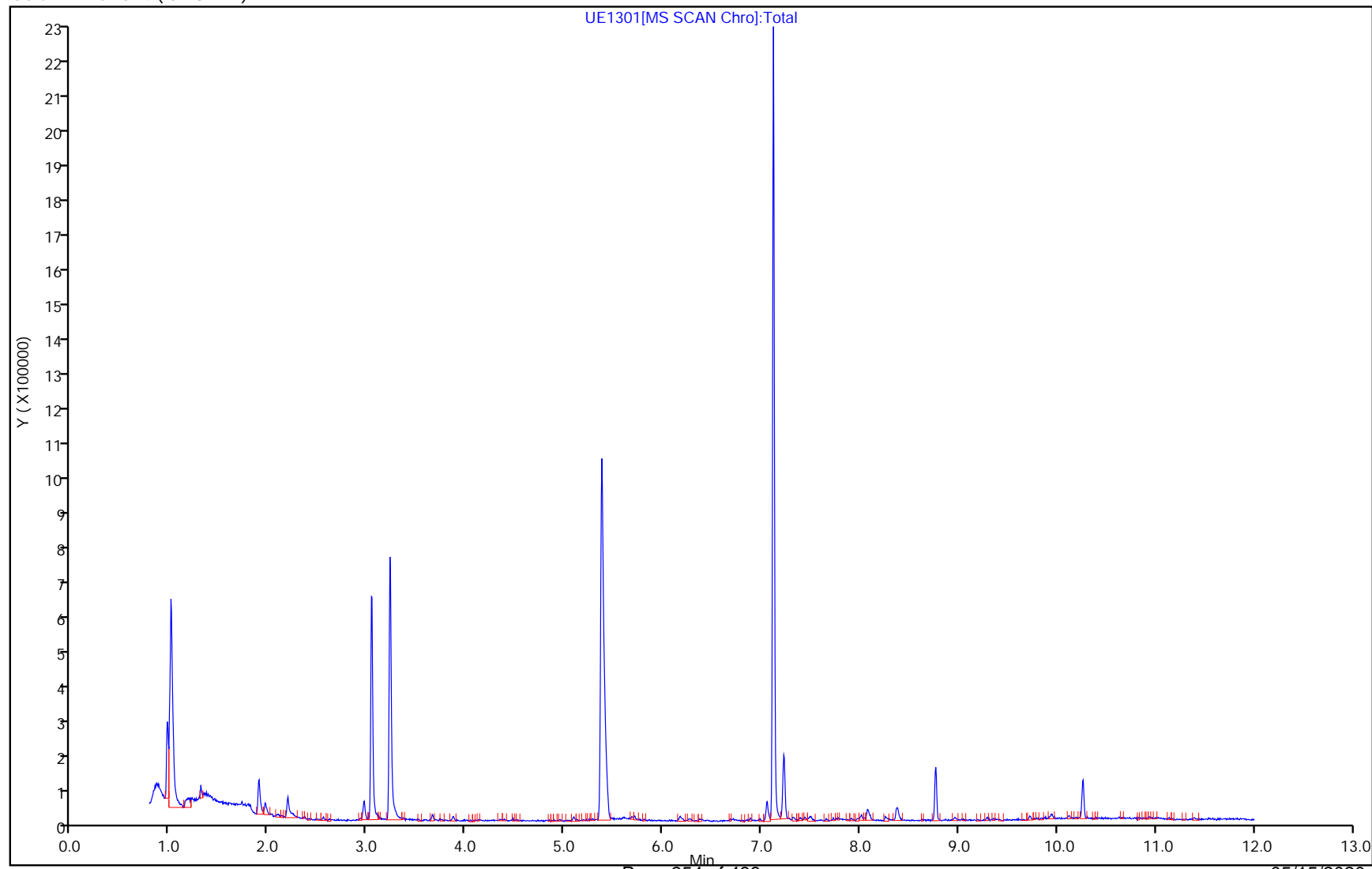
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-618502/9
 Matrix: Water Lab File ID: UE1309.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 12:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	101		70-130
460-00-4	4-Bromofluorobenzene	95		70-130

Report Date: 13-May-2020 15:32:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1309.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 13-May-2020 12:37:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-009
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 13:32:17 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor Date: 13-May-2020 12:52:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	1286574	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	508947	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	93	259479	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	225034	10.0	9.54	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.371	8.366	0.005	83	249370	10.0	10.1	
\$ 6 BFB									
16 Methylene Chloride	84	2.199	2.194	0.005	89	8698		0.4762	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524 ISSU/2016_00091 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 13-May-2020 15:32:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1309.D

Injection Date: 13-May-2020 12:37:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: mb

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

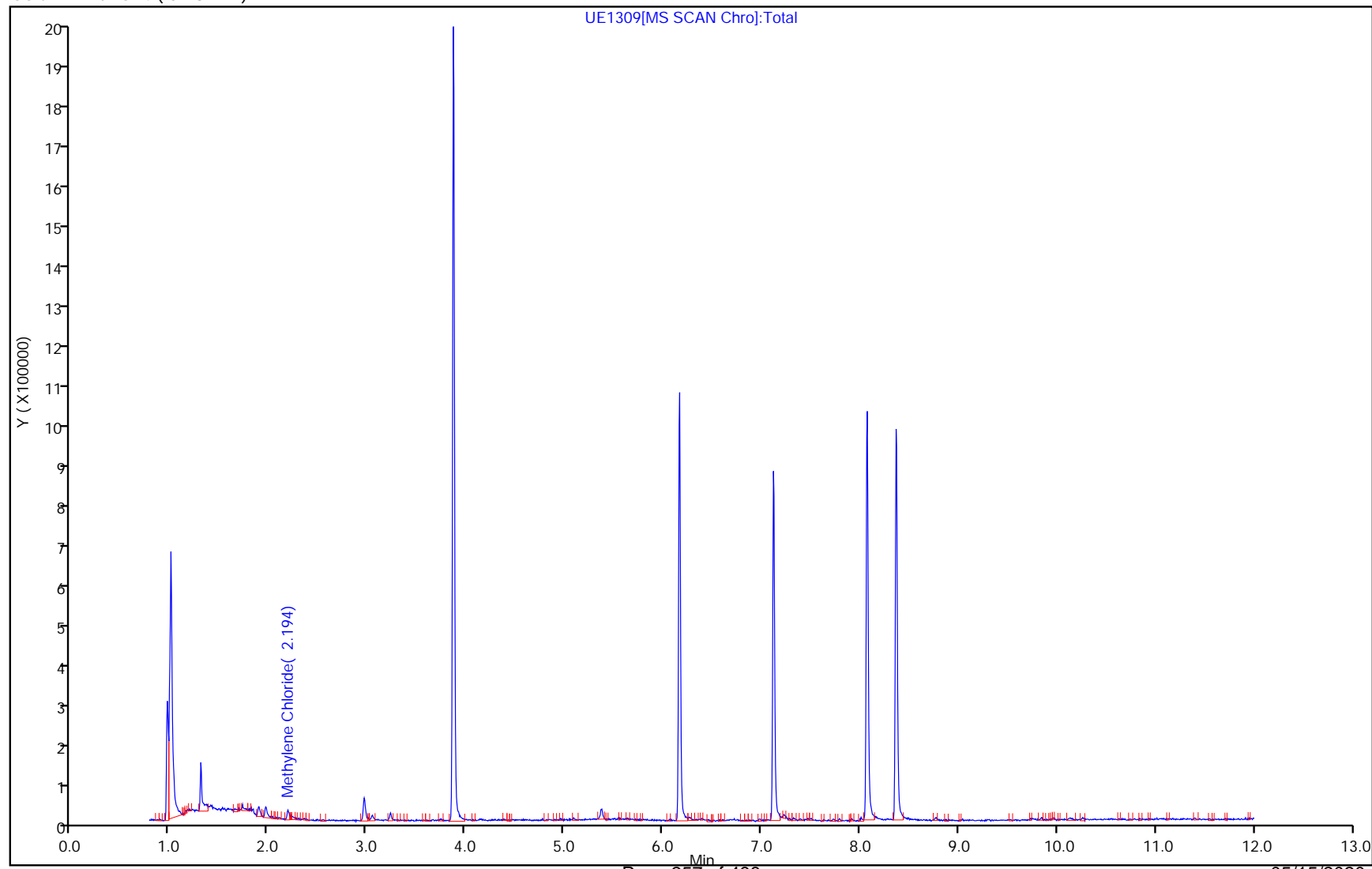
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 13-May-2020 15:32:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1309.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 13-May-2020 12:37:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-009
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 13:32:17 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 12:52:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.54	95.38
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.1	101.46

Report Date: 13-May-2020 15:32:20

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1309.D

Injection Date: 13-May-2020 12:37:30

Instrument ID: CMSU

Lims ID: mb

Client ID:

Operator ID: rd

ALS Bottle#: 9

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

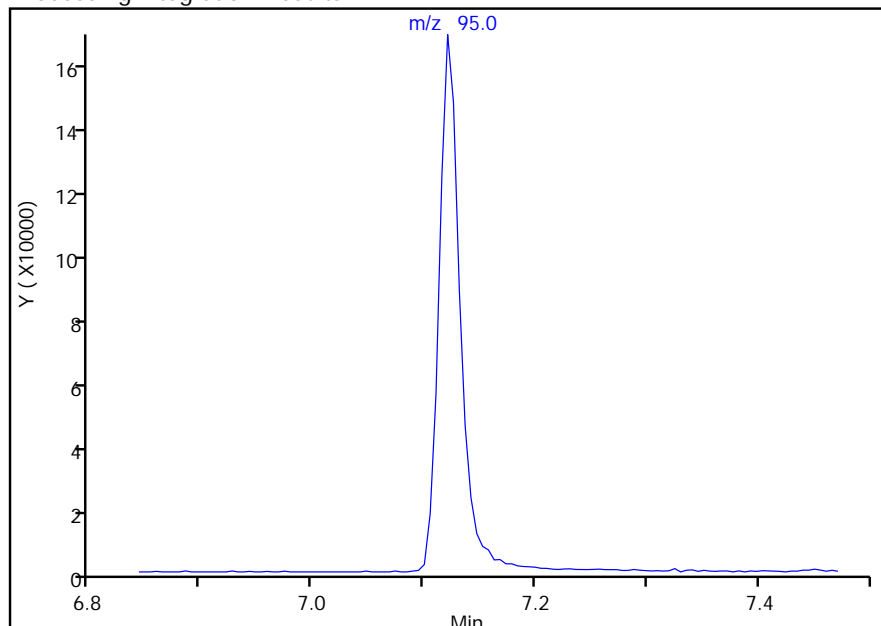
\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

Not Detected

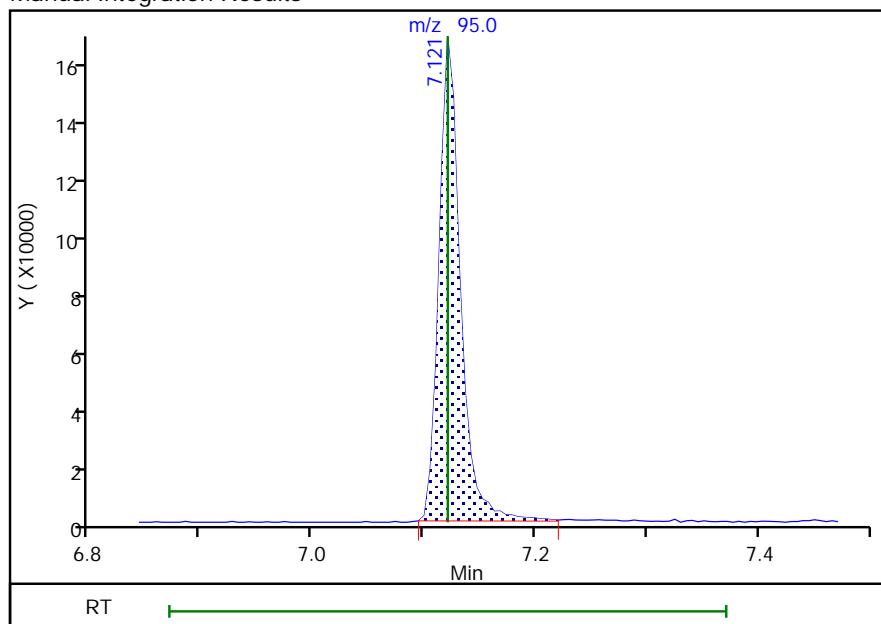
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
 Area: 225034
 Amount: 9.537566
 Amount Units: ug/l



Reviewer: diogor, 13-May-2020 12:52:12

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-618502/4
 Matrix: Water Lab File ID: UE1304.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 10:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	19.4		0.50	0.082
100-41-4	Ethylbenzene	19.8		0.50	0.099
127-18-4	Tetrachloroethene	19.0		0.50	0.18
108-88-3	Toluene	19.5		0.50	0.086
79-01-6	Trichloroethene	18.6		0.50	0.13
75-01-4	Vinyl chloride	18.6		0.50	0.16
1330-20-7	Xylenes, Total	39.5		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	101		70-130
460-00-4	4-Bromofluorobenzene	98		70-130

Report Date: 13-May-2020 15:32:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1304.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 13-May-2020 10:57:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-004
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 15:31:58 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 11:10:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1382099	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	539193	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.073	-0.005	89	293123	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	93	247627	10.0	9.77	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	279330	10.0	10.1	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	400167	20.0	18.6	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	403855	20.0	18.6	
8 Chloromethane	50	1.253	1.253	0.000	98	467493	20.0	21.3	
10 Bromomethane	94	1.404	1.404	0.000	98	248892	20.0	19.0	
11 Chloroethane	64	1.457	1.457	0.000	98	232113	20.0	18.5	M
12 Trichlorofluoromethane	101	1.588	1.588	0.000	97	518772	20.0	22.5	M
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	96	304057	20.0	17.0	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	97	304677	20.0	22.1	M
15 Acetone	58	1.896	1.896	0.000	86	113470	100.0	88.1	
16 Methylene Chloride	84	2.194	2.194	0.000	87	346301	20.0	17.6	
17 2-Methyl-2-propanol	59	2.236	2.241	-0.005	99	314123	200.0	200.8	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	966942	20.0	19.2	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	348502	20.0	18.5	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	100	572514	20.0	18.9	
21 Isopropyl ether	45	2.681	2.681	0.000	94	732766	16.0	16.2	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	89	842471	16.0	15.8	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	214040	100.0	100.1	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	508711	20.0	18.8	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	95	509398	20.0	18.1	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	221271	20.0	17.5	
27 Chloroform	83	3.287	3.287	0.000	99	604876	20.0	18.1	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	539336	20.0	18.9	
29 Carbon tetrachloride	117	3.518	3.517	0.001	96	484746	20.0	18.7	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	464268	20.0	19.0	
31 Benzene	78	3.664	3.664	0.000	95	1462675	20.0	19.4	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	442435	20.0	18.4	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	752807	16.0	15.7	

Report Date: 13-May-2020 15:32:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1304.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	407384	20.0	18.6	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	346389	20.0	19.7	a
36 Dibromomethane	93	4.386	4.386	0.000	91	227793	20.0	18.9	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	471846	20.0	19.8	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	574699	20.0	20.1	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	96	1603646	100.0	97.7	
40 Toluene	92	5.092	5.092	0.000	93	942015	20.0	19.5	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	531473	20.0	20.0	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	281257	20.0	19.1	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	376832	20.0	19.0	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	93	550121	20.0	19.2	
45 2-Hexanone	43	5.589	5.589	0.000	95	1097703	100.0	104.9	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	407940	20.0	19.4	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	370519	20.0	19.5	
48 Chlorobenzene	112	6.190	6.190	0.000	97	1076480	20.0	18.8	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	395764	20.0	19.2	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1774665	20.0	19.8	
51 m-Xylene & p-Xylene	91	6.378	6.373	0.005	99	1380903	20.0	19.8	
52 o-Xylene	91	6.682	6.682	0.000	94	1424943	20.0	19.7	
53 Styrene	104	6.697	6.697	0.000	97	1175012	20.0	20.6	
54 Bromoform	173	6.844	6.844	0.000	98	298873	20.0	19.9	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1758344	20.0	19.6	
56 Bromobenzene	156	7.231	7.231	0.000	90	520629	20.0	19.1	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	97	447100	20.0	21.4	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	137194	20.0	21.3	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	2016661	20.0	19.6	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1196351	20.0	19.0	
61 1,3,5-Trimethylbenzene	105	7.472	7.477	-0.005	93	1291439	20.0	19.3	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	97	1369331	20.0	19.3	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1244056	20.0	19.3	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1234639	20.0	19.8	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1771779	20.0	19.4	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	923213	20.0	19.3	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1436019	20.0	19.4	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	920856	20.0	18.7	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	1061779	20.0	20.2	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	89	883720	20.0	18.8	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	92	113409	20.0	20.6	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	426323	20.0	20.3	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	94	264758	20.0	19.8	
74 Naphthalene	128	9.935	9.930	0.005	99	1138111	20.0	21.3	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	393339	20.0	20.0	
S 76 Xylenes, Total	1				0		40.0	39.5	
S 78 1,3-Dichloropropene, Total	1				0		40.0	40.1	

Report Date: 13-May-2020 15:32:01

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 2.00

Units: uL

524 ISSU/2016_00091

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 13-May-2020 15:32:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1304.D

Injection Date: 13-May-2020 10:57:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: lcs

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

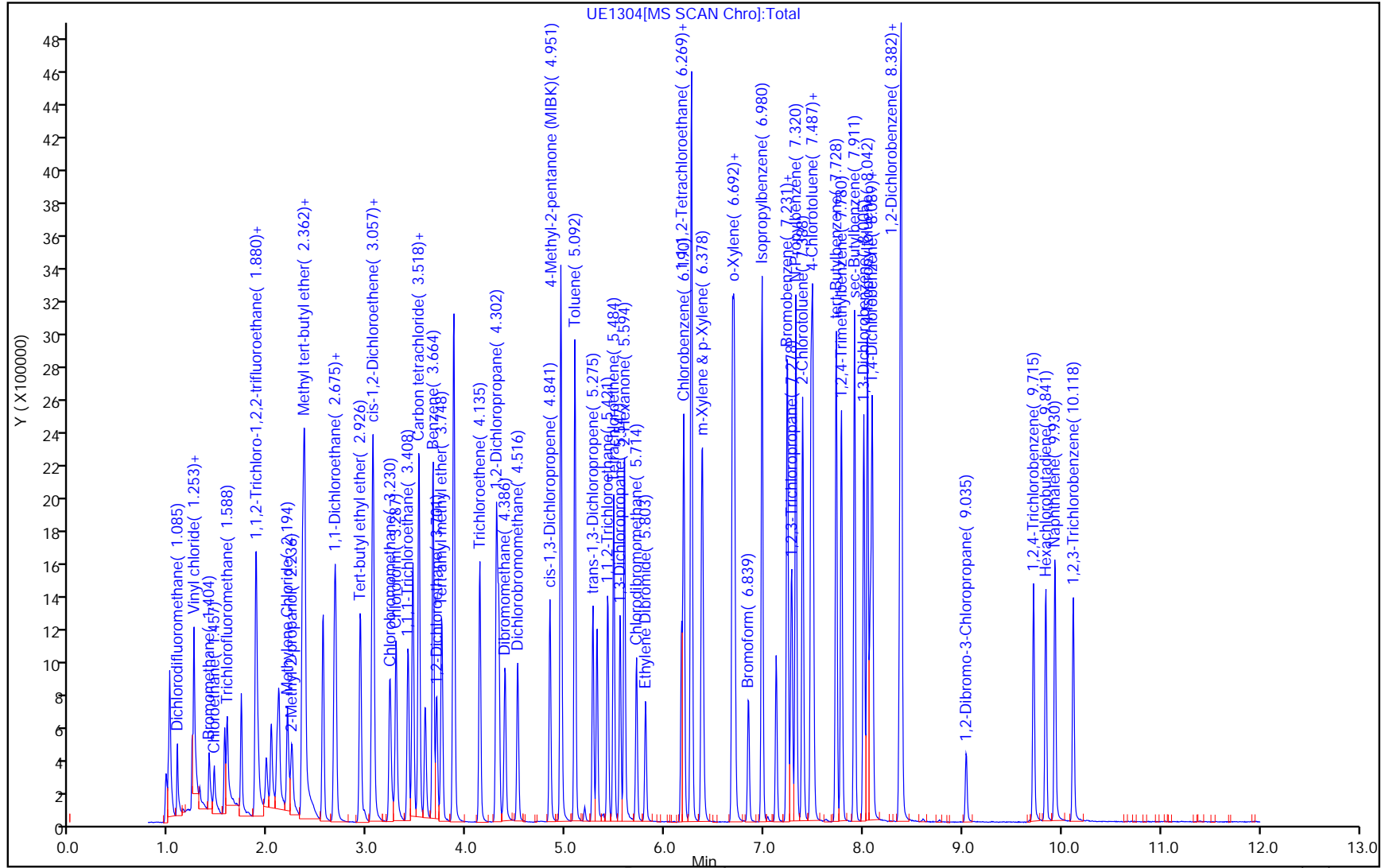
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 13-May-2020 15:32:01

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1304.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 13-May-2020 10:57:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-004
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 15:31:58 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 11:10:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.77	97.70
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.1	100.60

Report Date: 13-May-2020 15:32:01

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1304.D

Injection Date: 13-May-2020 10:57:30

Instrument ID: CMSU

Lims ID: lcs

Client ID:

Operator ID: rd

ALS Bottle#: 4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

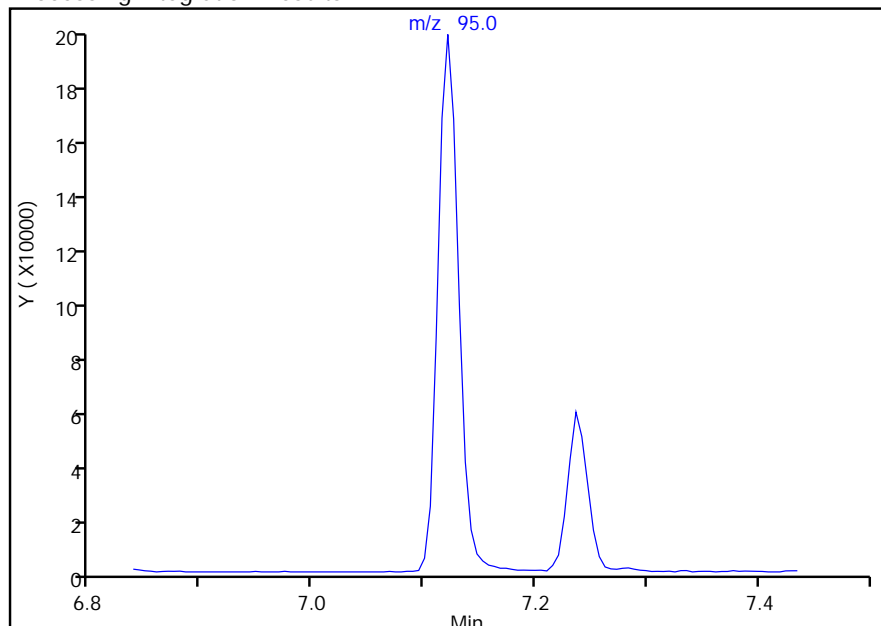
[\\$ 4 4-Bromofluorobenzene, CAS: 460-00-4](#)

Signal: 1

Not Detected

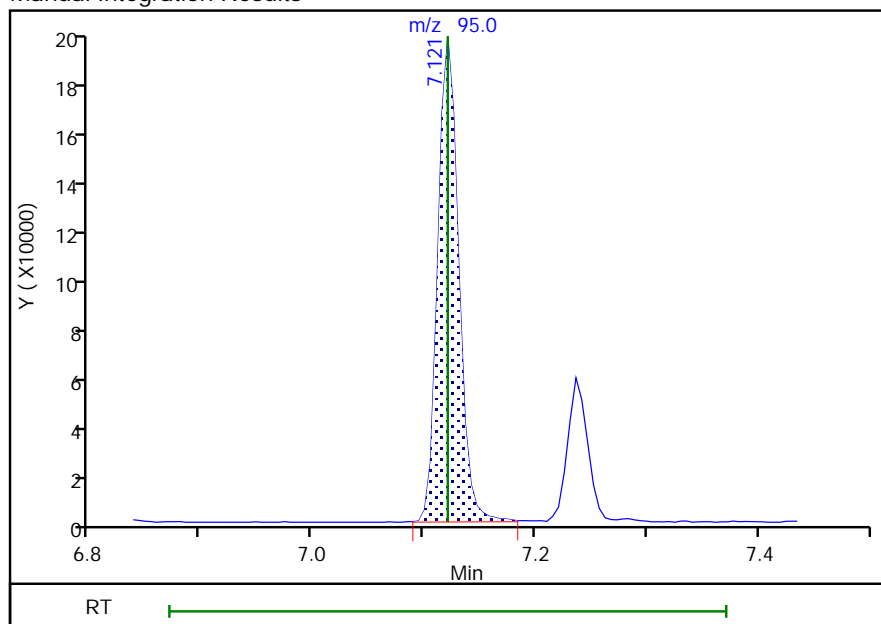
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
 Area: 247627
 Amount: 9.769741
 Amount Units: ug/l



Reviewer: diogor, 13-May-2020 11:10:36

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-618502/5
 Matrix: Water Lab File ID: UE1305.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 11:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	16.3		0.50	0.082
100-41-4	Ethylbenzene	16.1		0.50	0.099
127-18-4	Tetrachloroethene	15.0		0.50	0.18
108-88-3	Toluene	16.3		0.50	0.086
79-01-6	Trichloroethene	15.8		0.50	0.13
75-01-4	Vinyl chloride	15.8		0.50	0.16
1330-20-7	Xylenes, Total	32.4		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	99		70-130
460-00-4	4-Bromofluorobenzene	103		70-130

Report Date: 13-May-2020 15:32:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1305.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 13-May-2020 11:17:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-005
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 15:31:58 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 11:42:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1236284	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	493377	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	90	278567	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	232569	10.0	10.3	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	261980	10.0	9.93	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	300995	20.0	15.6	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	306877	20.0	15.8	
8 Chloromethane	50	1.253	1.253	0.000	76	364465	20.0	18.5	
10 Bromomethane	94	1.404	1.404	0.000	98	201875	20.0	17.2	
11 Chloroethane	64	1.457	1.457	0.000	99	180445	20.0	16.1	M
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	97	395050	20.0	19.2	M
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	229410	20.0	14.4	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	227499	20.0	18.4	M
15 Acetone	58	1.896	1.896	0.000	88	108503	100.0	94.7	
16 Methylene Chloride	84	2.194	2.194	0.000	87	330051	20.0	18.8	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	242366	200.0	173.2	
18 Methyl tert-butyl ether	73	2.361	2.362	-0.001	96	788190	20.0	17.5	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	269069	20.0	16.0	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	449146	20.0	16.5	
21 Isopropyl ether	45	2.681	2.681	0.000	95	564911	16.0	14.0	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	89	658827	16.0	13.8	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	163020	100.0	85.2	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	407032	20.0	16.8	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	386480	20.0	15.3	
26 Chlorobromomethane	130	3.224	3.225	-0.001	82	214467	20.0	18.9	M
27 Chloroform	83	3.287	3.287	0.000	100	484234	20.0	16.2	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	415860	20.0	15.9	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	356191	20.0	15.0	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	359611	20.0	16.1	
31 Benzene	78	3.664	3.664	0.000	95	1127465	20.0	16.3	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	98	363805	20.0	16.5	
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	587904	16.0	13.7	

Report Date: 13-May-2020 15:32:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1305.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	316074	20.0	15.8	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	274226	20.0	17.0	a
36 Dibromomethane	93	4.386	4.386	0.000	90	184548	20.0	16.7	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	375208	20.0	17.2	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	442758	20.0	16.9	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	-0.001	96	1241356	100.0	82.7	
40 Toluene	92	5.092	5.092	0.000	92	720130	20.0	16.3	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	96	414587	20.0	17.1	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	222311	20.0	16.5	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	283135	20.0	15.0	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	439536	20.0	16.8	
45 2-Hexanone	43	5.594	5.589	0.005	95	853777	100.0	85.8	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	320399	20.0	16.1	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	295411	20.0	17.0	
48 Chlorobenzene	112	6.190	6.190	0.000	96	844084	20.0	16.1	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	310272	20.0	15.9	
50 Ethylbenzene	91	6.268	6.269	-0.001	98	1369560	20.0	16.1	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1068616	20.0	16.1	
52 o-Xylene	91	6.682	6.682	0.000	94	1121484	20.0	16.3	
53 Styrene	104	6.697	6.697	0.000	97	919474	20.0	17.0	
54 Bromoform	173	6.844	6.844	0.000	98	234321	20.0	16.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1363865	20.0	16.0	
56 Bromobenzene	156	7.231	7.231	0.000	90	414104	20.0	16.0	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	357621	20.0	18.0	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	112177	20.0	18.3	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1583864	20.0	16.2	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	956767	20.0	16.0	
61 1,3,5-Trimethylbenzene	105	7.471	7.477	-0.006	93	998272	20.0	15.7	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	1107715	20.0	16.5	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	977548	20.0	16.0	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	942788	20.0	15.9	a
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1371681	20.0	15.8	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	737334	20.0	16.2	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1117038	20.0	15.9	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	742119	20.0	15.8	
70 n-Butylbenzene	91	8.381	8.382	-0.001	98	799412	20.0	16.0	
69 1,2-Dichlorobenzene	146	8.381	8.382	-0.001	98	708783	20.0	15.8	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	92	91739	20.0	17.5	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	339651	20.0	17.0	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	210039	20.0	16.5	
74 Naphthalene	128	9.935	9.930	0.005	99	908091	20.0	17.9	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	317202	20.0	16.9	
S 76 Xylenes, Total	1				0		40.0	32.4	
S 78 1,3-Dichloropropene, Total	1				0		40.0	34.0	

Report Date: 13-May-2020 15:32:04

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 2.00

Units: uL

524 ISSU/2016_00091

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 13-May-2020 15:32:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1305.D

Injection Date: 13-May-2020 11:17:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: lcsd

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

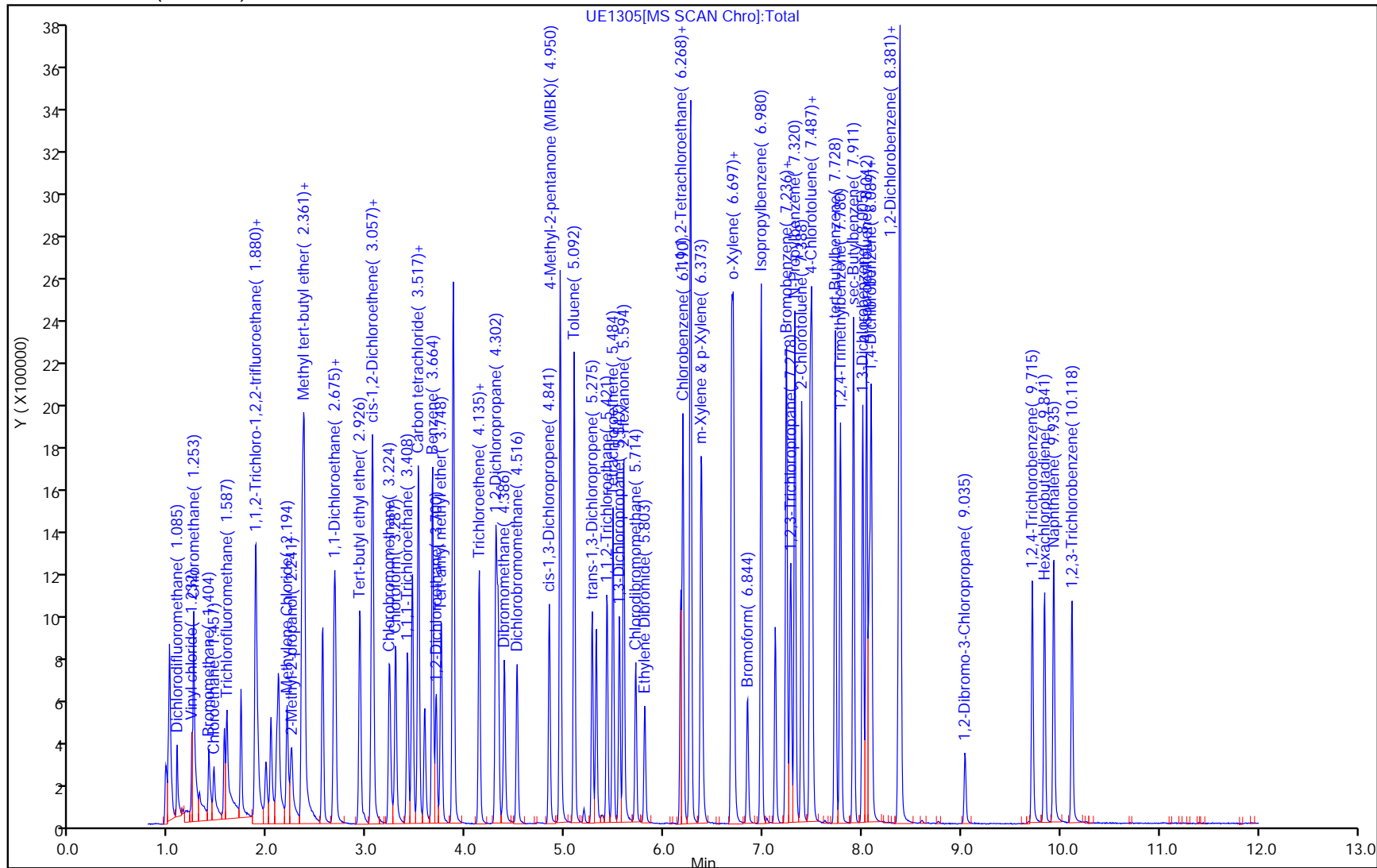
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 13-May-2020 15:32:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1305.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 13-May-2020 11:17:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-005
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 13-May-2020 15:31:58 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1018

First Level Reviewer: diogor

Date: 13-May-2020 11:42:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.3	102.58
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.93	99.28

Report Date: 13-May-2020 15:32:04

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1305.D

Injection Date: 13-May-2020 11:17:30

Instrument ID: CMSU

Lims ID: lcsd

Client ID:

Operator ID: rd

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

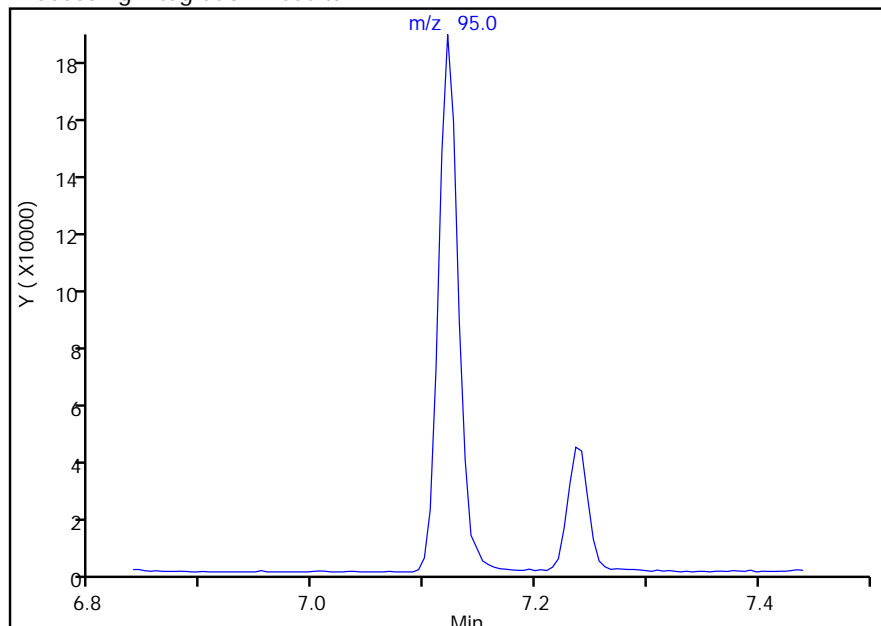
\$ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

Not Detected

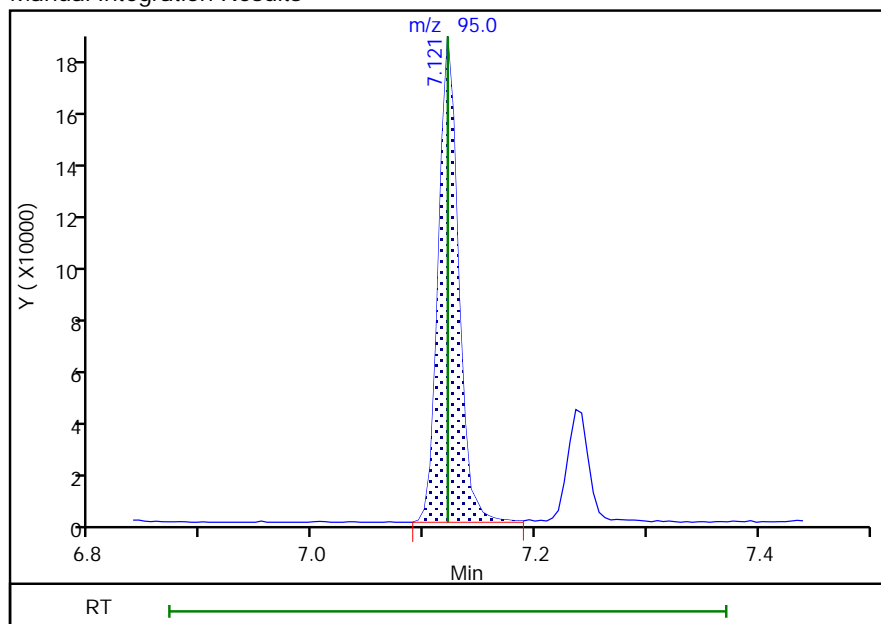
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 7.12
 Area: 232569
 Amount: 10.257884
 Amount Units: ug/l



Reviewer: diogor, 13-May-2020 11:41:57

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MS Lab Sample ID: 680-183527-2 MS
 Matrix: Water Lab File ID: UE1328.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 09:33
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 19:01
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	17.9		0.50	0.082
100-41-4	Ethylbenzene	17.7		0.50	0.099
108-88-3	Toluene	17.8		0.50	0.086
1330-20-7	Xylenes, Total	34.8		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	99		70-130
460-00-4	4-Bromofluorobenzene	102		70-130

Report Date: 14-May-2020 10:37:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1328.D
 Lims ID: 680-183527-A-2 MS
 Client ID: GWK016-2022
 Sample Type: MS
 Inject. Date: 13-May-2020 19:01:30 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-028
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:21:04 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:20:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1314839	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	526509	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	90	295895	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	246565	10.0	10.2	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	276308	10.0	9.86	
\$ 6 BFB									
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	384097	20.0	18.7	a
9 Vinyl chloride	62	1.232	1.232	0.000	97	381863	20.0	18.4	
8 Chloromethane	50	1.253	1.253	0.000	73	371124	20.0	17.8	
10 Bromomethane	94	1.404	1.404	0.000	99	220448	20.0	17.7	
11 Chloroethane	64	1.457	1.457	0.000	100	197987	20.0	16.6	
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	97	382785	20.0	17.5	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	97	298095	20.0	17.6	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	208037	20.0	15.9	
15 Acetone	58	1.901	1.896	0.005	87	92030	100.0	74.2	
16 Methylene Chloride	84	2.194	2.194	0.000	85	296344	20.0	15.9	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	252018	200.0	169.3	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	831748	20.0	17.3	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	315759	20.0	17.6	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	522023	20.0	18.1	
21 Isopropyl ether	45	2.681	2.681	0.000	93	612304	16.0	14.2	
22 Tert-butyl ethyl ether	59	2.932	2.926	0.006	90	709561	16.0	14.0	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	178618	100.0	87.8	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	465215	20.0	18.0	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	434621	20.0	16.2	
26 Chlorobromomethane	130	3.225	3.225	-0.001	82	183689	20.0	15.2	
27 Chloroform	83	3.287	3.287	0.000	99	554619	20.0	17.4	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	98	499110	20.0	17.9	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	449091	20.0	17.7	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	98	441479	20.0	18.5	
31 Benzene	78	3.664	3.664	0.000	95	1320140	20.0	17.9	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	98	403059	20.0	17.2	

Report Date: 14-May-2020 10:37:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1328.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	640041	16.0	14.0	
34 Trichloroethene	132	4.135	4.135	0.000	95	373888	20.0	17.5	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	307228	20.0	17.9	a
36 Dibromomethane	93	4.386	4.386	0.000	90	198768	20.0	16.9	
37 Dichlorobromomethane	83	4.516	4.516	0.000	99	411254	20.0	17.6	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	92	478468	20.0	17.1	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	-0.001	96	1327822	100.0	82.9	
40 Toluene	92	5.092	5.092	0.000	93	840129	20.0	17.8	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	96	441056	20.0	17.0	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	243543	20.0	17.0	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	346976	20.0	17.3	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	93	472842	20.0	16.9	
45 2-Hexanone	43	5.594	5.589	0.005	95	900557	100.0	85.2	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	344544	20.0	16.3	
47 Ethylene Dibromide	107	5.803	5.803	0.000	100	313505	20.0	16.9	
48 Chlorobenzene	112	6.190	6.190	0.000	97	946544	20.0	16.9	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	346175	20.0	16.7	
50 Ethylbenzene	91	6.269	6.269	-0.001	98	1598240	20.0	17.7	
51 m-Xylene & p-Xylene	91	6.378	6.373	0.005	99	1231667	20.0	17.5	
52 o-Xylene	91	6.682	6.682	0.000	94	1261766	20.0	17.3	
53 Styrene	104	6.697	6.697	0.000	97	1032756	20.0	17.9	
54 Bromoform	173	6.844	6.844	0.000	99	247509	20.0	16.3	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1595575	20.0	17.6	
56 Bromobenzene	156	7.231	7.231	0.000	91	452429	20.0	16.4	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	383035	20.0	18.2	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	117597	20.0	18.0	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1846232	20.0	17.8	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1085476	20.0	17.1	
61 1,3,5-Trimethylbenzene	105	7.477	7.477	0.000	93	1129509	20.0	16.7	a
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	1224275	20.0	17.1	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1142865	20.0	17.6	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	1026196	20.0	16.3	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1634553	20.0	17.7	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	812800	20.0	16.8	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1281338	20.0	17.2	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	814572	20.0	16.4	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	874921	20.0	16.5	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	95	781566	20.0	16.4	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	95167	20.0	17.1	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	328073	20.0	15.4	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	240719	20.0	17.8	
74 Naphthalene	128	9.935	9.930	0.005	99	913164	20.0	16.9	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	322561	20.0	16.2	
S 76 Xylenes, Total	1				0		40.0	34.8	
S 77 Trihalomethanes, Total	1				0			67.6	
S 78 1,3-Dichloropropene, Total	1				0		40.0	34.1	

Report Date: 14-May-2020 10:37:16

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 2.00

Units: uL

524 ISSU/2016_00091

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 14-May-2020 10:37:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1328.D

Injection Date: 13-May-2020 19:01:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-2 MS

Worklist Smp#: 28

Client ID: GWK016-2022

Purge Vol: 5.000 mL

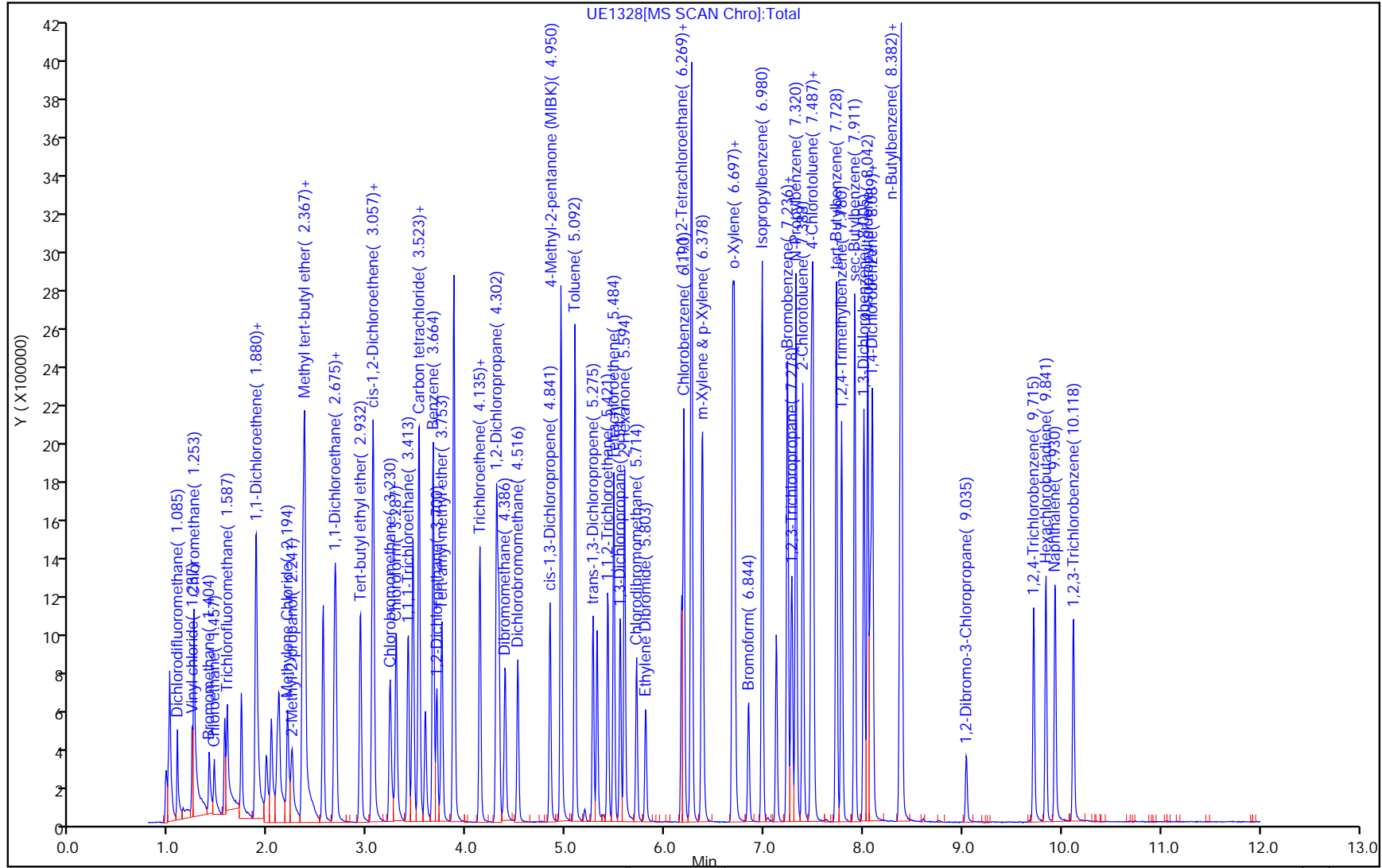
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:37:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1328.D
 Lims ID: 680-183527-A-2 MS
 Client ID: GWK016-2022
 Sample Type: MS
 Inject. Date: 13-May-2020 19:01:30 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-028
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:21:04 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:20:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.2	102.25
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.86	98.58

Report Date: 14-May-2020 10:37:16

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1328.D

Injection Date: 13-May-2020 19:01:30

Instrument ID: CMSU

Lims ID: 680-183527-A-2 MS

Client ID: GWK016-2022

Operator ID: rd

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)

Detector: MS SCAN

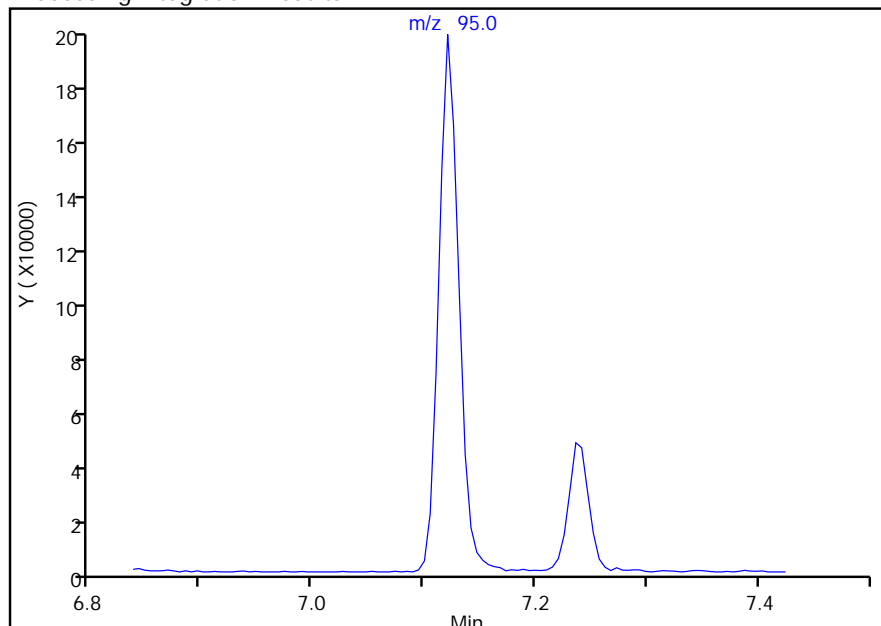
[\\$ 4 4-Bromofluorobenzene, CAS: 460-00-4](#)

Signal: 1

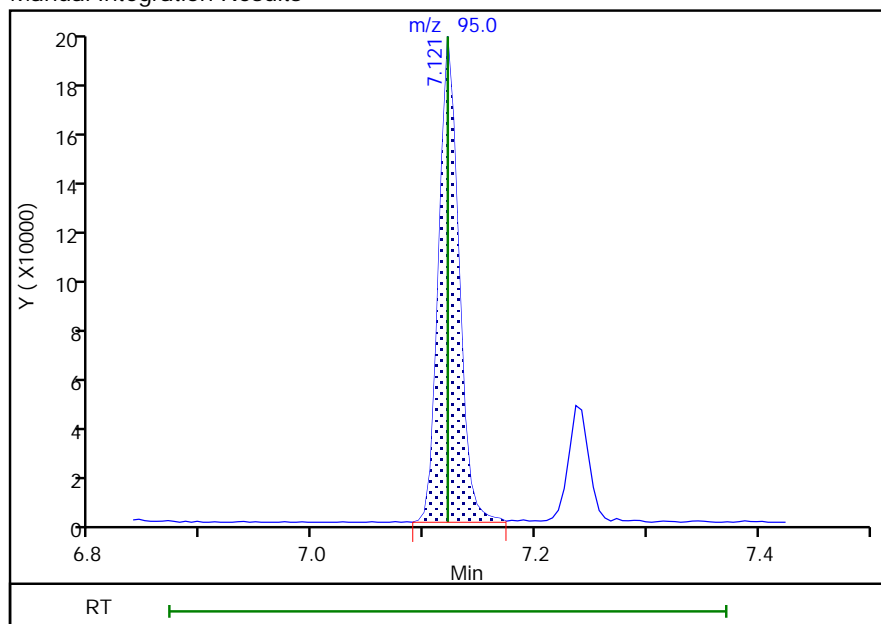
Not Detected

Expected RT: 7.12

Processing Integration Results

RT: 7.12
Area: 246565
Amount: 10.225465
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:19:27

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MSD Lab Sample ID: 680-183527-2 MSD
 Matrix: Water Lab File ID: UE1329.D
 Analysis Method: 524.2 Date Collected: 05/05/2020 09:33
 Sample wt/vol: 5(mL) Date Analyzed: 05/13/2020 19:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 618502 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	17.5		0.50	0.082
100-41-4	Ethylbenzene	17.7		0.50	0.099
108-88-3	Toluene	17.6		0.50	0.086
1330-20-7	Xylenes, Total	34.8		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	99		70-130
460-00-4	4-Bromofluorobenzene	103		70-130

Report Date: 14-May-2020 10:37:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1329.D
 Lims ID: 680-183527-A-2 MSD
 Client ID: GWK016-2022
 Sample Type: MSD
 Inject. Date: 13-May-2020 19:21:30 ALS Bottle#: 29 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-029
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:21:04 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:21:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	1379143	20.0	20.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	560058	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	89	312005	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	260693	10.0	10.3	a
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	294044	10.0	9.95	
\$ 6 BFB									
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	405784	20.0	18.9	a
9 Vinyl chloride	62	1.232	1.232	0.000	98	399559	20.0	18.4	
8 Chloromethane	50	1.253	1.253	0.000	73	398263	20.0	18.2	
10 Bromomethane	94	1.405	1.404	0.000	99	235070	20.0	18.0	
11 Chloroethane	64	1.457	1.457	0.000	100	219557	20.0	17.5	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	97	352094	20.0	15.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	99	301655	20.0	16.9	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	96	241369	20.0	17.5	
15 Acetone	58	1.901	1.896	0.005	88	103675	100.0	80.1	
16 Methylene Chloride	84	2.194	2.194	0.000	87	326429	20.0	16.7	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	269699	200.0	172.7	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	866538	20.0	17.2	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	336567	20.0	17.9	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	537517	20.0	17.7	
21 Isopropyl ether	45	2.681	2.681	0.000	94	640908	16.0	14.2	
22 Tert-butyl ethyl ether	59	2.927	2.926	0.000	90	729661	16.0	13.7	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	178995	100.0	83.9	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	477211	20.0	17.6	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	94	459923	20.0	16.3	
26 Chlorobromomethane	130	3.225	3.225	0.000	81	217373	20.0	17.2	
27 Chloroform	83	3.287	3.287	0.000	100	583818	20.0	17.5	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	98	521698	20.0	17.6	
29 Carbon tetrachloride	117	3.518	3.517	0.001	96	474756	20.0	17.6	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	451789	20.0	17.8	
31 Benzene	78	3.664	3.664	0.000	94	1372583	20.0	17.5	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	391399	20.0	15.7	

Report Date: 14-May-2020 10:37:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1329.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	659026	16.0	13.8	
34 Trichloroethene	132	4.135	4.135	0.000	96	385590	20.0	17.0	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	91	313507	20.0	17.1	a
36 Dibromomethane	93	4.386	4.386	0.000	91	208883	20.0	16.7	
37 Dichlorobromomethane	83	4.517	4.516	0.000	99	427268	20.0	17.2	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	91	501531	20.0	16.9	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	95	1376936	100.0	80.8	
40 Toluene	92	5.092	5.092	0.000	93	883873	20.0	17.6	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	96	463671	20.0	16.8	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	95	251233	20.0	16.4	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	357058	20.0	16.9	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	493185	20.0	16.6	
45 2-Hexanone	43	5.589	5.589	0.000	95	943872	100.0	84.7	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	359679	20.0	16.1	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	331209	20.0	16.8	
48 Chlorobenzene	112	6.190	6.190	0.000	97	1006186	20.0	16.9	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	363789	20.0	16.6	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1684260	20.0	17.7	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1305303	20.0	17.6	
52 o-Xylene	91	6.682	6.682	0.000	94	1329520	20.0	17.3	
53 Styrene	104	6.698	6.697	0.001	97	1100660	20.0	18.1	
54 Bromoform	173	6.844	6.844	0.000	98	266540	20.0	16.6	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1686805	20.0	17.6	
56 Bromobenzene	156	7.231	7.231	0.000	90	485388	20.0	16.7	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	97	398976	20.0	17.9	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	127633	20.0	18.6	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1959413	20.0	17.9	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1144488	20.0	17.1	
61 1,3,5-Trimethylbenzene	105	7.472	7.477	-0.005	93	1258699	20.0	17.7	a
62 4-Chlorotoluene	91	7.493	7.492	0.000	96	1313690	20.0	17.4	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	1218863	20.0	17.8	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1183237	20.0	17.8	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1740127	20.0	17.9	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	871733	20.0	17.1	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1427542	20.0	18.1	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	881771	20.0	16.8	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	1024572	20.0	18.4	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	87	826934	20.0	16.5	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	93	103862	20.0	17.7	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	397340	20.0	17.8	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	266129	20.0	18.7	
74 Naphthalene	128	9.930	9.930	0.000	99	1033748	20.0	18.1	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	370933	20.0	17.7	
S 76 Xylenes, Total	1				0		40.0	34.8	
S 77 Trihalomethanes, Total	1				0			67.5	
S 78 1,3-Dichloropropene, Total	1				0		40.0	33.7	

Report Date: 14-May-2020 10:37:22

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524MMix_00168

Amount Added: 2.00

Units: uL

524 ISSU/2016_00091

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 14-May-2020 10:37:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1329.D

Injection Date: 13-May-2020 19:21:30

Instrument ID: CMSU

Operator ID: rd

Lims ID: 680-183527-A-2 MSD

Worklist Smp#: 29

Client ID: GWK016-2022

Purge Vol: 5.000 mL

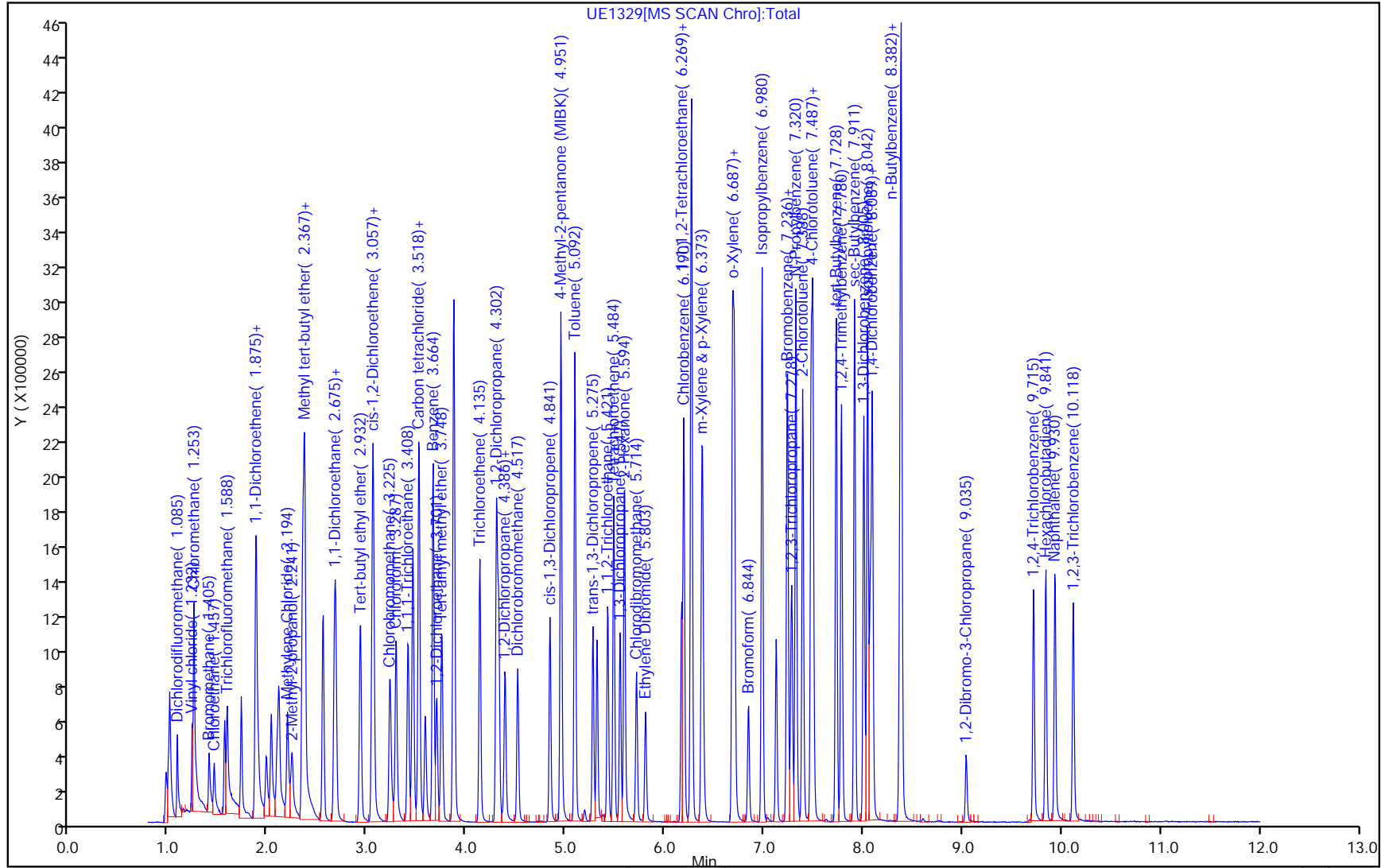
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 14-May-2020 10:37:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1329.D
 Lims ID: 680-183527-A-2 MSD
 Client ID: GWK016-2022
 Sample Type: MSD
 Inject. Date: 13-May-2020 19:21:30 ALS Bottle#: 29 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0063707-029
 Operator ID: rd Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\U524.2.m
 Limit Group: 524.2
 Last Update: 14-May-2020 10:21:04 Calib Date: 11-May-2020 14:19:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200511-63660.b\UE1113.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1032

First Level Reviewer: intarachau

Date: 14-May-2020 10:21:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.3	103.07
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.95	99.49

Report Date: 14-May-2020 10:37:22

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

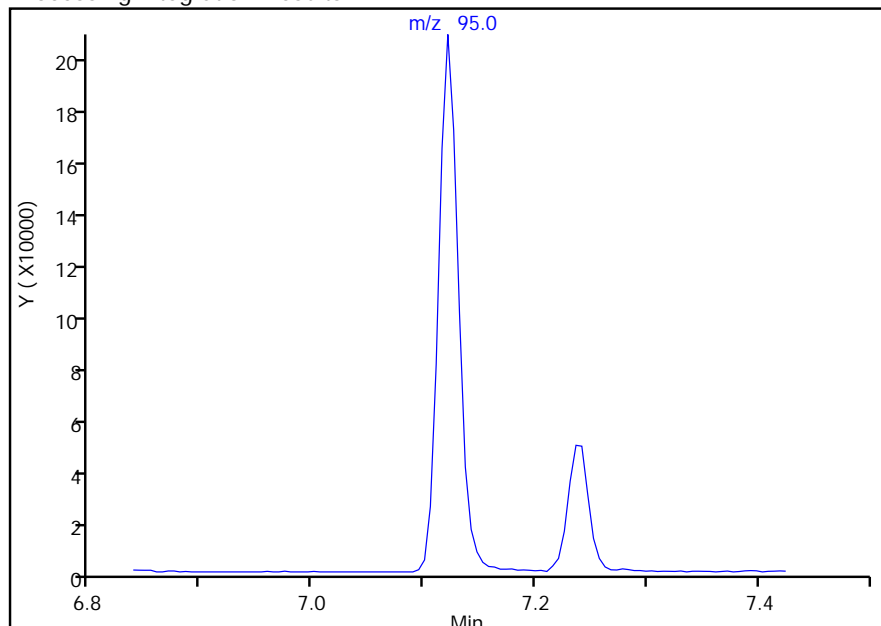
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200513-63707.b\UE1329.D		
Injection Date:	13-May-2020 19:21:30	Instrument ID:	CMSU
Lims ID:	680-183527-A-2 MSD		
Client ID:	GWK016-2022		
Operator ID:	rd	ALS Bottle#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	29

§ 4 4-Bromofluorobenzene, CAS: 460-00-4

Signal: 1

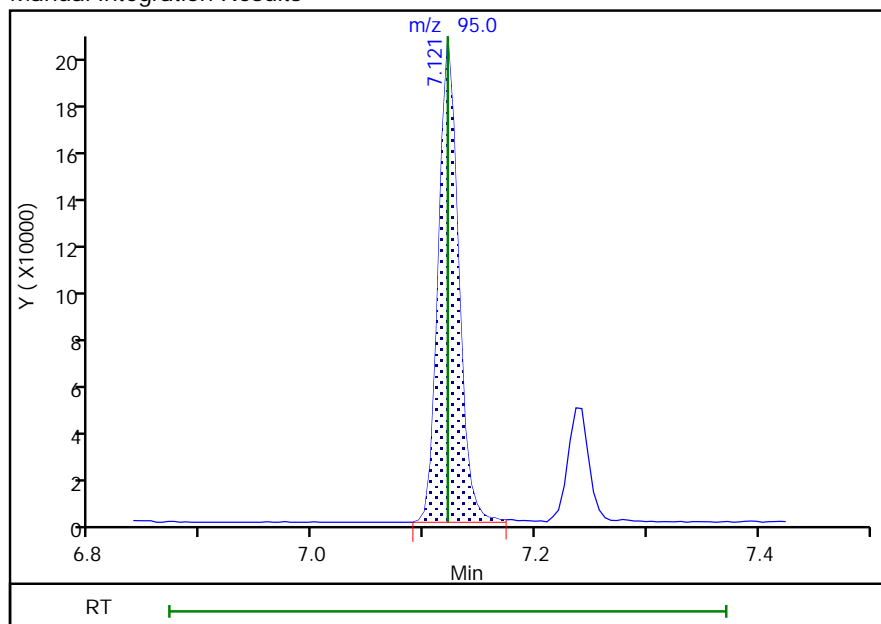
Not Detected
Expected RT: 7.12

Processing Integration Results



RT: 7.12
Area: 260693
Amount: 10.307285
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 14-May-2020 10:20:34

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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05/15/2020

September 2020

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 05/11/2020 10:07
 Analysis Batch Number: 618210 End Date: 05/11/2020 18:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-618210/1		05/11/2020 10:07	1	UE1101.D	Rtx-624 0.18 (mm)
IC 680-618210/6		05/11/2020 11:58	1	UE1106.D	Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 11:58	1		Rtx-624 0.18 (mm)
IC 680-618210/7		05/11/2020 12:18	1	UE1107.D	Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 12:18	1		Rtx-624 0.18 (mm)
IC 680-618210/8		05/11/2020 12:38	1	UE1108.D	Rtx-624 0.18 (mm)
IC 680-618210/9		05/11/2020 12:58	1	UE1109.D	Rtx-624 0.18 (mm)
IC 680-618210/10		05/11/2020 13:18	1	UE1110.D	Rtx-624 0.18 (mm)
ICIS 680-618210/11		05/11/2020 13:38	1	UE1111.D	Rtx-624 0.18 (mm)
IC 680-618210/12		05/11/2020 13:59	1	UE1112.D	Rtx-624 0.18 (mm)
IC 680-618210/13		05/11/2020 14:19	1	UE1113.D	Rtx-624 0.18 (mm)
ICV 680-618210/15		05/11/2020 14:59	1	UE1115.D	Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 14:59	1		Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 15:41	1		Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 16:21	1		Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 17:11	1		Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 17:31	1		Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 17:51	1		Rtx-624 0.18 (mm)
ZZZZZ		05/11/2020 18:12	1		Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 05/13/2020 09:47
 Analysis Batch Number: 618502 End Date: 05/13/2020 19:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-618502/1		05/13/2020 09:47	1	UE1301.D	Rtx-624 0.18 (mm)
CCVIS 680-618502/3		05/13/2020 10:36	1	UE1303.D	Rtx-624 0.18 (mm)
LCS 680-618502/4		05/13/2020 10:57	1	UE1304.D	Rtx-624 0.18 (mm)
LCSD 680-618502/5		05/13/2020 11:17	1	UE1305.D	Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 11:57	1		Rtx-624 0.18 (mm)
MB 680-618502/9		05/13/2020 12:37	1	UE1309.D	Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 13:18	1		Rtx-624 0.18 (mm)
680-183527-3		05/13/2020 13:38	1	UE1312.D	Rtx-624 0.18 (mm)
680-183527-6		05/13/2020 13:58	1	UE1313.D	Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 14:18	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 14:38	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 14:58	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 15:19	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 15:39	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 15:59	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 16:19	1		Rtx-624 0.18 (mm)
680-183527-1		05/13/2020 16:39	1	UE1321.D	Rtx-624 0.18 (mm)
680-183527-4		05/13/2020 16:59	1	UE1322.D	Rtx-624 0.18 (mm)
680-183527-5		05/13/2020 17:20	1	UE1323.D	Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 17:40	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 18:00	1		Rtx-624 0.18 (mm)
ZZZZZ		05/13/2020 18:20	1		Rtx-624 0.18 (mm)
680-183527-2		05/13/2020 18:40	1	UE1327.D	Rtx-624 0.18 (mm)
680-183527-2 MS		05/13/2020 19:01	1	UE1328.D	Rtx-624 0.18 (mm)
680-183527-2 MSD		05/13/2020 19:21	1	UE1329.D	Rtx-624 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Batch Number: 618502 Batch Start Date: 05/13/20 09:47 Batch Analyst: Proctor, Steven M

Batch Method: 524.2 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	ChlorineCheck	FinalAmount	524 ISSU/2016 00091	524MMix 00168
BFB 680-618502/1	J	524.2			5 mL		5 mL		
CCVIS 680-618502/3		524.2			5 mL		5 mL	5 uL	2 uL
LCS 680-618502/4		524.2			5 mL		5 mL	5 uL	2 uL
LCSD 680-618502/5		524.2			5 mL		5 mL	5 uL	2 uL
MB 680-618502/9		524.2			5 mL		5 mL	5 uL	
680-183527-A-3	TB2022-02	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-183527-A-6	TB2022-01	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-183527-A-1	GWK003-2022	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-183527-A-4	GWVA2-2022	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-183527-A-5	GWVA2-6022	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-183527-A-2	GWK016-2022	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-183527-A-2 MS	GWK016-2022	524.2	T	<2	5 mL	N	5 mL	5 uL	2 uL
680-183527-A-2 MSD	GWK016-2022	524.2	T	<2	5 mL	N	5 mL	5 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_bfb 00217					
BFB 680-618502/1	J	524.2		2 uL					
CCVIS 680-618502/3		524.2							
LCS 680-618502/4		524.2							
LCSD 680-618502/5		524.2							
MB 680-618502/9		524.2							
680-183527-A-3	TB2022-02	524.2	T						
680-183527-A-6	TB2022-01	524.2	T						
680-183527-A-1	GWK003-2022	524.2	T						
680-183527-A-4	GWVA2-2022	524.2	T						
680-183527-A-5	GWVA2-6022	524.2	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Batch Number: 618502 Batch Start Date: 05/13/20 09:47 Batch Analyst: Proctor, Steven M

Batch Method: 524.2 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_bfb 00217					
680-183527-A-2	GWK016-2022	524.2	T						
680-183527-A-2 MS	GWK016-2022	524.2	T						
680-183527-A-2 MSD	GWK016-2022	524.2	T						

Batch Notes	
pH Indicator ID	phpaper 1-2.5_00062
Residual Chlorine Indicator ID	kistarchpaper_00005

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

Method 504.1

**EDB, DBCP, and 1,2,3-TCP (GC) by
Method 504.1**

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (2): CLP II 0.25 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	PCA2 #
GWK003-2022	680-183527-1	86
GWK016-2022	680-183527-2	84
TB2022-02	680-183527-3	85
GWVA2-2022	680-183527-4	87
GWVA2-6022	680-183527-5	84
TB2022-01	680-183527-6	86
	MB 680-618071/3-A	85
	LCS 680-618071/4-A	87
	LCSD 680-618071/5-A	87
GWK016-2022 MS	680-183527-2 MS	82
GWK016-2022 MSD	680-183527-2 MSD	88

PCA = Pentachloroethane

QC LIMITS
70-130

Column to be used to flag recovery values

FORM II 504.1

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XE08009.D
 Lab ID: LCS 680-618071/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylene Dibromide	0.100	0.103	103	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM III

GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: XE08010.DLab ID: LCSD 680-618071/5-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Ethylene Dibromide	0.100	0.104	104	1	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XE08015.D
 Lab ID: 680-183527-2 MS Client ID: GWK016-2022 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Ethylene Dibromide	0.0980	ND	0.0966	99	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: XE08016.D

Lab ID: 680-183527-2 MSD Client ID: GWK016-2022 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Ethylene Dibromide	0.0964	0.0998	104	3	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: MB 680-618071/3-A
 Matrix: Water Date Extracted: 05/08/2020 13:35
 Lab File ID: (1) XE08008.D Lab File ID: (2) XE08008.D
 Date Analyzed: (1) 05/08/2020 15:41 Date Analyzed: (2) 05/08/2020 15:41
 Instrument ID: (1) CSGX Instrument ID: (2) CSGX
 GC Column: (1) CLP I 0.25 ID: 0.25(mm) GC Column: (2) CLP II 0.25 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-618071/4-A	05/08/2020 15:51	05/08/2020 15:51
	LCSD 680-618071/5-A	05/08/2020 16:01	05/08/2020 16:01
GWK016-2022	680-183527-2	05/08/2020 16:40	05/08/2020 16:40
GWK016-2022 MS	680-183527-2 MS	05/08/2020 16:50	05/08/2020 16:50
GWK016-2022 MSD	680-183527-2 MSD	05/08/2020 17:00	05/08/2020 17:00
TB2022-02	680-183527-3	05/08/2020 17:10	05/08/2020 17:10
GWVA2-2022	680-183527-4	05/08/2020 17:20	05/08/2020 17:20
GWVA2-6022	680-183527-5	05/08/2020 17:29	05/08/2020 17:29
TB2022-01	680-183527-6	05/08/2020 17:39	05/08/2020 17:39
GWK003-2022	680-183527-1	05/08/2020 17:49	05/08/2020 17:49

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MS Lab Sample ID: 680-183527-2 MS
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 05/08/2020 16:50 Date Analyzed (2): 05/08/2020 16:50
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0966		3.7
	2		1.59	1.56	1.62	0.0931		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MSD Lab Sample ID: 680-183527-2 MSD
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 05/08/2020 17:00 Date Analyzed (2): 05/08/2020 17:00
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0998		4.6
	2		1.59	1.56	1.62	0.0953		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-618071/4-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 05/08/2020 15:51 Date Analyzed (2): 05/08/2020 15:51
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.103		5.8
	2		1.59	1.56	1.62	0.0974		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-618071/5-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 05/08/2020 16:01 Date Analyzed (2): 05/08/2020 16:01
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.104		4.6
	2		1.59	1.56	1.62	0.0997		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK003-2022 Lab Sample ID: 680-183527-1
 Matrix: Water Lab File ID: XE08021.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 10:03
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.8 (mL) Date Analyzed: 05/08/2020 17:49
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0024

Report Date: 11-May-2020 15:25:55

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08021.D
 Lims ID: 680-183527-F-1-A
 Client ID: GWK003-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:49:38 ALS Bottle#: 21 Worklist Smp#: 21
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-021
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.282	0.000	463901	0.3714
2	2.552	2.552	0.000	388275	0.3763

RPD = 1.30

Report Date: 11-May-2020 15:25:55

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08021.D

Injection Date: 08-May-2020 17:49:38

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-F-1-A

Lab Sample ID: 680-183527-1

Worklist Smp#: 21

Client ID: GWK003-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

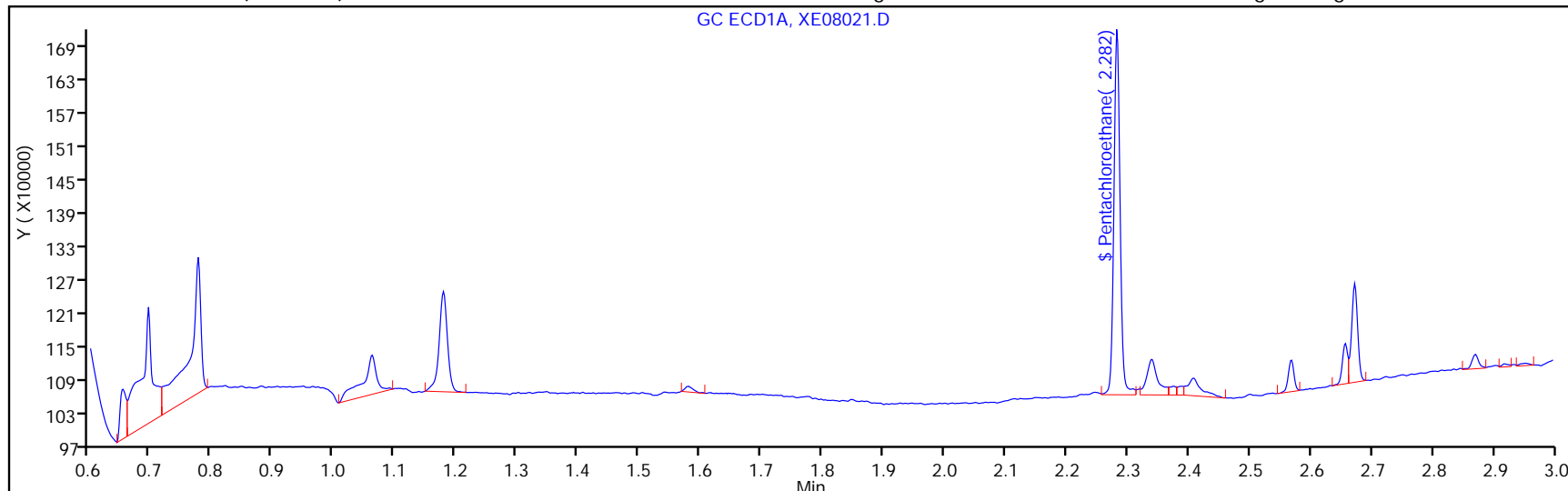
ALS Bottle#: 21

Method: EDBDBCP_CSGX

Limit Group: 504.1

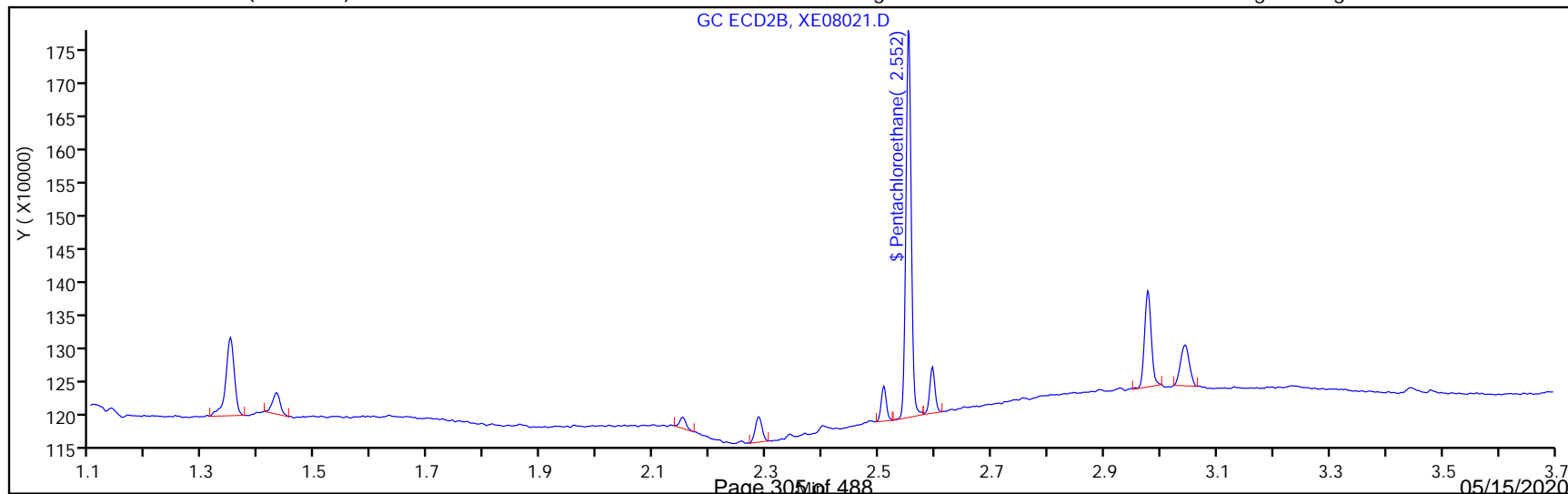
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:55

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08021.D
 Lims ID: 680-183527-F-1-A
 Client ID: GWK003-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:49:38 ALS Bottle#: 21 Worklist Smp#: 21
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-021
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3714	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3763	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK003-2022 Lab Sample ID: 680-183527-1
 Matrix: Water Lab File ID: XE08021.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 10:03
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.8 (mL) Date Analyzed: 05/08/2020 17:49
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	86		70-130

Report Date: 11-May-2020 15:25:55

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08021.D
 Lims ID: 680-183527-F-1-A
 Client ID: GWK003-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:49:38 ALS Bottle#: 21 Worklist Smp#: 21
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-021
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	463901	0.3714
2	2.552	2.552	0.000	388275	0.3763

RPD = 1.30

Report Date: 11-May-2020 15:25:55

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08021.D

Injection Date: 08-May-2020 17:49:38

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-F-1-A

Lab Sample ID: 680-183527-1

Worklist Smp#: 21

Client ID: GWK003-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

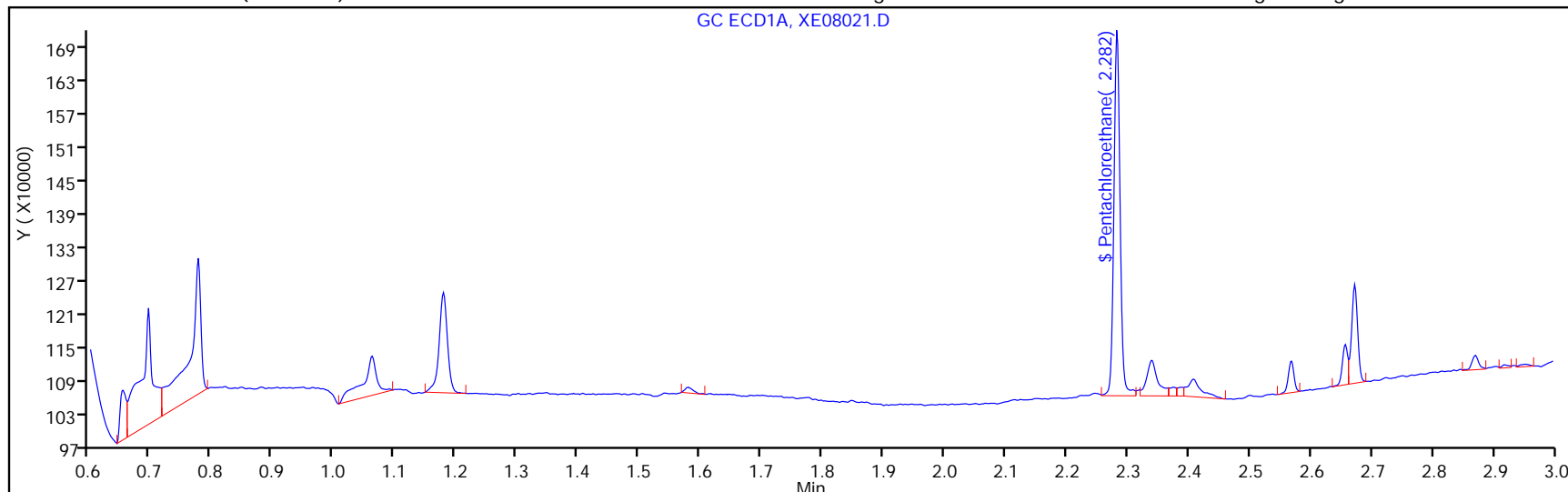
ALS Bottle#: 21

Method: EDBDBCP_CSGX

Limit Group: 504.1

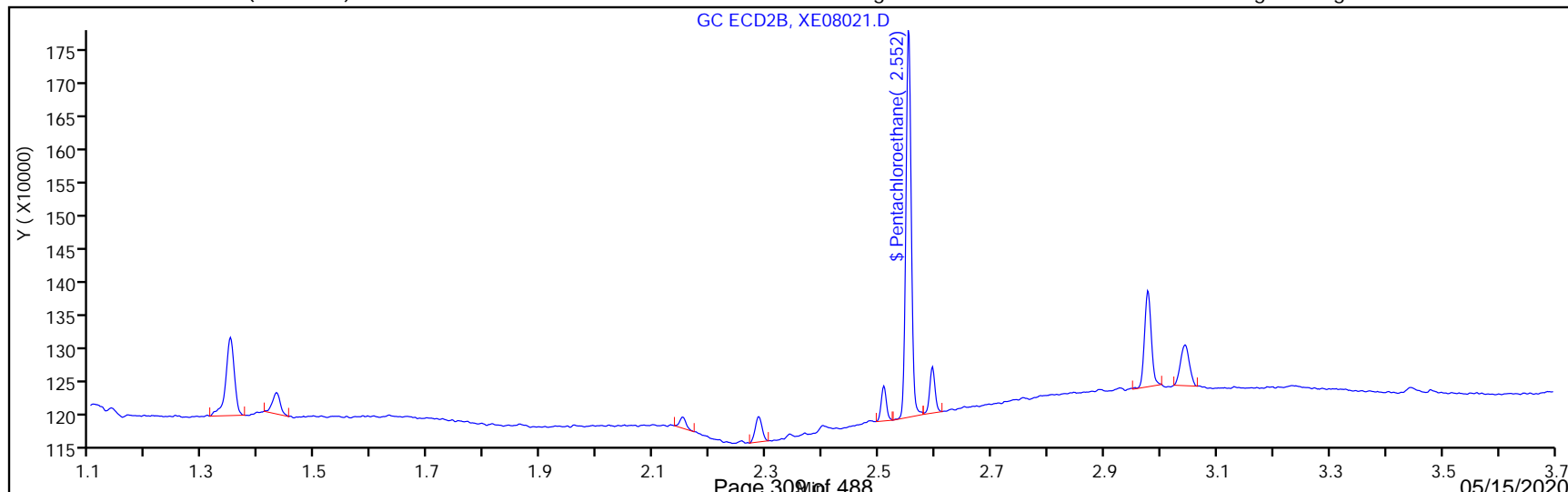
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:55

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08021.D
 Lims ID: 680-183527-F-1-A
 Client ID: GWK003-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:49:38 ALS Bottle#: 21 Worklist Smp#: 21
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-021
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3714	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3763	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 Lab Sample ID: 680-183527-2
 Matrix: Water Lab File ID: XE08014.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 09:33
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.3 (mL) Date Analyzed: 05/08/2020 16:40
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 11-May-2020 15:25:49

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08014.D
 Lims ID: 680-183527-E-2-A
 Client ID: GWK016-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 16:40:43 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-014
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.283	2.282	0.001	441666	0.3536
2	2.553	2.552	0.001	381410	0.3697

RPD = 4.43

Report Date: 11-May-2020 15:25:49

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08014.D

Injection Date: 08-May-2020 16:40:43

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-2-A

Lab Sample ID: 680-183527-2

Worklist Smp#: 14

Client ID: GWK016-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

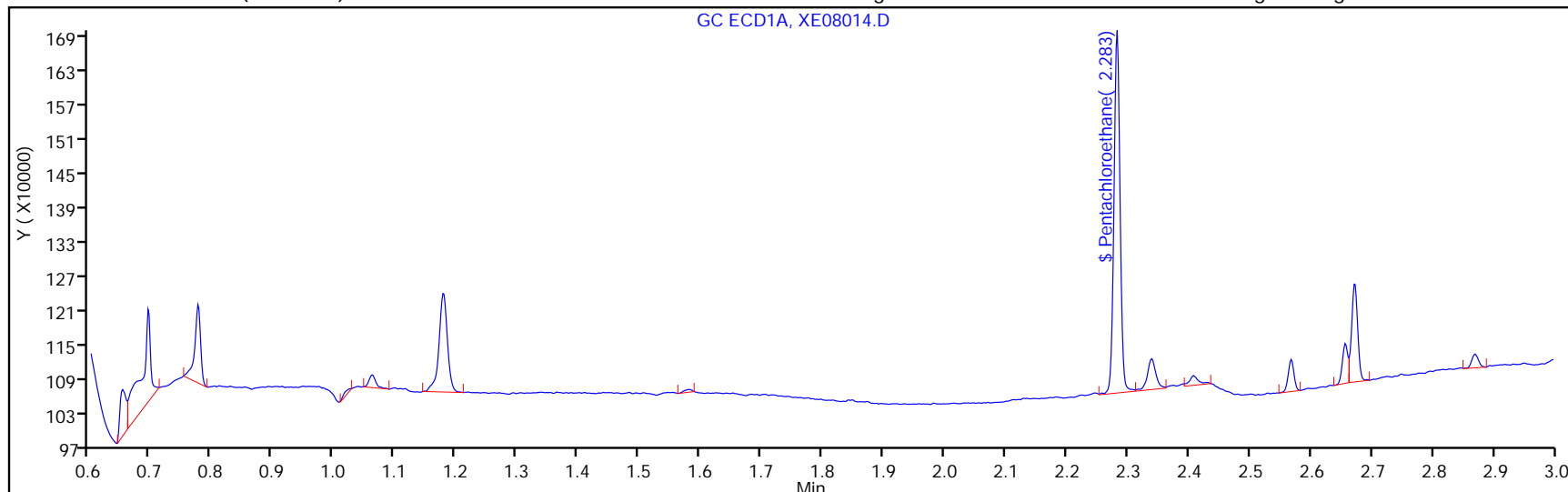
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

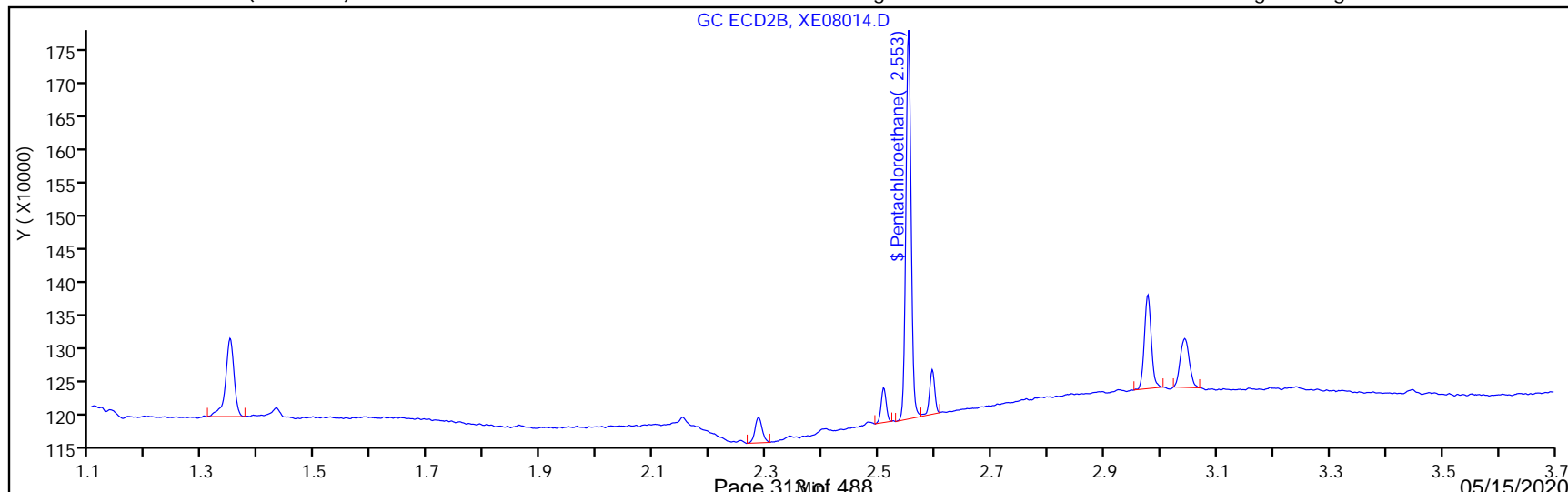
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:49

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08014.D
 Lims ID: 680-183527-E-2-A
 Client ID: GWK016-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 16:40:43 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-014
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3536	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3697	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 Lab Sample ID: 680-183527-2
 Matrix: Water Lab File ID: XE08014.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 09:33
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.3 (mL) Date Analyzed: 05/08/2020 16:40
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	84		70-130

Report Date: 11-May-2020 15:25:49

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08014.D
 Lims ID: 680-183527-E-2-A
 Client ID: GWK016-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 16:40:43 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-014
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.282	0.001	441666	0.3536
2	2.553	2.552	0.001	381410	0.3697

RPD = 4.43

Report Date: 11-May-2020 15:25:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08014.D

Injection Date: 08-May-2020 16:40:43

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-2-A

Lab Sample ID: 680-183527-2

Worklist Smp#: 14

Client ID: GWK016-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

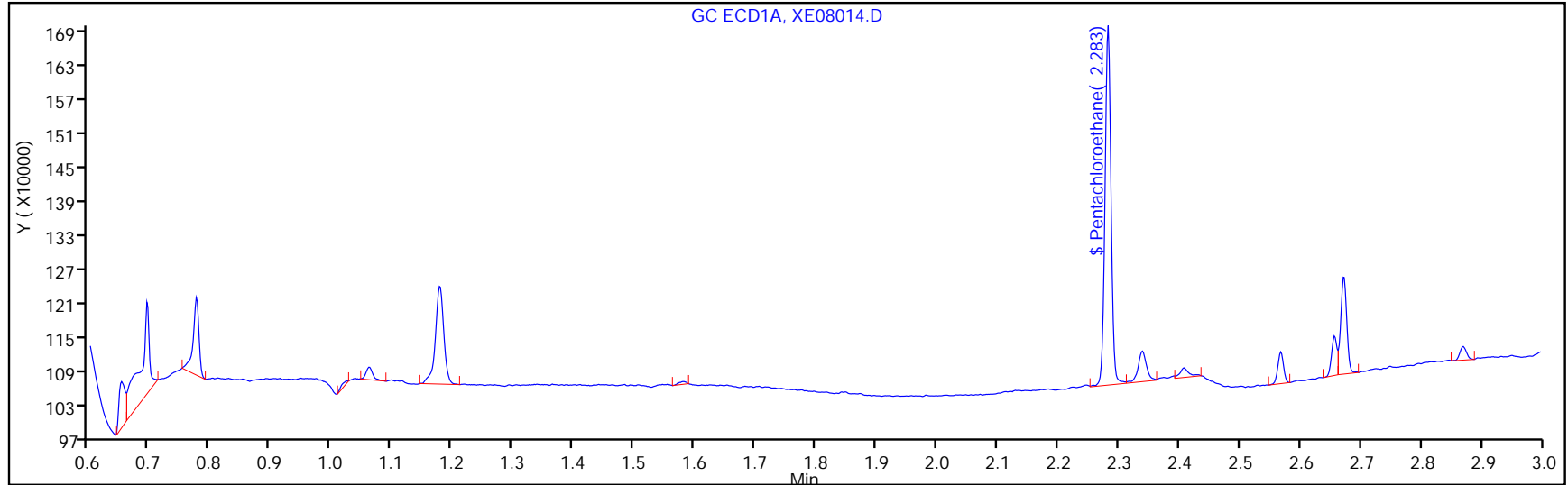
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

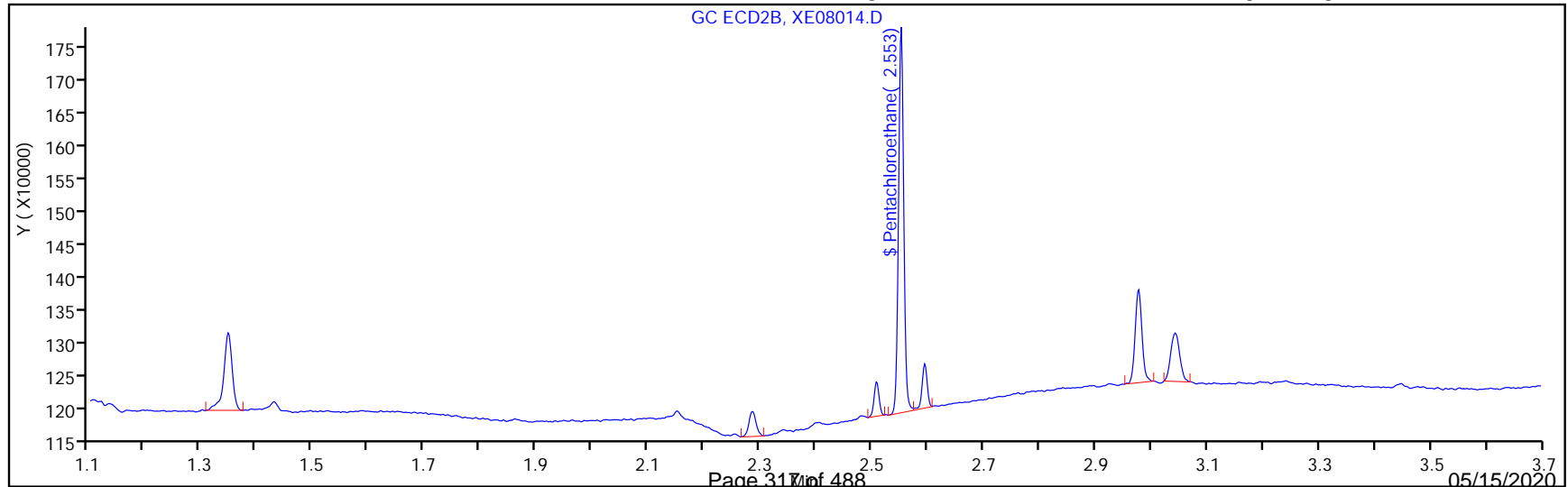
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:50

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08014.D
 Lims ID: 680-183527-E-2-A
 Client ID: GWK016-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 16:40:43 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-014
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3536	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3697	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: TB2022-02 Lab Sample ID: 680-183527-3
 Matrix: Water Lab File ID: XE08017.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 08:00
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 36(mL) Date Analyzed: 05/08/2020 17:10
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0024

Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08017.D
 Lims ID: 680-183527-E-3-A
 Client ID: TB2022-02
 Sample Type: Client
 Inject. Date: 08-May-2020 17:10:15 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.282	0.000	444416	0.3558
2	2.552	2.552	0.000	384323	0.3725

RPD = 4.57

Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08017.D

Injection Date: 08-May-2020 17:10:15

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-3-A

Lab Sample ID: 680-183527-3

Worklist Smp#: 17

Client ID: TB2022-02

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

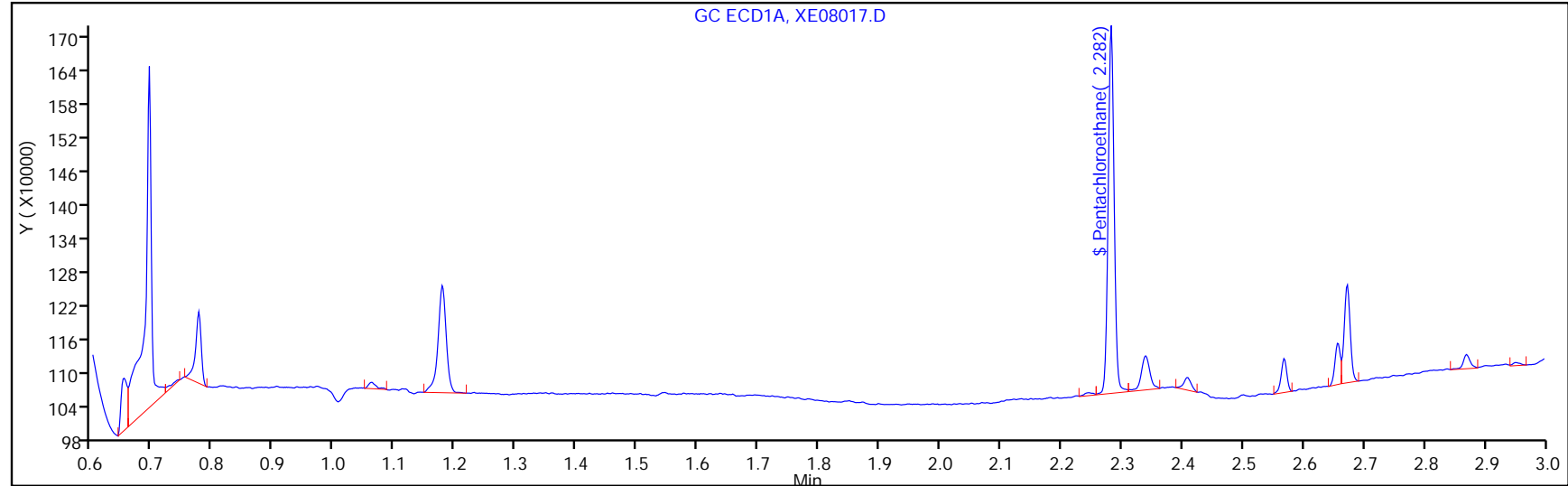
ALS Bottle#: 17

Method: EDBDBCP_CSGX

Limit Group: 504.1

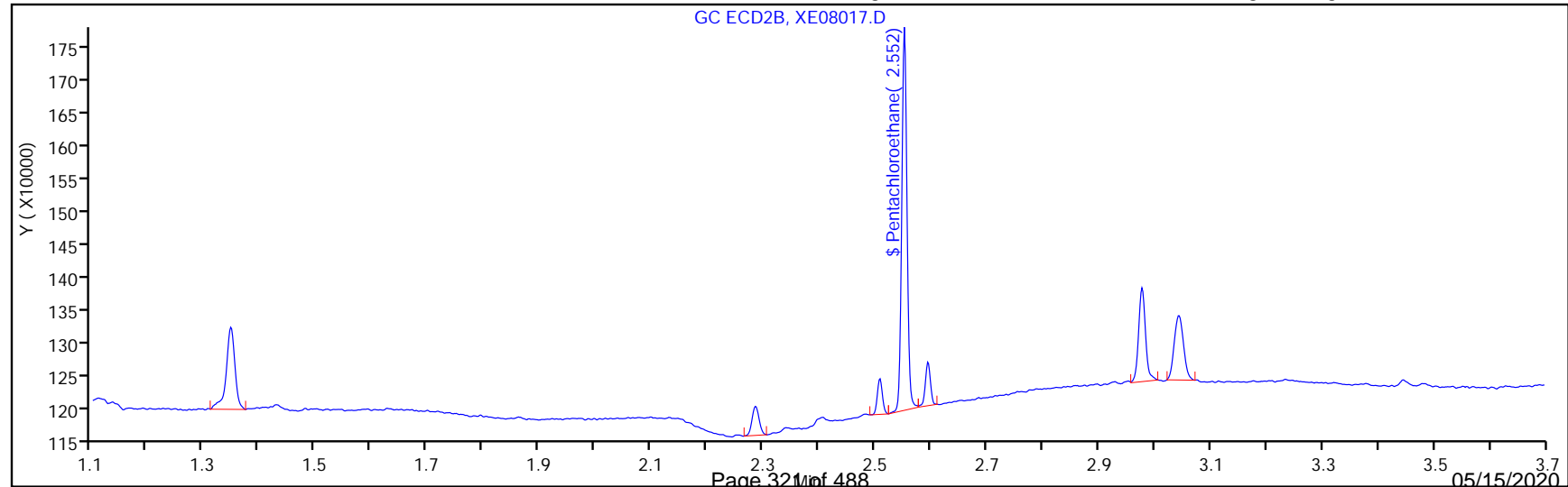
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08017.D
 Lims ID: 680-183527-E-3-A
 Client ID: TB2022-02
 Sample Type: Client
 Inject. Date: 08-May-2020 17:10:15 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3558	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3725	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: TB2022-02 Lab Sample ID: 680-183527-3
 Matrix: Water Lab File ID: XE08017.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 08:00
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 36(mL) Date Analyzed: 05/08/2020 17:10
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	85		70-130

Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08017.D
 Lims ID: 680-183527-E-3-A
 Client ID: TB2022-02
 Sample Type: Client
 Inject. Date: 08-May-2020 17:10:15 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.282	0.000	444416	0.3558
2	2.552	2.552	0.000	384323	0.3725

RPD = 4.57

Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08017.D

Injection Date: 08-May-2020 17:10:15

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-3-A

Lab Sample ID: 680-183527-3

Worklist Smp#: 17

Client ID: TB2022-02

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

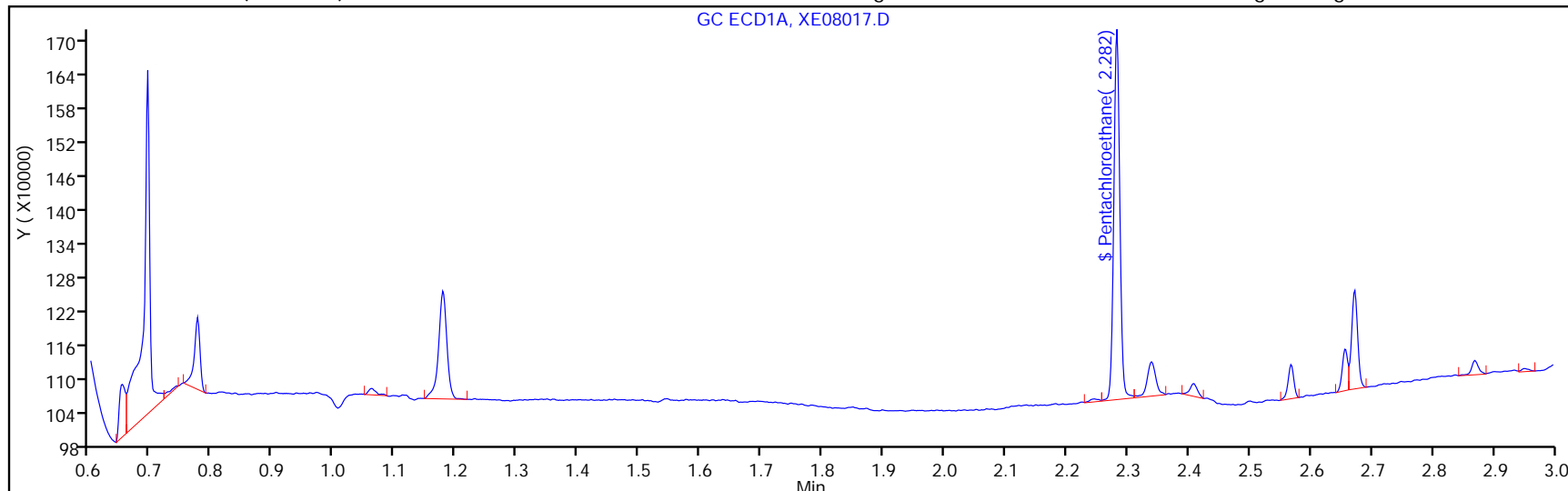
ALS Bottle#: 17

Method: EDBDBCP_CSGX

Limit Group: 504.1

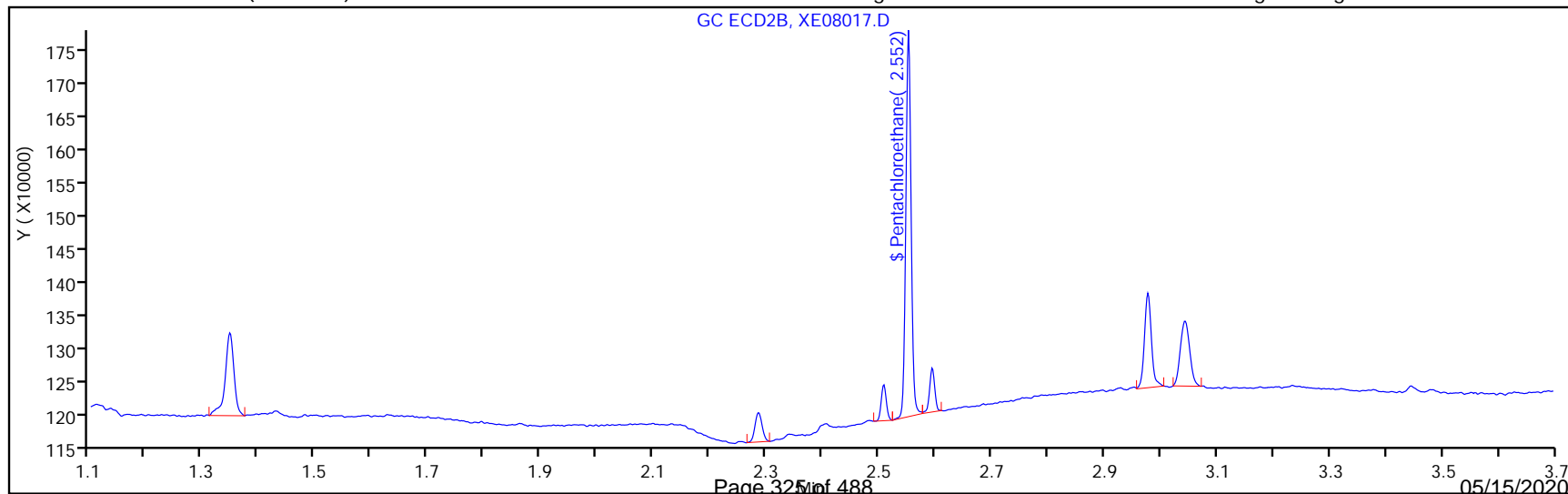
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08017.D
 Lims ID: 680-183527-E-3-A
 Client ID: TB2022-02
 Sample Type: Client
 Inject. Date: 08-May-2020 17:10:15 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-017
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3558	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3725	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWVA2-2022 Lab Sample ID: 680-183527-4
 Matrix: Water Lab File ID: XE08018.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 10:30
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 36.1 (mL) Date Analyzed: 05/08/2020 17:20
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.017	0.0024

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08018.D
 Lims ID: 680-183527-D-4-A
 Client ID: GWVA2-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:20:05 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.282	0.000	443710	0.3553
2	2.552	2.552	0.000	391687	0.3796

RPD = 6.63

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08018.D

Injection Date: 08-May-2020 17:20:05

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-D-4-A

Lab Sample ID: 680-183527-4

Worklist Smp#: 18

Client ID: GWVA2-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

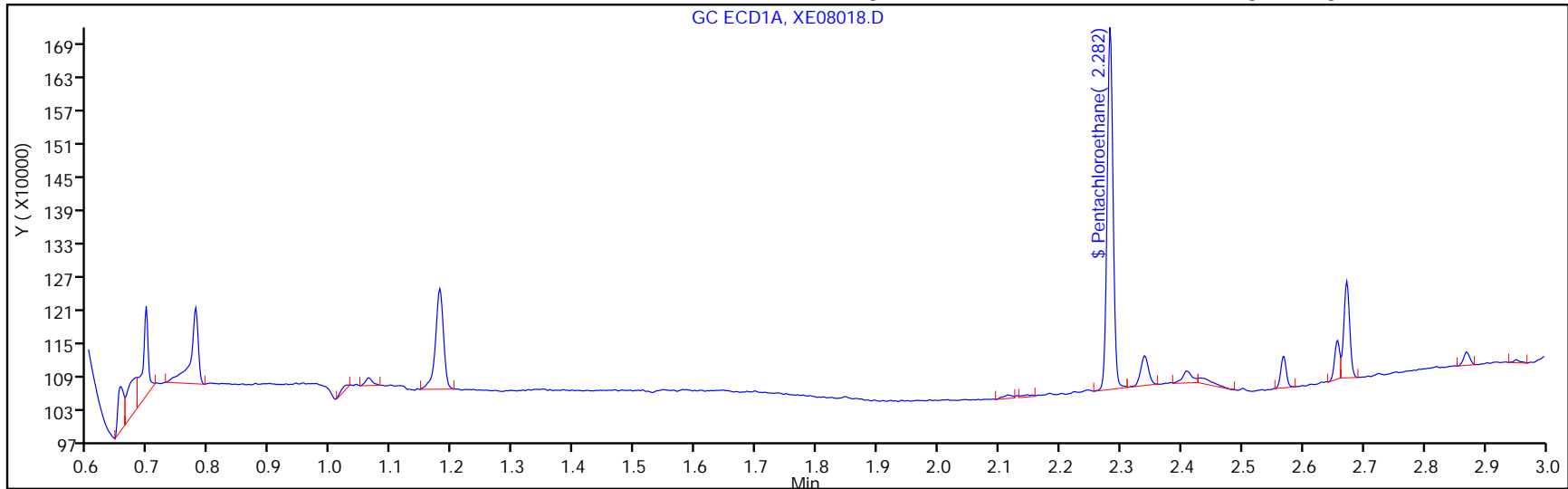
ALS Bottle#: 18

Method: EDBDBCP_CSGX

Limit Group: 504.1

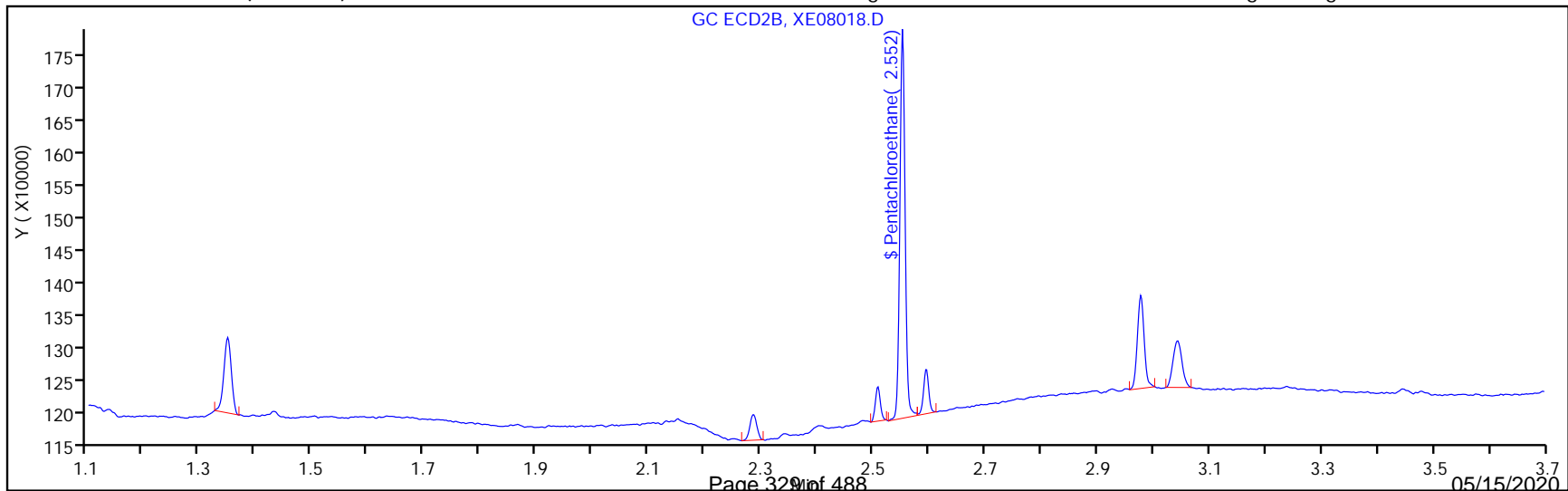
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08018.D
 Lims ID: 680-183527-D-4-A
 Client ID: GWVA2-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:20:05 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3553	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3796	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWVA2-2022 Lab Sample ID: 680-183527-4
 Matrix: Water Lab File ID: XE08018.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 10:30
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 36.1 (mL) Date Analyzed: 05/08/2020 17:20
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	87		70-130

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08018.D
 Lims ID: 680-183527-D-4-A
 Client ID: GWVA2-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:20:05 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.282	0.000	443710	0.3553
2	2.552	2.552	0.000	391687	0.3796

RPD = 6.63

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08018.D

Injection Date: 08-May-2020 17:20:05

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-D-4-A

Lab Sample ID: 680-183527-4

Worklist Smp#: 18

Client ID: GWVA2-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

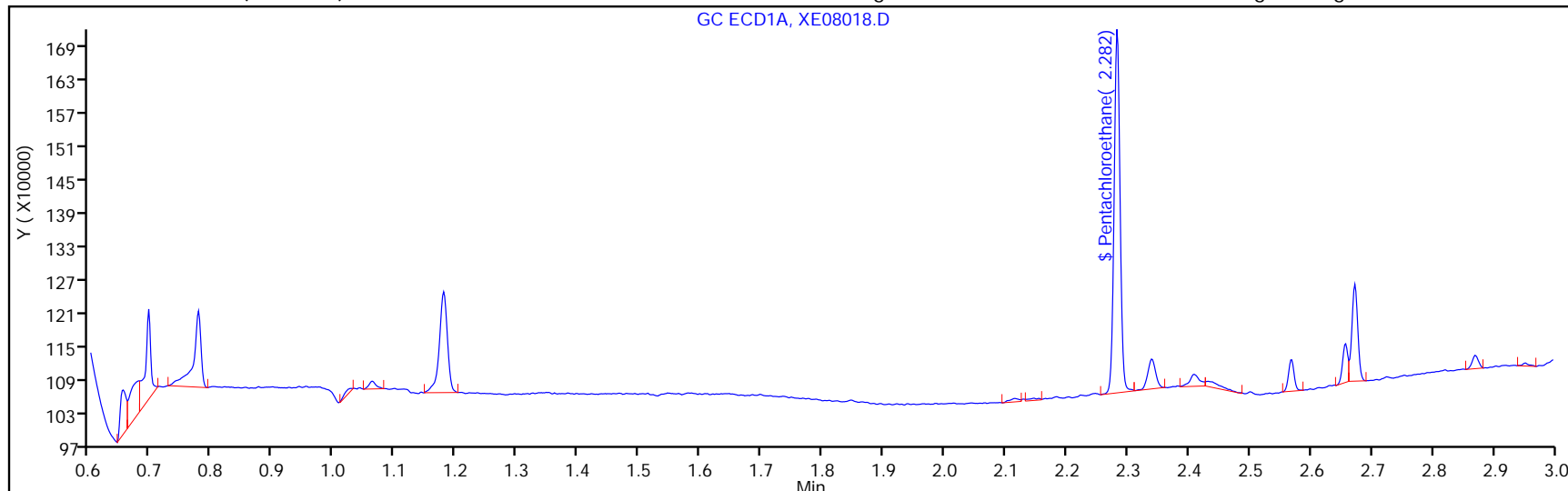
ALS Bottle#: 18

Method: EDBDBCP_CSGX

Limit Group: 504.1

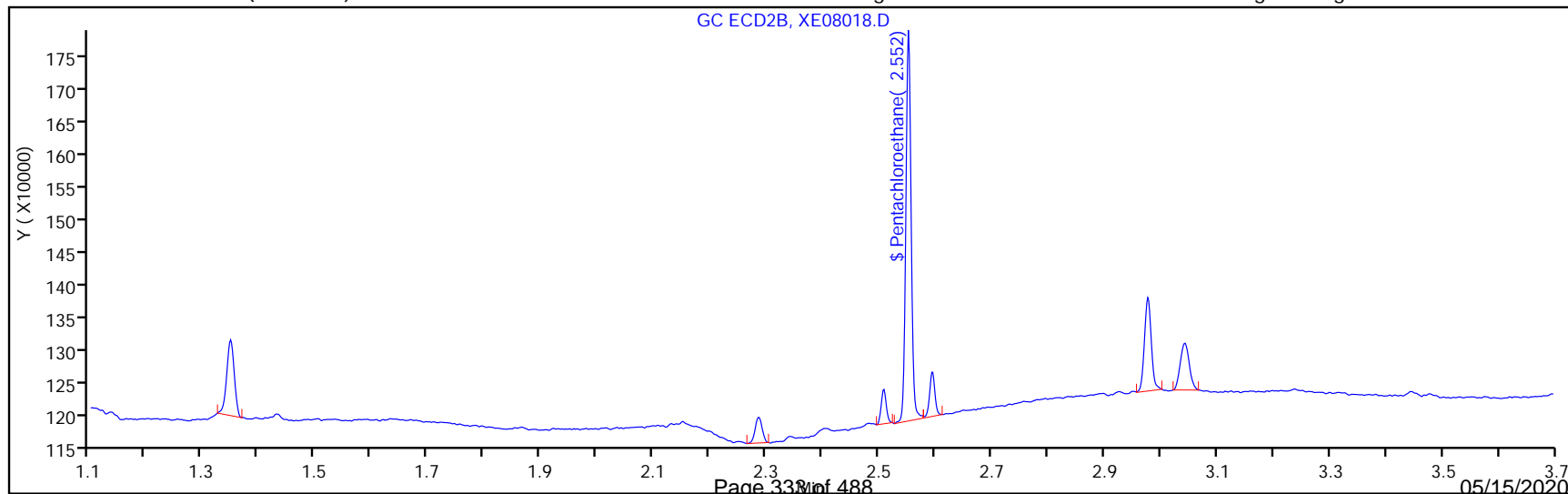
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08018.D
 Lims ID: 680-183527-D-4-A
 Client ID: GWVA2-2022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:20:05 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-018
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3553	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3796	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWVA2-6022 Lab Sample ID: 680-183527-5
 Matrix: Water Lab File ID: XE08019.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 10:30
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.7 (mL) Date Analyzed: 05/08/2020 17:29
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08019.D
 Lims ID: 680-183527-E-5-A
 Client ID: GWVA2-6022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:29:53 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-019
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.282	0.000	451431	0.3615
2	2.552	2.552	0.000	380937	0.3692

RPD = 2.12

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08019.D

Injection Date: 08-May-2020 17:29:53

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-5-A

Lab Sample ID: 680-183527-5

Worklist Smp#: 19

Client ID: GWVA2-6022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

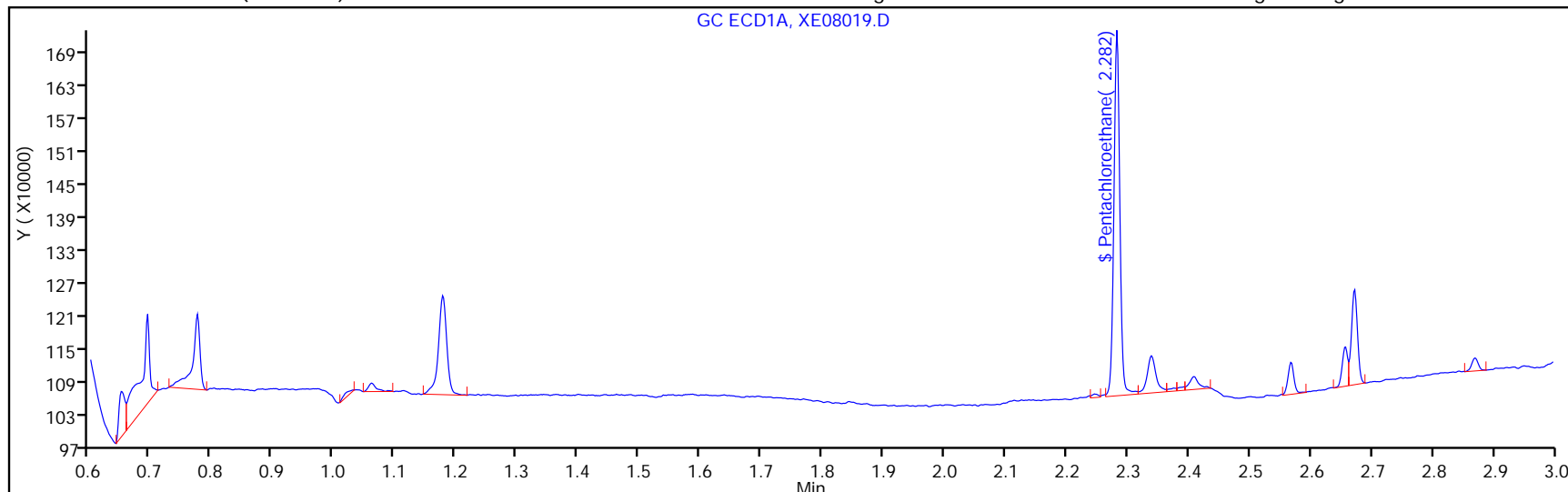
ALS Bottle#: 19

Method: EDBDBCP_CSGX

Limit Group: 504.1

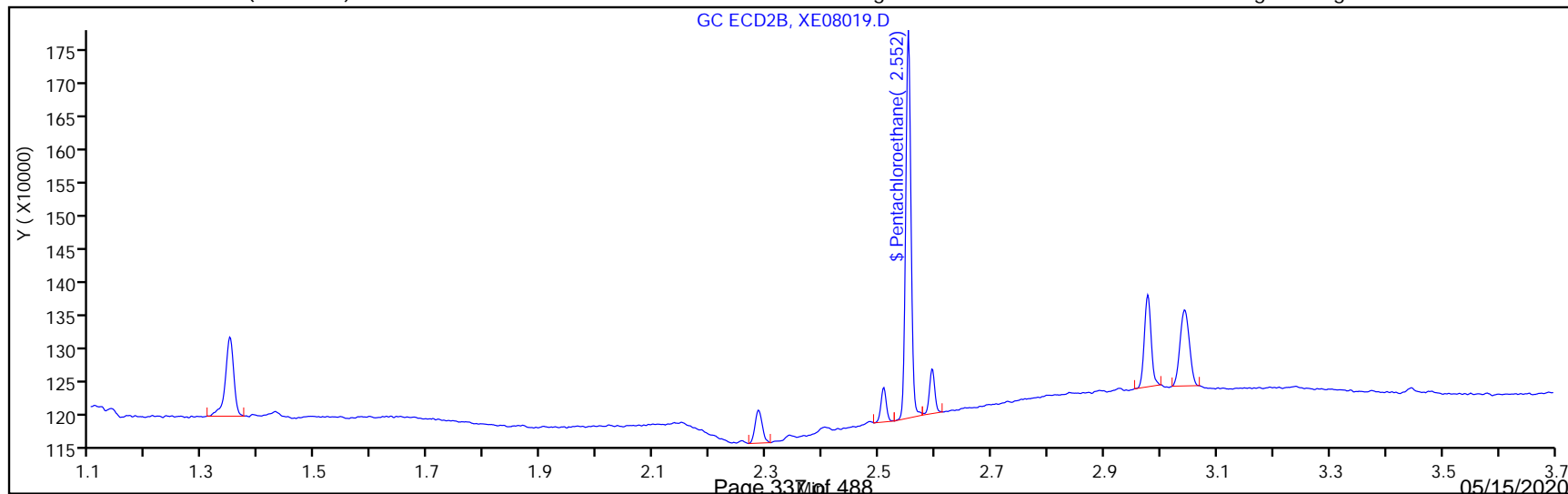
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08019.D
 Lims ID: 680-183527-E-5-A
 Client ID: GWVA2-6022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:29:53 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-019
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3615	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3692	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWVA2-6022 Lab Sample ID: 680-183527-5
 Matrix: Water Lab File ID: XE08019.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 10:30
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.7 (mL) Date Analyzed: 05/08/2020 17:29
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	84		70-130

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08019.D
 Lims ID: 680-183527-E-5-A
 Client ID: GWVA2-6022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:29:53 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-019
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	451431	0.3615
2	2.552	2.552	0.000	380937	0.3692

RPD = 2.12

Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08019.D

Injection Date: 08-May-2020 17:29:53

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-5-A

Lab Sample ID: 680-183527-5

Worklist Smp#: 19

Client ID: GWVA2-6022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

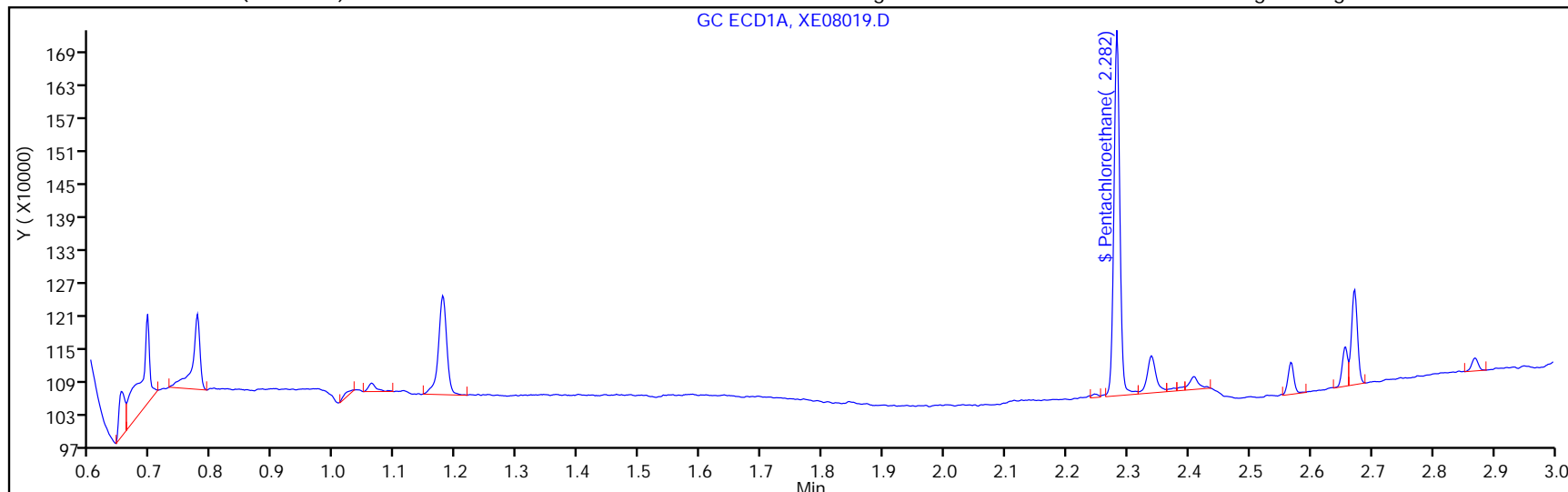
ALS Bottle#: 19

Method: EDBDBCP_CSGX

Limit Group: 504.1

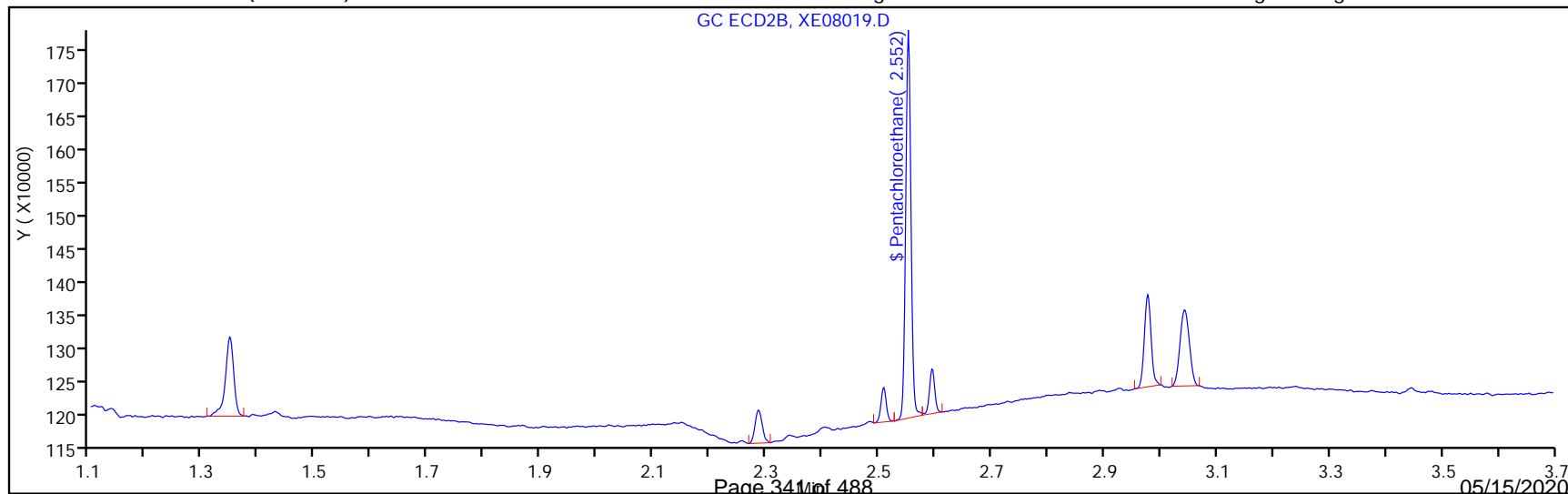
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08019.D
 Lims ID: 680-183527-E-5-A
 Client ID: GWVA2-6022
 Sample Type: Client
 Inject. Date: 08-May-2020 17:29:53 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-019
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3615	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3692	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: TB2022-01 Lab Sample ID: 680-183527-6
 Matrix: Water Lab File ID: XE08020.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 08:00
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.6 (mL) Date Analyzed: 05/08/2020 17:39
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 11-May-2020 15:25:54

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08020.D
 Lims ID: 680-183527-E-6-A
 Client ID: TB2022-01
 Sample Type: Client
 Inject. Date: 08-May-2020 17:39:47 ALS Bottle#: 20 Worklist Smp#: 20
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-020
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	448069	0.3588
2	2.552	2.552	0.000	388942	0.3770

RPD = 4.95

Report Date: 11-May-2020 15:25:54

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08020.D

Injection Date: 08-May-2020 17:39:47

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-6-A

Lab Sample ID: 680-183527-6

Worklist Smp#: 20

Client ID: TB2022-01

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

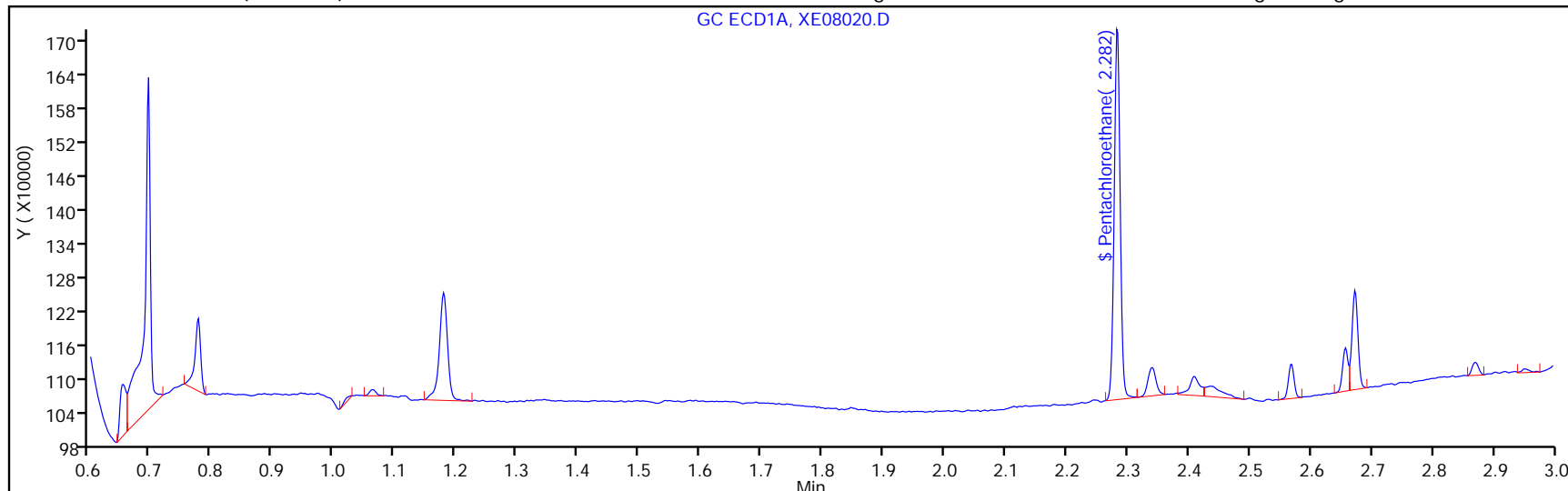
ALS Bottle#: 20

Method: EDBDBCP_CSGX

Limit Group: 504.1

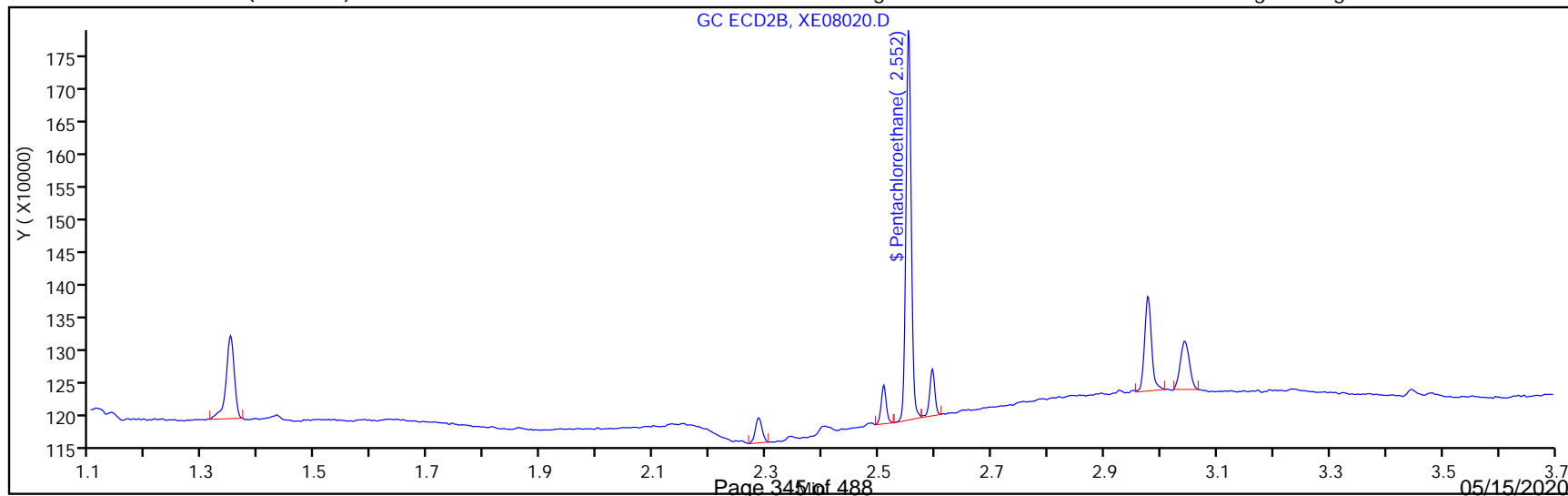
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:54

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08020.D
 Lims ID: 680-183527-E-6-A
 Client ID: TB2022-01
 Sample Type: Client
 Inject. Date: 08-May-2020 17:39:47 ALS Bottle#: 20 Worklist Smp#: 20
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-020
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3588	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3770	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: TB2022-01 Lab Sample ID: 680-183527-6
 Matrix: Water Lab File ID: XE08020.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 08:00
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.6 (mL) Date Analyzed: 05/08/2020 17:39
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	86		70-130

Report Date: 11-May-2020 15:25:54

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08020.D
 Lims ID: 680-183527-E-6-A
 Client ID: TB2022-01
 Sample Type: Client
 Inject. Date: 08-May-2020 17:39:47 ALS Bottle#: 20 Worklist Smp#: 20
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-020
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	448069	0.3588
2	2.552	2.552	0.000	388942	0.3770

RPD = 4.95

Report Date: 11-May-2020 15:25:54

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08020.D

Injection Date: 08-May-2020 17:39:47

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-6-A

Lab Sample ID: 680-183527-6

Worklist Smp#: 20

Client ID: TB2022-01

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

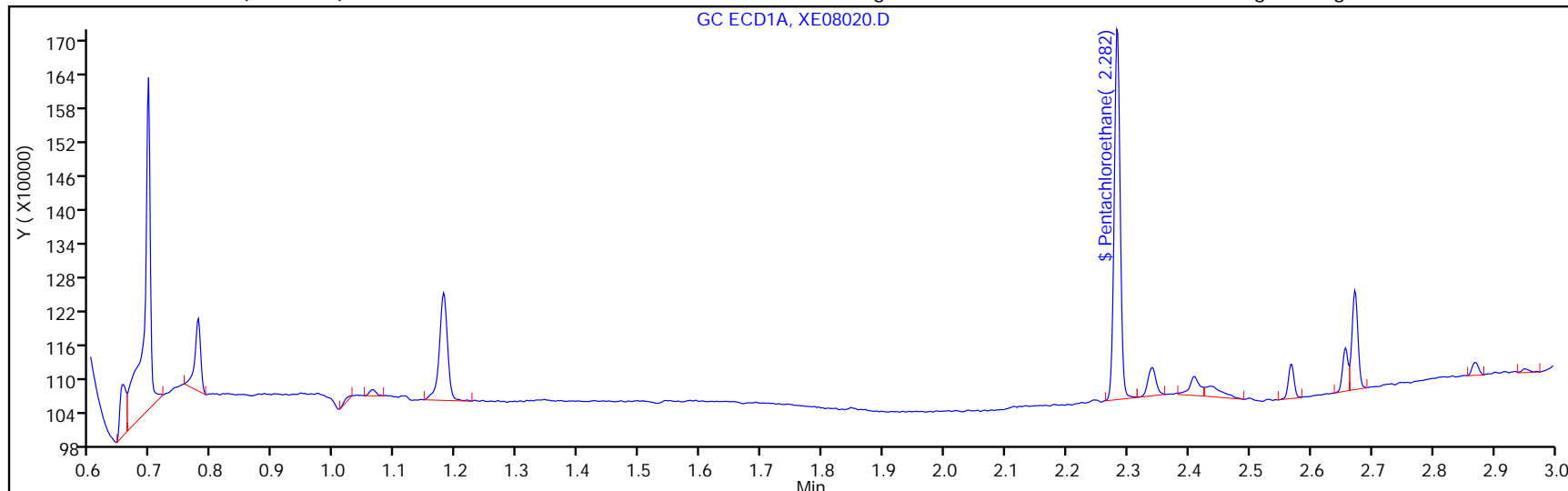
ALS Bottle#: 20

Method: EDBDBCP_CSGX

Limit Group: 504.1

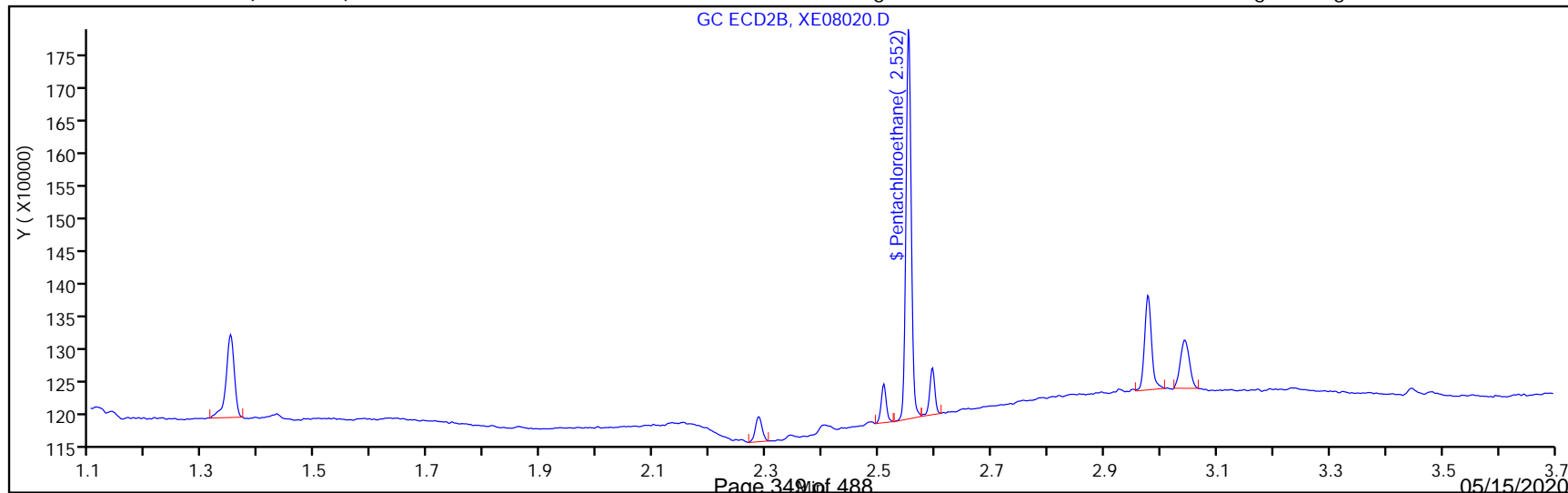
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:54

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08020.D
 Lims ID: 680-183527-E-6-A
 Client ID: TB2022-01
 Sample Type: Client
 Inject. Date: 08-May-2020 17:39:47 ALS Bottle#: 20 Worklist Smp#: 20
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-020
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3588	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3770	0.00

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 616788

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2020 15:26 Calibration End Date: 04/28/2020 16:35 Calibration ID: 75386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616788/18	XD28018.D
Level 2	IC 680-616788/17	XD28017.D
Level 3	IC 680-616788/16	XD28016.D
Level 4	IC 680-616788/15	XD28015.D
Level 5	IC 680-616788/14	XD28014.D
Level 6	IC 680-616788/13	XD28013.D
Level 7	IC 680-616788/12	XD28012.D
Level 8	IC 680-616788/11	XD28011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.062						1.030 - 1.090	1.062
Ethylene Dibromide	1.239	1.237	1.238	++++	1.238	1.238	1.238	1.237			1.207 - 1.267	1.238
1,2,3-Trichloropropane	2.169	2.167	2.168	++++	2.168	2.168	2.168	2.169			2.137 - 2.197	2.168
1,2-Dibromo-3-Chloropropane	2.899	2.899	2.898	++++	2.898	2.898	2.898	2.899			2.869 - 2.929	2.898
Pentachloroethane	2.282	2.282	2.283	++++	2.282	2.282	2.283	2.282			2.252 - 2.312	2.282

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 616788

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2020 15:26 Calibration End Date: 04/28/2020 16:35 Calibration ID: 75386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616788/18	XD28018.D
Level 2	IC 680-616788/17	XD28017.D
Level 3	IC 680-616788/16	XD28016.D
Level 4	IC 680-616788/15	XD28015.D
Level 5	IC 680-616788/14	XD28014.D
Level 6	IC 680-616788/13	XD28013.D
Level 7	IC 680-616788/12	XD28012.D
Level 8	IC 680-616788/11	XD28011.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	547366				Ave		547365.714						20.0			
Ethylene Dibromide	312390 312091	314448 300825	317086 290648	++++ 289298	Ave		305255.128			3.8			20.0			
1,2,3-Trichloropropane	51716 39399	45124 38351	43539 37700	++++ 36563	Ave		41770.2667			12.9			20.0			
1,2-Dibromo-3-Chloropropane	558022 485172	535715 463495	496995 456848	++++ 444708	Ave		491565.202			8.6			20.0			
Pentachloroethane	1536976 1284230	1342928 1141877	1178872 1137535	++++ 1120154	Ave		1248938.96			12.2			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 616788

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2020 15:26 Calibration End Date: 04/28/2020 16:35 Calibration ID: 75386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616788/18	XD28018.D
Level 2	IC 680-616788/17	XD28017.D
Level 3	IC 680-616788/16	XD28016.D
Level 4	IC 680-616788/15	XD28015.D
Level 5	IC 680-616788/14	XD28014.D
Level 6	IC 680-616788/13	XD28013.D
Level 7	IC 680-616788/12	XD28012.D
Level 8	IC 680-616788/11	XD28011.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3831560					7.00
Ethylene Dibromide	Ave	48811 611050	98265 726620	198179 904055	++++	487642	0.156 2.03	0.313 2.50	0.625 3.13	++++	1.56
1,2,3-Trichloropropane	Ave	40403 389504	70506 471252	136059 571296	++++	307805	0.781 10.2	1.56 12.5	3.13 15.6	++++	7.81
1,2-Dibromo-3-Chloropropane	Ave	87191 941474	167411 1142121	310622 1389714	++++	758081	0.156 2.03	0.313 2.50	0.625 3.13	++++	1.56
Pentachloroethane	Ave	96061 927775	167866 1137535	294718 1400193	++++	802644	0.0625 0.813	0.125 1.00	0.250 1.25	++++	0.625

Curve Type Legend:

Ave = Average

Report Date: 29-Apr-2020 14:21:05

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28011.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 28-Apr-2020 15:26:07 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:05 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.237	1.237	0.000	904055	3.13	2.96	
2	1.585	1.585	0.000	775210	3.13	2.95	
						RPD = 0.54	
3 1,2,3-Trichloropropane							
1	2.169	2.167	0.002	571296	15.6	13.7	
2	2.405	2.405	0.000	497501	15.6	13.9	
						RPD = 1.53	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	1400193	1.25	1.12	
2	2.553	2.553	0.000	1198045	1.25	1.16	
						RPD = 3.51	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1389714	3.13	2.83	
2	3.371	3.371	0.000	1233054	3.13	2.82	
						RPD = 0.35	

Reagents:

504 WS #1_00167 Amount Added: 100.00 Units: uL

Report Date: 29-Apr-2020 14:21:05

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28011.D

Injection Date: 28-Apr-2020 15:26:07

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

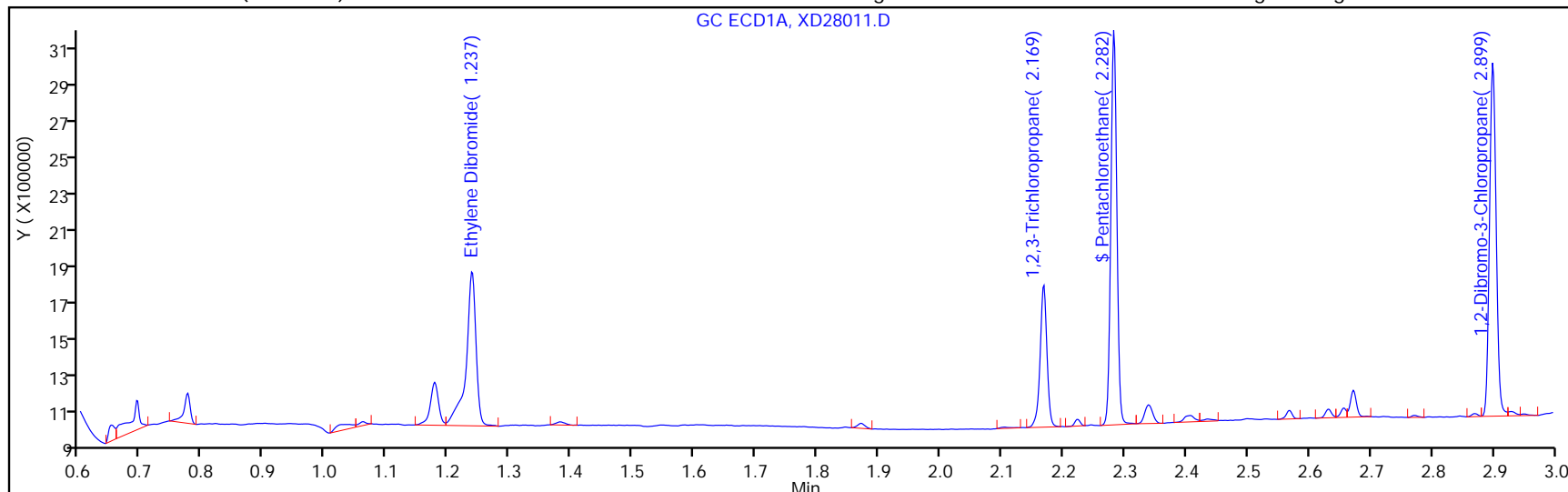
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

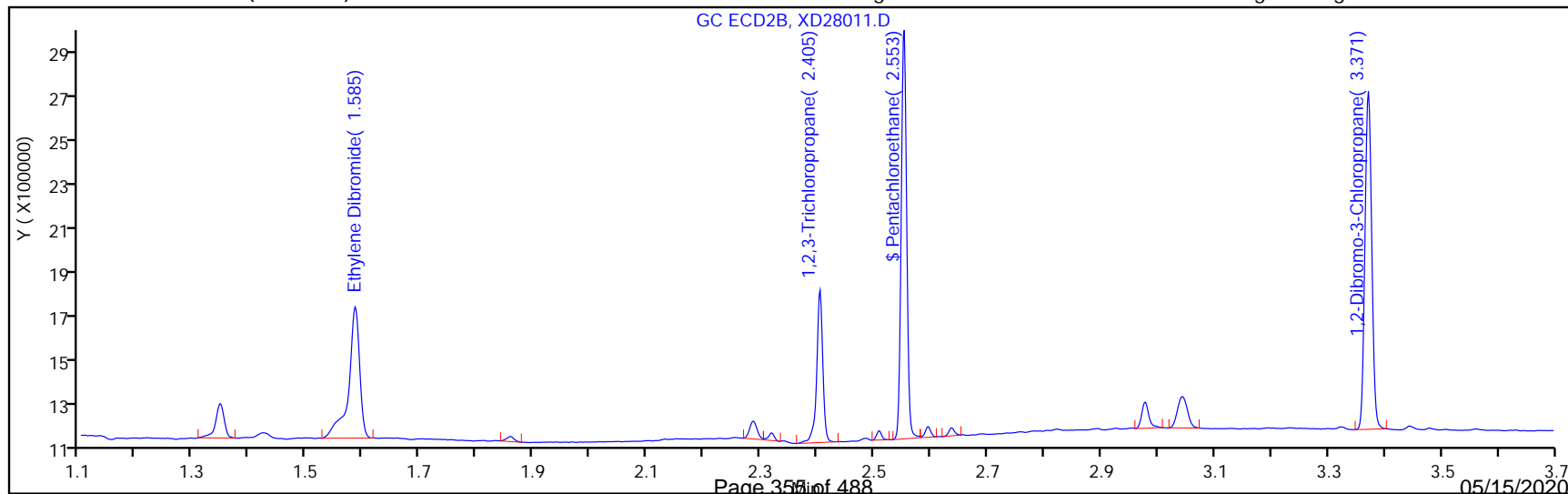
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:08

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28012.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 28-Apr-2020 15:35:58 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:07 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.237	0.001	726620	2.50	2.38	
2	1.586	1.585	0.001	634891	2.50	2.41	
						RPD = 1.34	
3 1,2,3-Trichloropropane							
1	2.168	2.167	0.001	471252	12.5	11.3	
2	2.404	2.405	-0.001	390969	12.5	10.9	
						RPD = 3.31	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	1137535	1.00	0.9108	
2	2.553	2.553	0.000	975661	1.00	0.9456	
						RPD = 3.75	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	1142121	2.50	2.32	
2	3.371	3.371	0.000	1024792	2.50	2.34	
						RPD = 0.77	

Reagents:

504 WS #1_00167 Amount Added: 80.00 Units: uL

Report Date: 29-Apr-2020 14:21:08

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28012.D

Injection Date: 28-Apr-2020 15:35:58

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

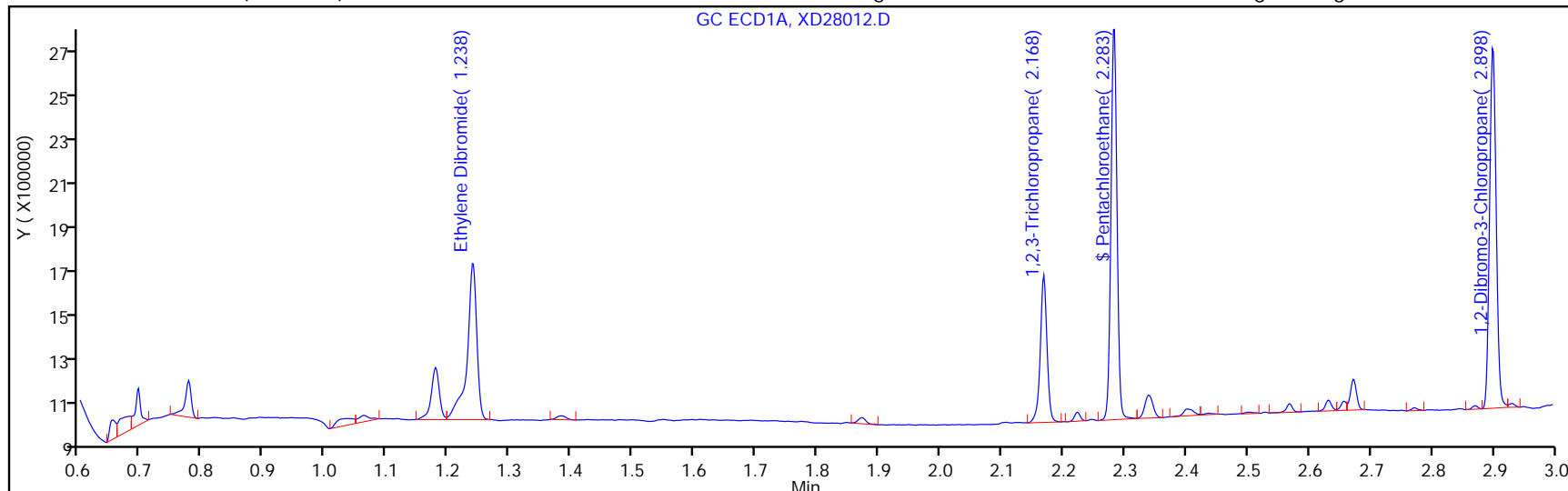
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

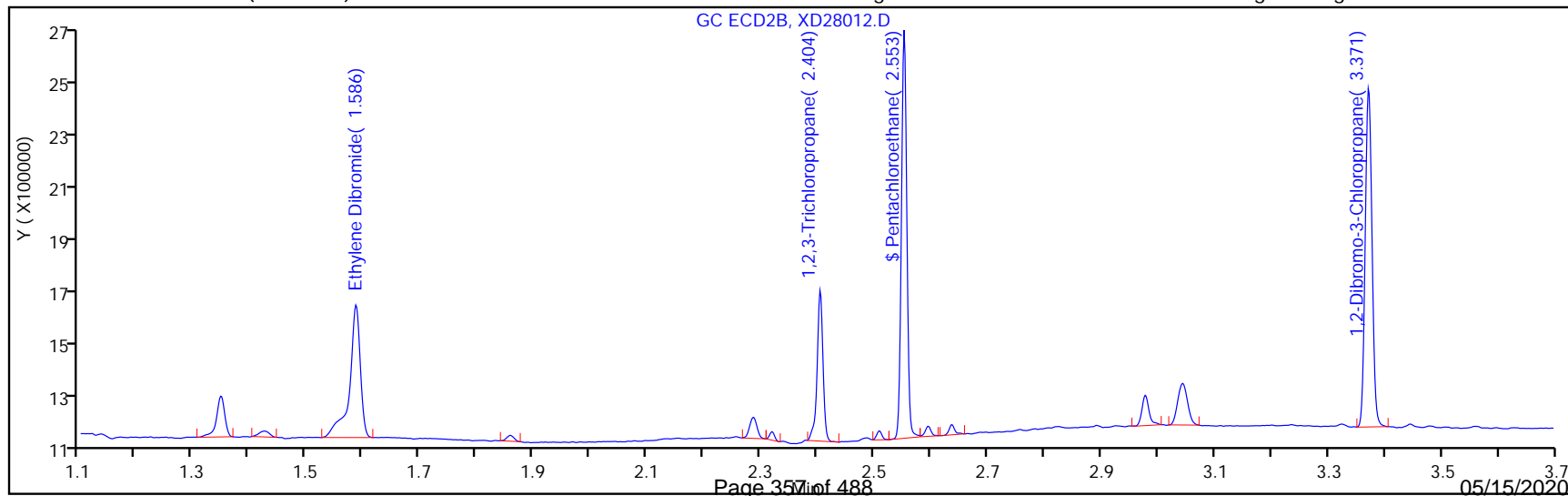
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28013.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 28-Apr-2020 15:45:46 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:09 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.237	0.001	611050	2.03	2.00	
2	1.586	1.585	0.001	515396	2.03	1.96	
						RPD = 2.19	
3 1,2,3-Trichloropropane							
1	2.168	2.167	0.001	389504	10.2	9.32	
2	2.404	2.405	-0.001	348107	10.2	9.72	
						RPD = 4.13	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	927775	0.8125	0.7429	
2	2.553	2.553	0.000	801014	0.8125	0.7763	
						RPD = 4.41	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	941474	2.03	1.92	
2	3.371	3.371	0.000	844532	2.03	1.93	
						RPD = 0.75	

Reagents:

504 WS #1_00167 Amount Added: 65.00 Units: uL

Report Date: 29-Apr-2020 14:21:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28013.D

Injection Date: 28-Apr-2020 15:45:46

Instrument ID: CSGX

Operator ID:
Worklist Smp#: 13

Lims ID: IC Iv6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

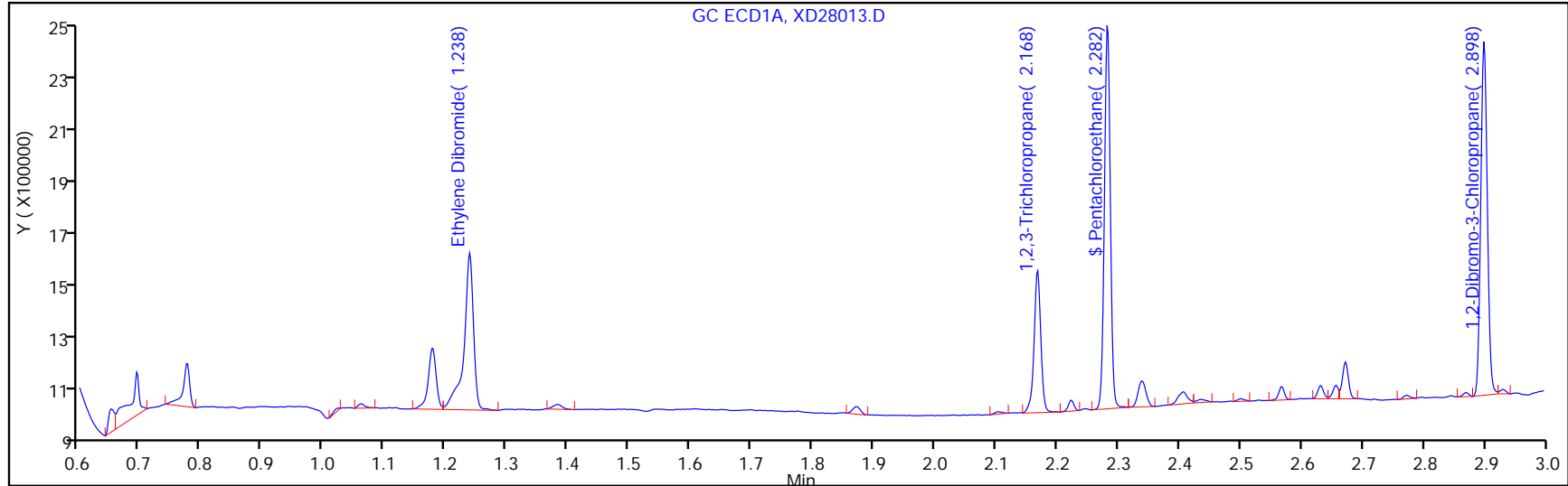
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

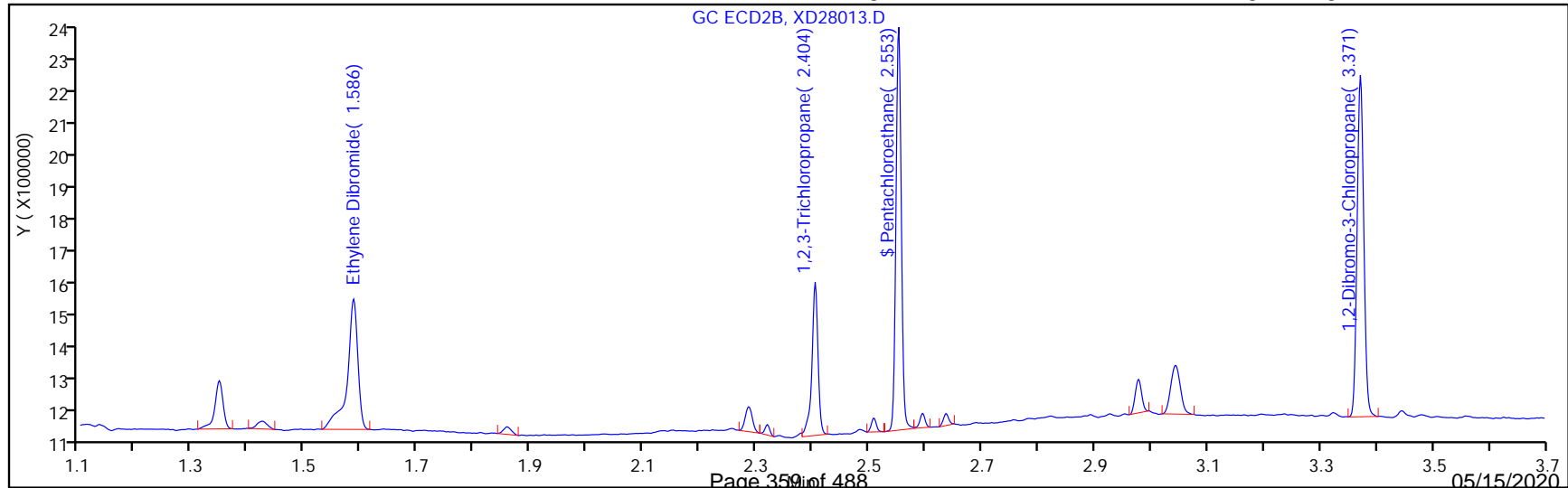
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28014.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 28-Apr-2020 15:55:46 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:10 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:08:13

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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1 Chlorodibromomethane							
1	1.062	1.060	0.002	3831560	7.00	7.00	
2	1.429	1.428	0.001	3357830	7.00	7.00	
						RPD = 0.00	
2 Ethylene Dibromide							
1	1.238	1.237	0.001	487642	1.56	1.60	
2	1.586	1.585	0.001	405151	1.56	1.54	
						RPD = 3.70	
3 1,2,3-Trichloropropane							
1	2.168	2.167	0.001	307805	7.81	7.37	M
2	2.404	2.405	-0.001	254785	7.81	7.11	M
						RPD = 3.54	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	802644	0.6250	0.6427	
2	2.553	2.553	0.000	695729	0.6250	0.6743	
						RPD = 4.80	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	758081	1.56	1.54	
2	3.371	3.371	0.000	672931	1.56	1.54	
						RPD = 0.30	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

504 WS #1_00167

Amount Added: 50.00

Units: uL

504-DBCM_00131

Amount Added: 50.00

Units: uL

Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28014.D

Injection Date: 28-Apr-2020 15:55:46

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv15

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

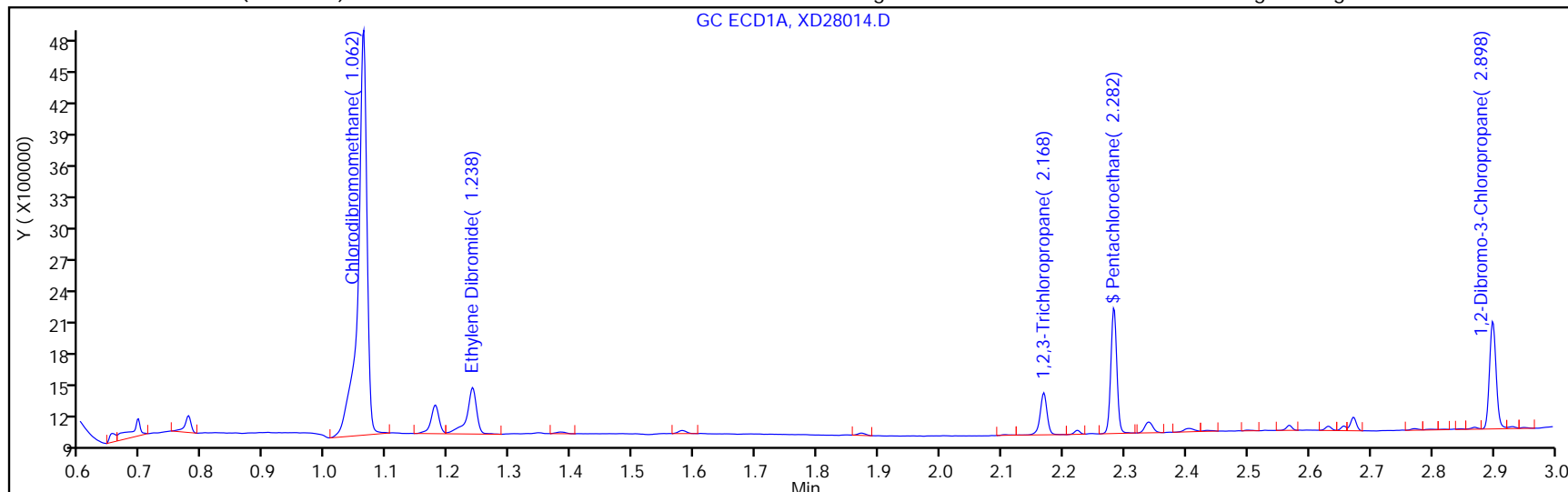
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

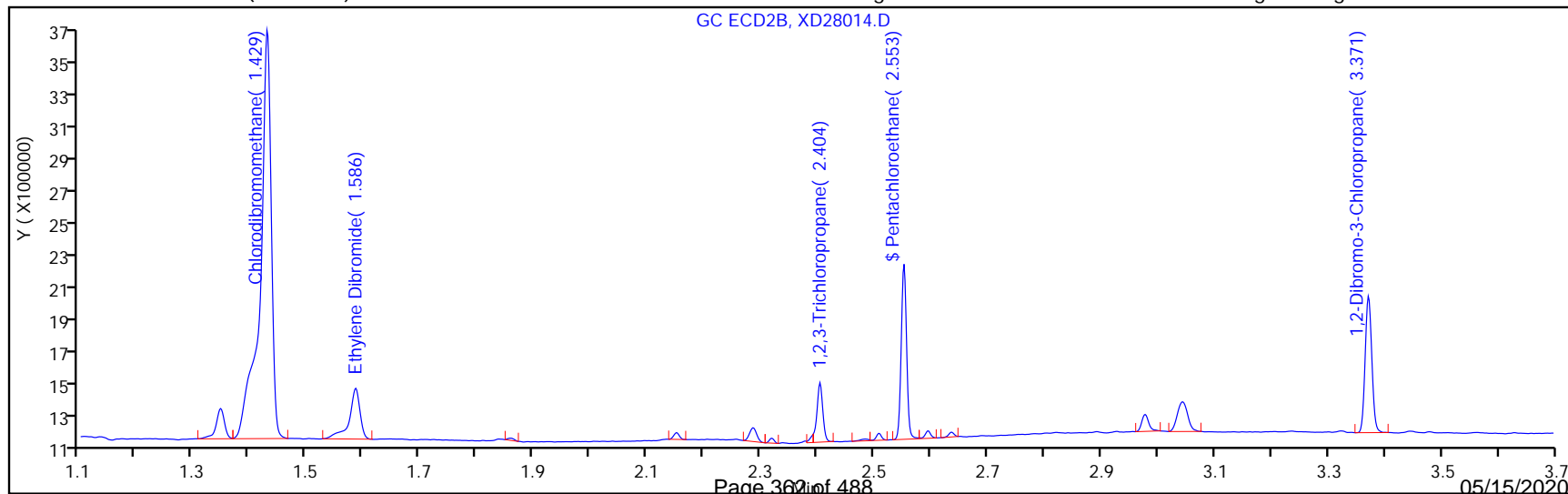
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28015.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 28-Apr-2020 16:05:37 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-015
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:12 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:07:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.237	1.237	0.000	341486	1.09	1.12	
2	1.585	1.585	0.000	276637	1.09	1.05	
							RPD = 6.22

3 1,2,3-Trichloropropane

1	2.167	2.167	0.000	220307	5.47	5.27	M
2	2.405	2.405	0.000	180613	5.47	5.04	M
							RPD = 4.50

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	636953	0.4375	0.5100	
2	2.553	2.553	0.000	535546	0.4375	0.5190	
							RPD = 1.76

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	529588	1.09	1.08	
2	3.371	3.371	0.000	471511	1.09	1.08	
							RPD = 0.00

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 35.00

Units: uL

Report Date: 29-Apr-2020 14:21:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28015.D

Injection Date: 28-Apr-2020 16:05:37

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 15

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

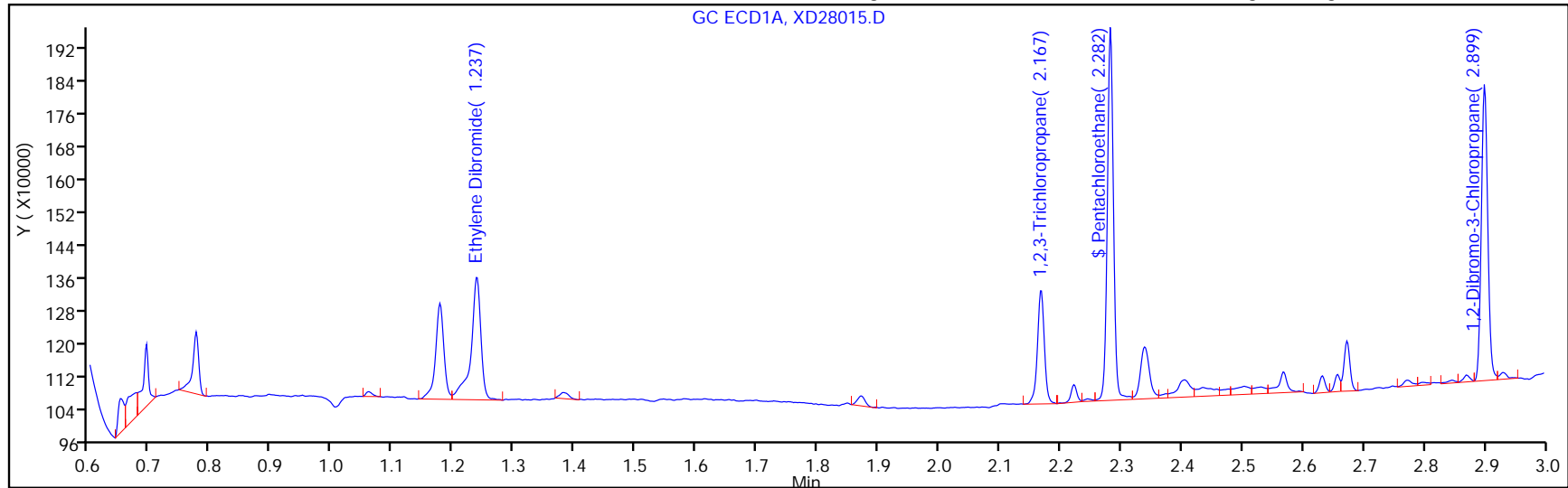
ALS Bottle#: 15

Method: EDBDBCP_CSGX

Limit Group: 504.1

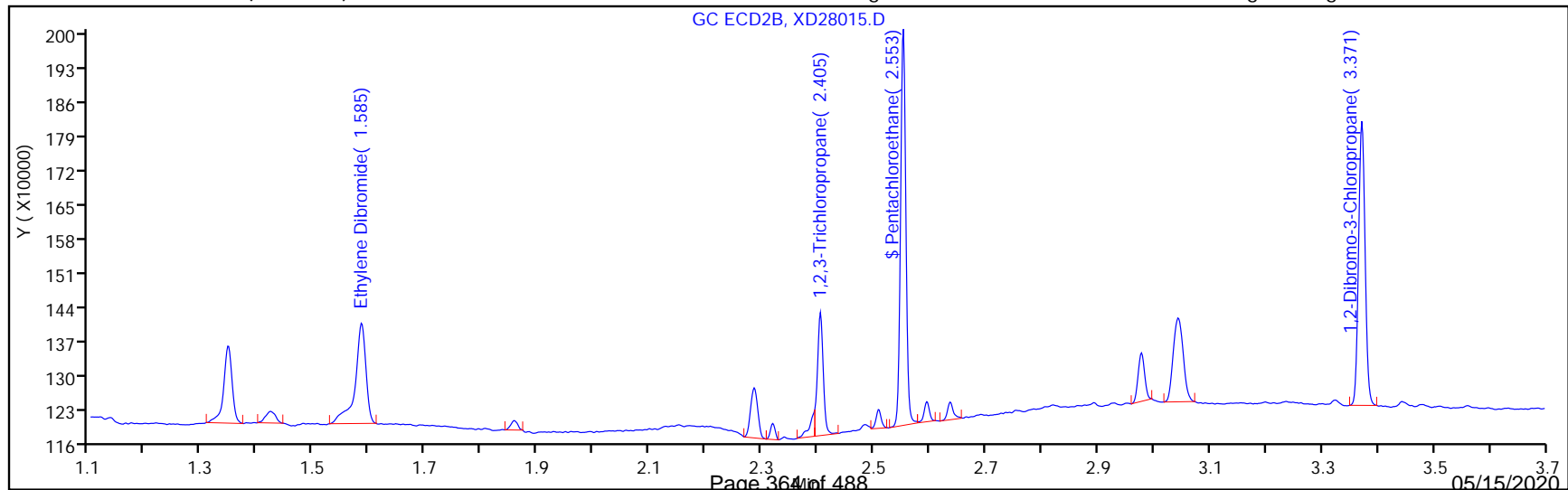
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28016.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 28-Apr-2020 16:15:25 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-016
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:13 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:06:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.237	0.001	198179	0.6250	0.6492	M
2	1.586	1.585	0.001	166411	0.6250	0.6323	M
						RPD = 2.63	
3 1,2,3-Trichloropropane							
1	2.168	2.167	0.001	136059	3.13	3.26	M
2	2.404	2.405	-0.001	111629	3.13	3.12	M
						RPD = 4.43	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	294718	0.2500	0.2360	
2	2.553	2.553	0.000	252670	0.2500	0.2449	
						RPD = 3.71	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	310622	0.6250	0.6319	
2	3.371	3.371	0.000	282718	0.6250	0.6460	
						RPD = 2.20	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 20.00

Units: uL

Report Date: 29-Apr-2020 14:21:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28016.D

Injection Date: 28-Apr-2020 16:15:25

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 16

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

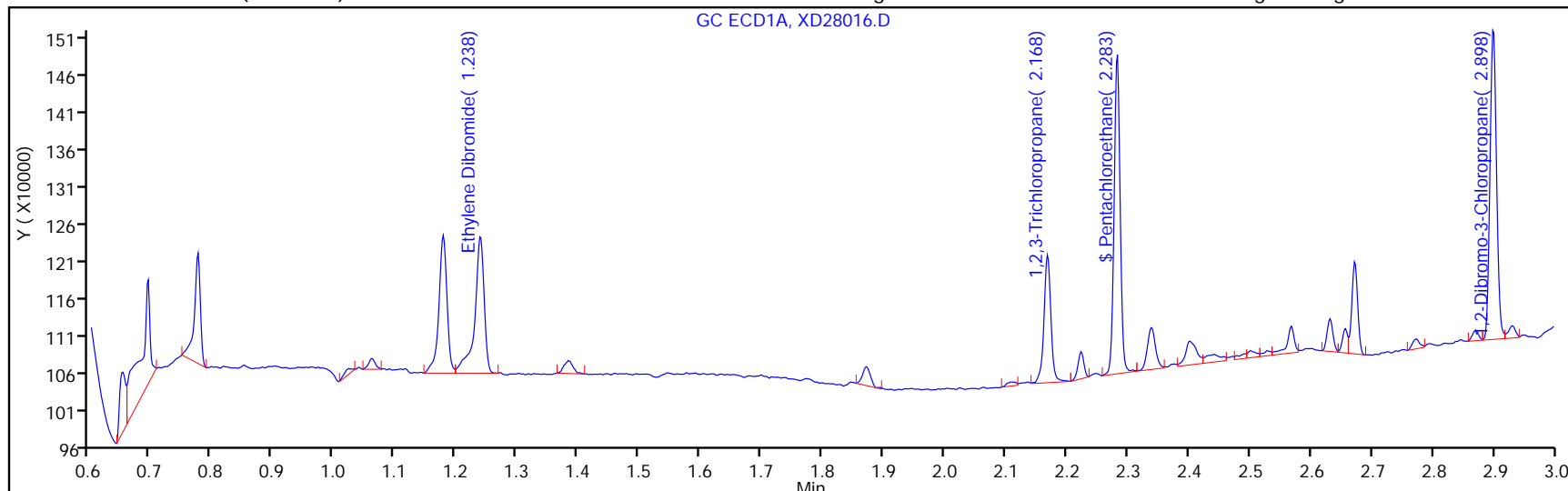
ALS Bottle#: 16

Method: EDBDBCP_CSGX

Limit Group: 504.1

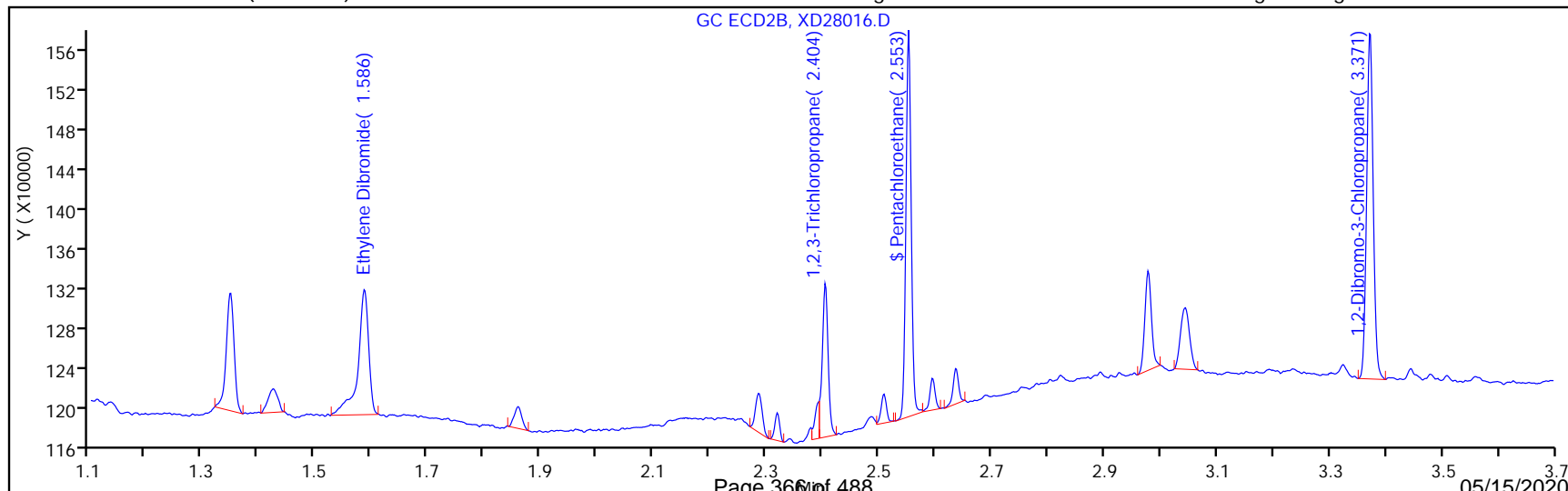
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 28-Apr-2020 16:25:17 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-017
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:15 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:10:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.237	1.237	0.000	98265	0.3125	0.3219	M
2	1.585	1.585	0.000	85575	0.3125	0.3252	M
						RPD = 1.01	
3 1,2,3-Trichloropropane							
1	2.167	2.167	0.000	70506	1.56	1.69	
2	2.405	2.405	0.000	61474	1.56	1.72	
						RPD = 1.65	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	167866	0.1250	0.1344	M
2	2.551	2.553	-0.002	131762	0.1250	0.1277	
						RPD = 5.12	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	167411	0.3125	0.3406	
2	3.371	3.371	0.000	143442	0.3125	0.3277	
						RPD = 3.84	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 10.00

Units: uL

Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D

Injection Date: 28-Apr-2020 16:25:17

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 17

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

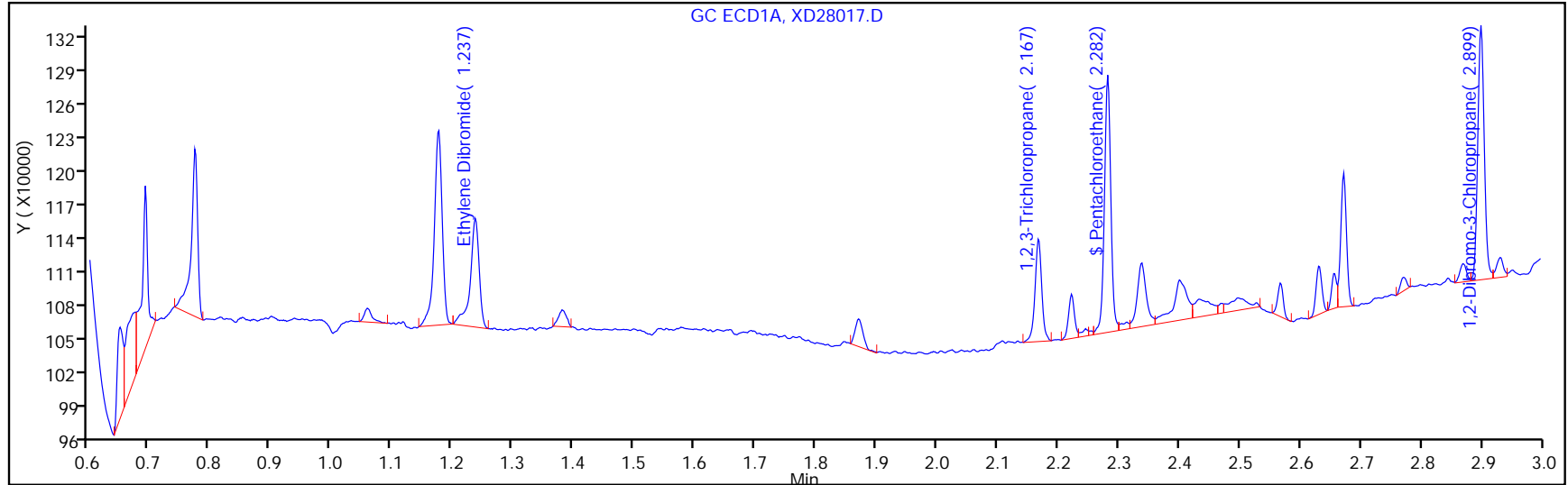
ALS Bottle#: 17

Method: EDBDBCP_CSGX

Limit Group: 504.1

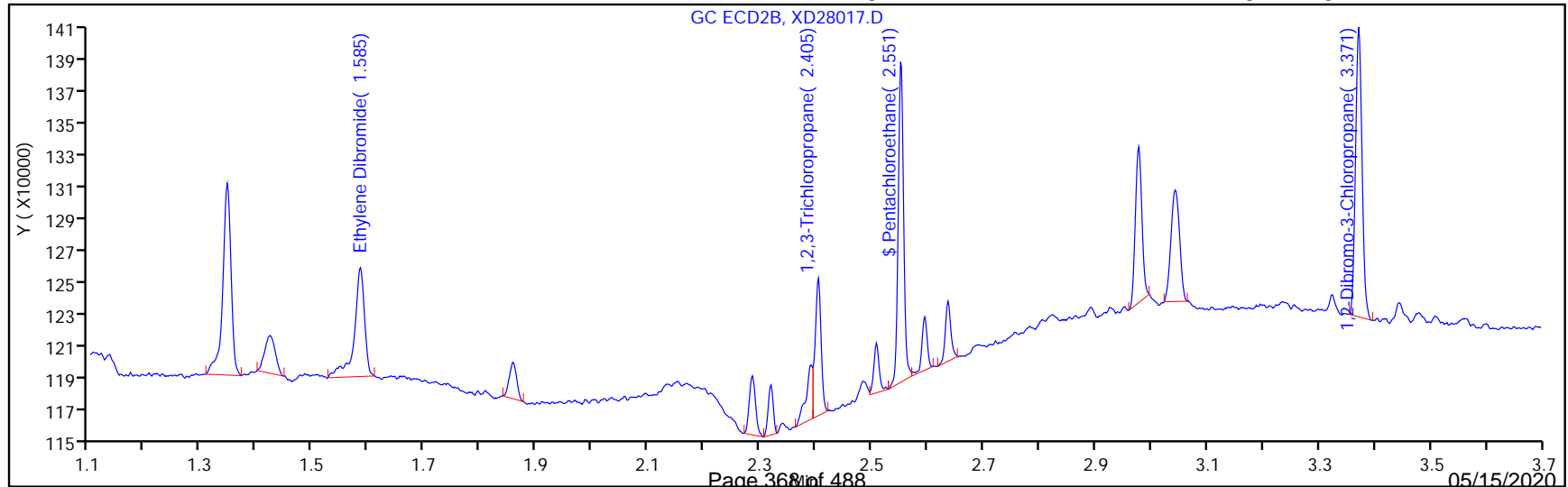
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

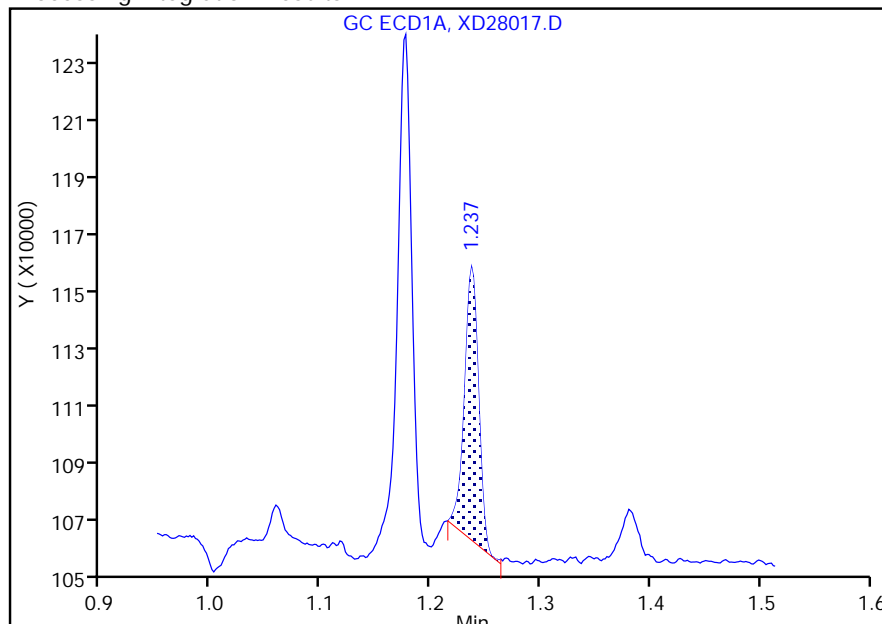
Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D
 Injection Date: 28-Apr-2020 16:25:17 Instrument ID: CSGX
 Lims ID: IC IV2
 Client ID:
 Operator ID: ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

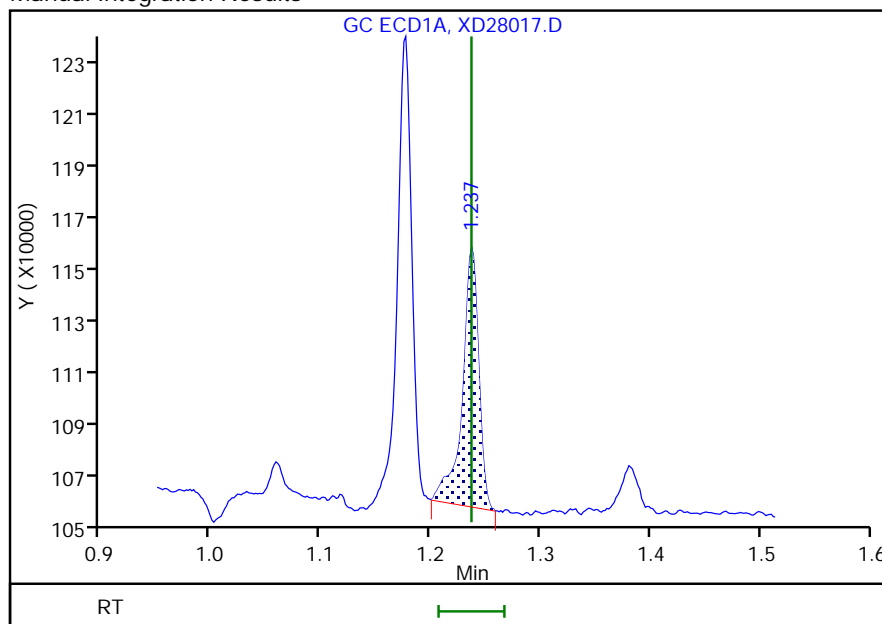
RT: 1.24
 Area: 80456
 Amount: 0.274923
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 98265
 Amount: 0.321911
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:09:33
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

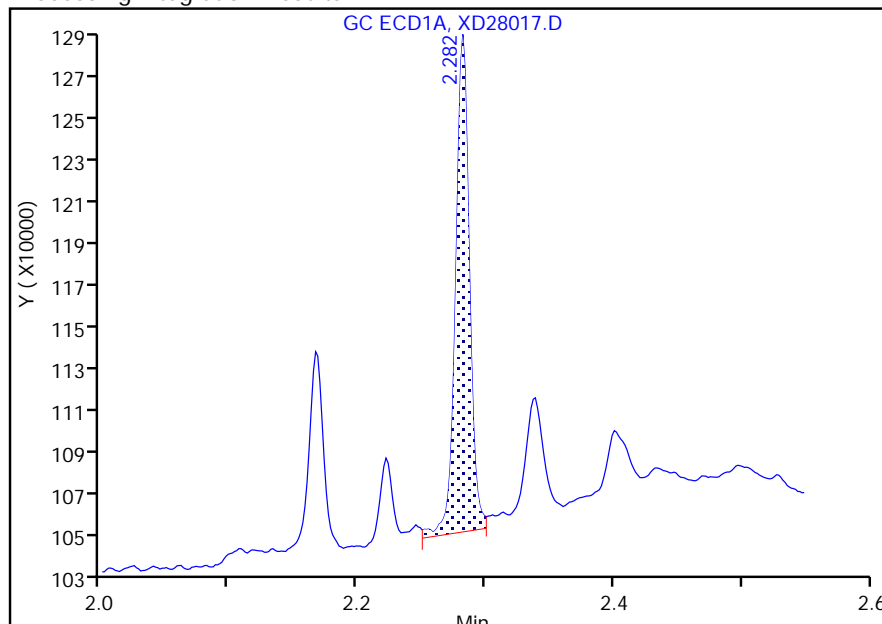
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D		
Injection Date:	28-Apr-2020 16:25:17	Instrument ID:	CSGX
Lims ID:	IC IV2		
Client ID:			
Operator ID:		ALS Bottle#:	17
		Worklist Smp#:	17
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	EDBDBCP_CSGX	Limit Group:	504.1
Column:	CLPesticides I (0.25 mm)	Detector:	GC ECD1A

\$ 4 Pentachloroethane, CAS: 76-01-7

Signal: 1

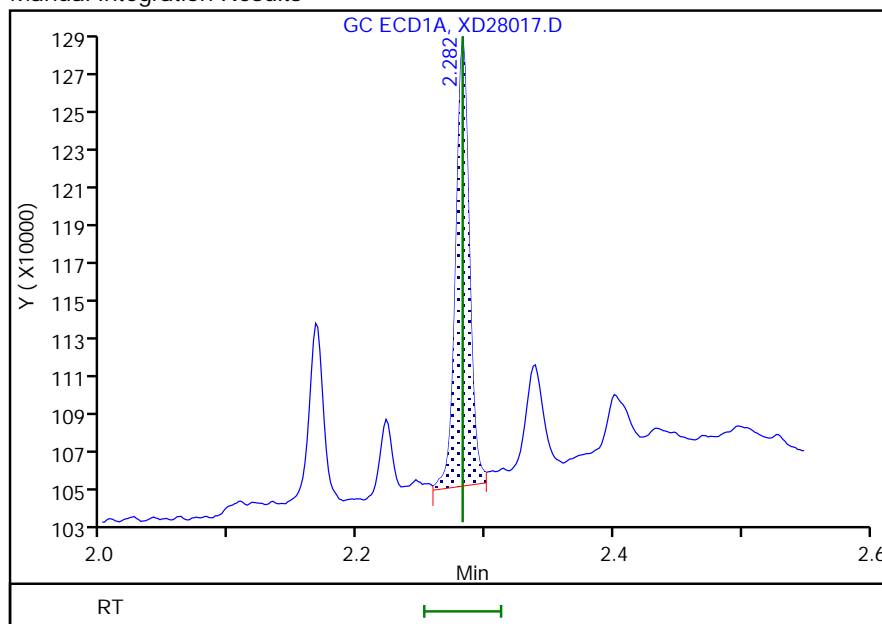
RT: 2.28
 Area: 169610
 Amount: 0.132866
 Amount Units: ng/ml

Processing Integration Results



RT: 2.28
 Area: 167866
 Amount: 0.134407
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:12:38

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Report Date: 29-Apr-2020 14:21:17

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 28-Apr-2020 16:35:07 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-018
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:17 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:11:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.239	1.237	0.002	48811	0.1563	0.1599	M
2	1.586	1.585	0.001	44845	0.1563	0.1704	M
							RPD = 6.36
3 1,2,3-Trichloropropane							
1	2.169	2.167	0.002	40403	0.7813	0.9673	
2	2.405	2.405	0.000	35691	0.7813	1.00	
							RPD = 2.96
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	96061	0.0625	0.0769	
2	2.553	2.553	0.000	70290	0.0625	0.0681	
							RPD = 12.12
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	87191	0.1563	0.1774	
2	3.371	3.371	0.000	78340	0.1563	0.1790	
							RPD = 0.91

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 5.00

Units: uL

Report Date: 29-Apr-2020 14:21:17

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D

Injection Date: 28-Apr-2020 16:35:07

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 18

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

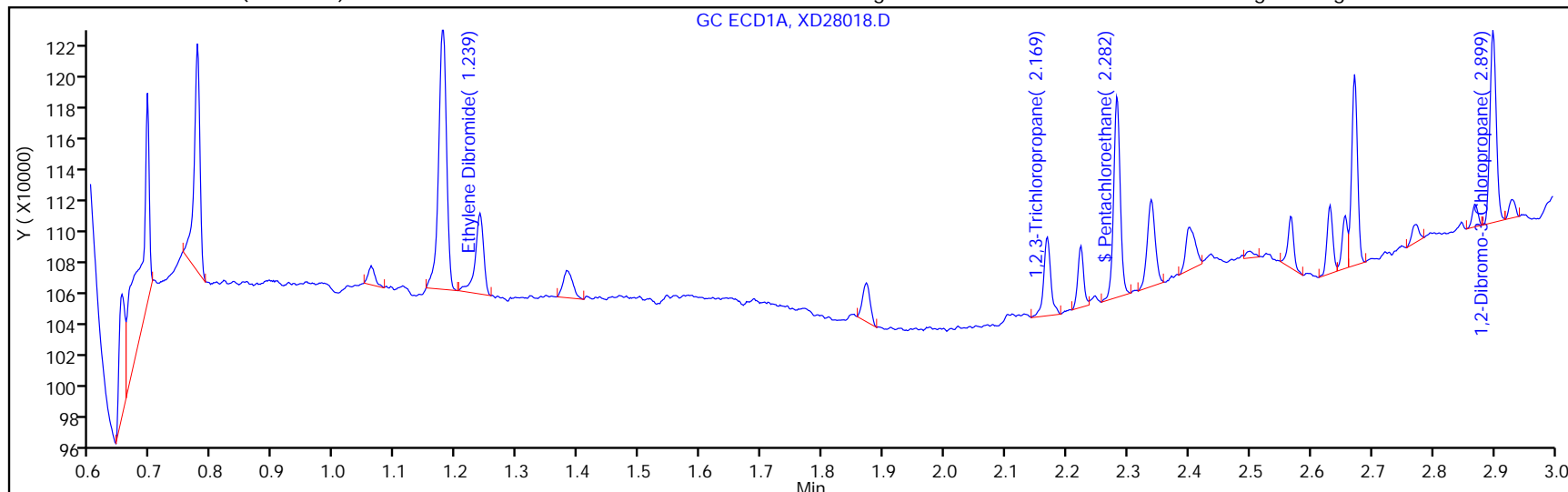
ALS Bottle#: 18

Method: EDBDBCP_CSGX

Limit Group: 504.1

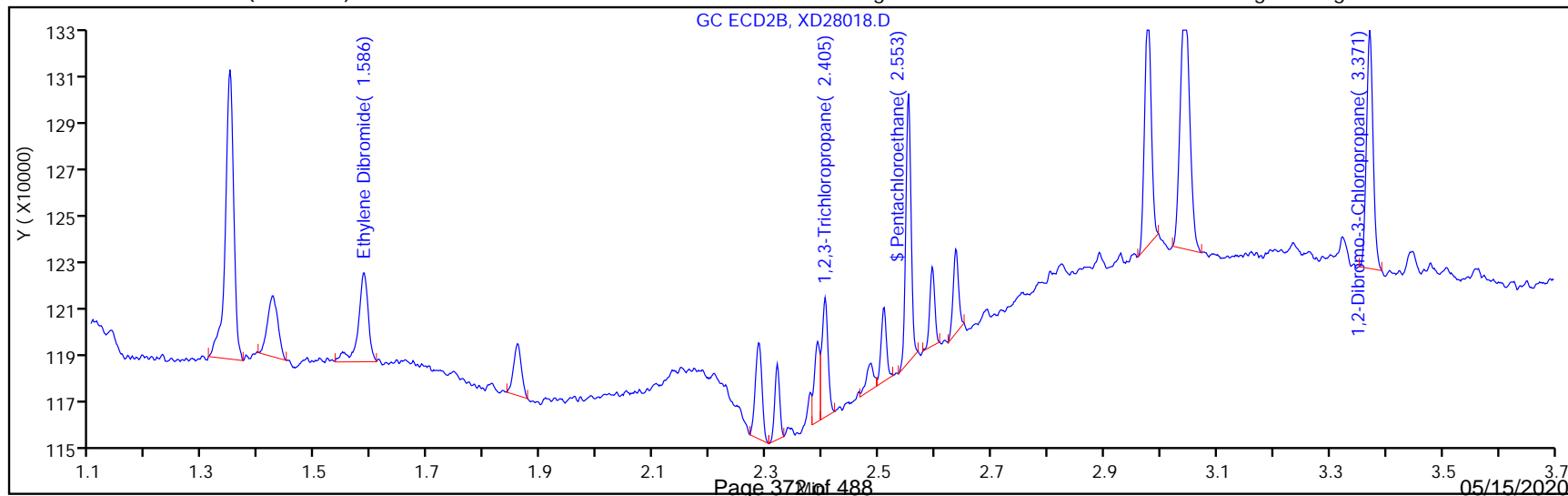
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:17

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

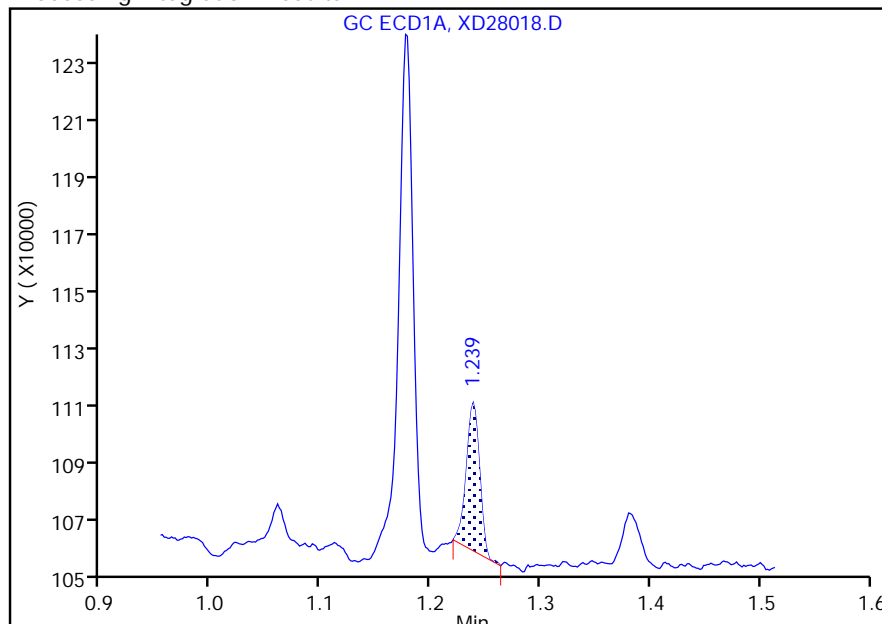
Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Injection Date: 28-Apr-2020 16:35:07 Instrument ID: CSGX
 Lims ID: IC IV1
 Client ID:
 Operator ID: ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

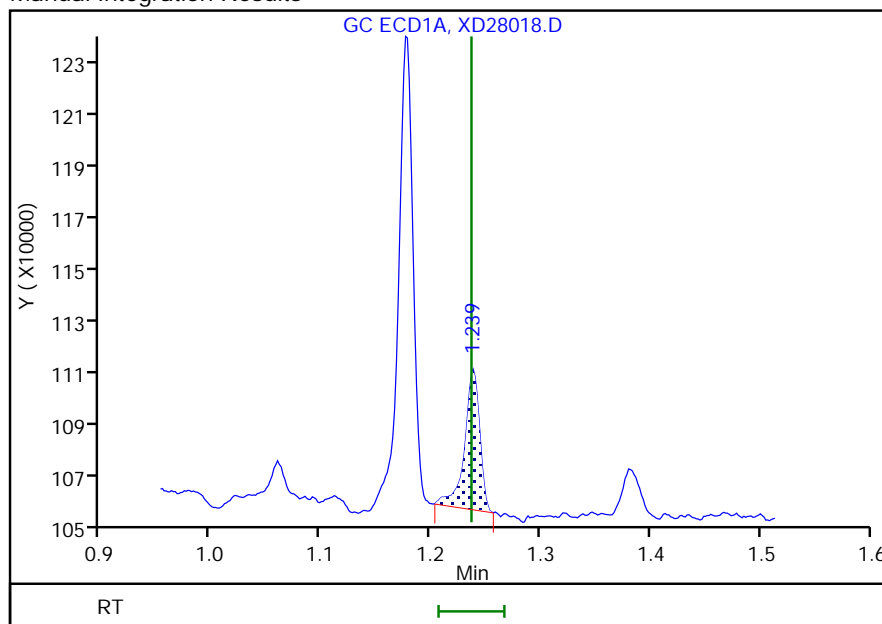
RT: 1.24
 Area: 40871
 Amount: 0.136340
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 48811
 Amount: 0.159902
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:10:25
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 616788

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2020 15:26 Calibration End Date: 04/28/2020 16:35 Calibration ID: 75387

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616788/18	XD28018.D
Level 2	IC 680-616788/17	XD28017.D
Level 3	IC 680-616788/16	XD28016.D
Level 4	IC 680-616788/15	XD28015.D
Level 5	IC 680-616788/14	XD28014.D
Level 6	IC 680-616788/13	XD28013.D
Level 7	IC 680-616788/12	XD28012.D
Level 8	IC 680-616788/11	XD28011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.429						1.398 - 1.458	1.429
Ethylene Dibromide	1.586	1.585	1.586	++++	1.586	1.586	1.586	1.585			1.555 - 1.615	1.586
1,2,3-Trichloropropane	2.405	2.405	2.404	++++	2.404	2.404	2.404	2.405			2.375 - 2.435	2.404
1,2-Dibromo-3-Chloropropane	3.371	3.371	3.371	++++	3.371	3.371	3.371	3.371			3.341 - 3.401	3.371
Pentachloroethane	2.553	2.551	2.553	++++	2.553	2.553	2.553	2.553			2.523 - 2.583	2.553

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 616788

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2020 15:26 Calibration End Date: 04/28/2020 16:35 Calibration ID: 75387

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616788/18	XD28018.D
Level 2	IC 680-616788/17	XD28017.D
Level 3	IC 680-616788/16	XD28016.D
Level 4	IC 680-616788/15	XD28015.D
Level 5	IC 680-616788/14	XD28014.D
Level 6	IC 680-616788/13	XD28013.D
Level 7	IC 680-616788/12	XD28012.D
Level 8	IC 680-616788/11	XD28011.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	479690				Ave		479690.000						20.0			
Ethylene Dibromide	287008 259297	273840 253733	266258 253956	++++ 248067	Ave		263165.608			5.2			20.0			
1,2,3-Trichloropropane	45684 32612	39343 34275	35721 31278	++++ 31840	Ave		35822.0478			14.4			20.0			
1,2-Dibromo-3-Chloropropane	501376 430676	459014 415770	452349 409917	++++ 394577	Ave		437668.389			8.3			20.0			
Pentachloroethane	1124640 1113166	1054096 985863	1010680 975661	++++ 958436	Ave		1031791.83			6.5			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1 Analy Batch No.: 616788

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2020 15:26 Calibration End Date: 04/28/2020 16:35 Calibration ID: 75387

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-616788/18	XD28018.D
Level 2	IC 680-616788/17	XD28017.D
Level 3	IC 680-616788/16	XD28016.D
Level 4	IC 680-616788/15	XD28015.D
Level 5	IC 680-616788/14	XD28014.D
Level 6	IC 680-616788/13	XD28013.D
Level 7	IC 680-616788/12	XD28012.D
Level 8	IC 680-616788/11	XD28011.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3357830					7.00
Ethylene Dibromide	Ave	44845 515396	85575 634891	166411 775210	++++	405151	0.156 2.03	0.313 2.50	0.625 3.13	++++	1.56
1,2,3-Trichloropropane	Ave	35691 348107	61474 390969	111629 497501	++++	254785	0.781 10.2	1.56 12.5	3.13 15.6	++++	7.81
1,2-Dibromo-3-Chloropropane	Ave	78340 844532	143442 1024792	282718 1233054	++++	672931	0.156 2.03	0.313 2.50	0.625 3.13	++++	1.56
Pentachloroethane	Ave	70290 801014	131762 975661	252670 1198045	++++	695729	0.0625 0.813	0.125 1.00	0.250 1.25	++++	0.625

Curve Type Legend:

Ave = Average

Report Date: 29-Apr-2020 14:21:05

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28011.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 28-Apr-2020 15:26:07 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:05 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.237	1.237	0.000	904055	3.13	2.96	
2	1.585	1.585	0.000	775210	3.13	2.95	
						RPD = 0.54	
3 1,2,3-Trichloropropane							
1	2.169	2.167	0.002	571296	15.6	13.7	
2	2.405	2.405	0.000	497501	15.6	13.9	
						RPD = 1.53	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	1400193	1.25	1.12	
2	2.553	2.553	0.000	1198045	1.25	1.16	
						RPD = 3.51	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1389714	3.13	2.83	
2	3.371	3.371	0.000	1233054	3.13	2.82	
						RPD = 0.35	

Reagents:

504 WS #1_00167 Amount Added: 100.00 Units: uL

Report Date: 29-Apr-2020 14:21:05

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28011.D

Injection Date: 28-Apr-2020 15:26:07

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

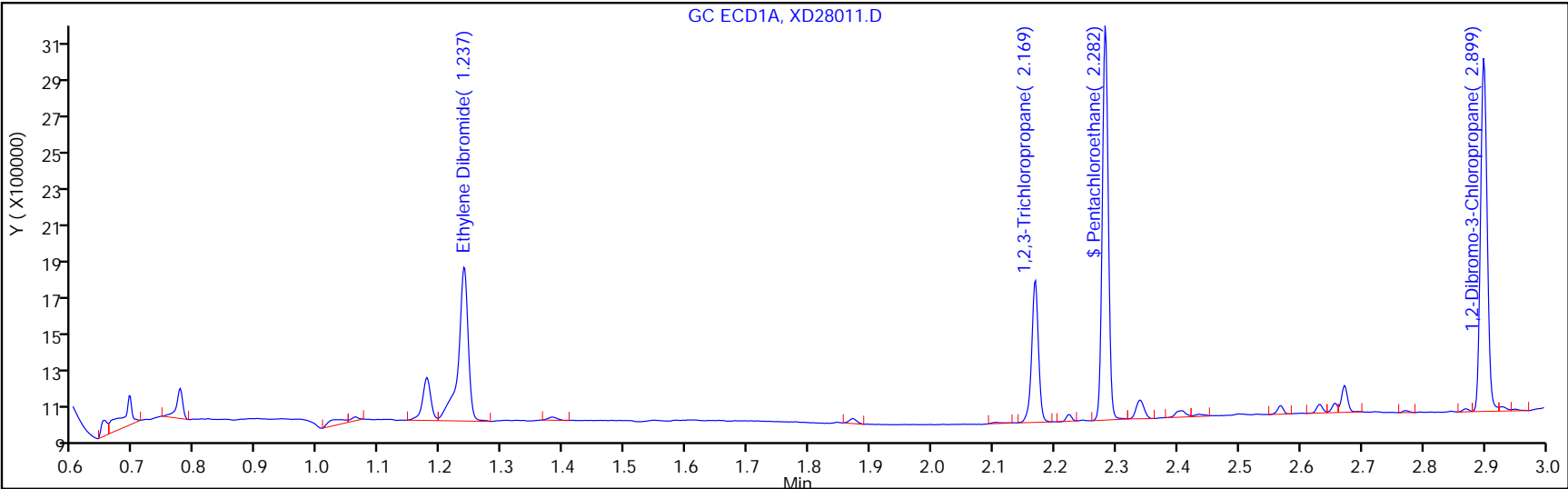
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

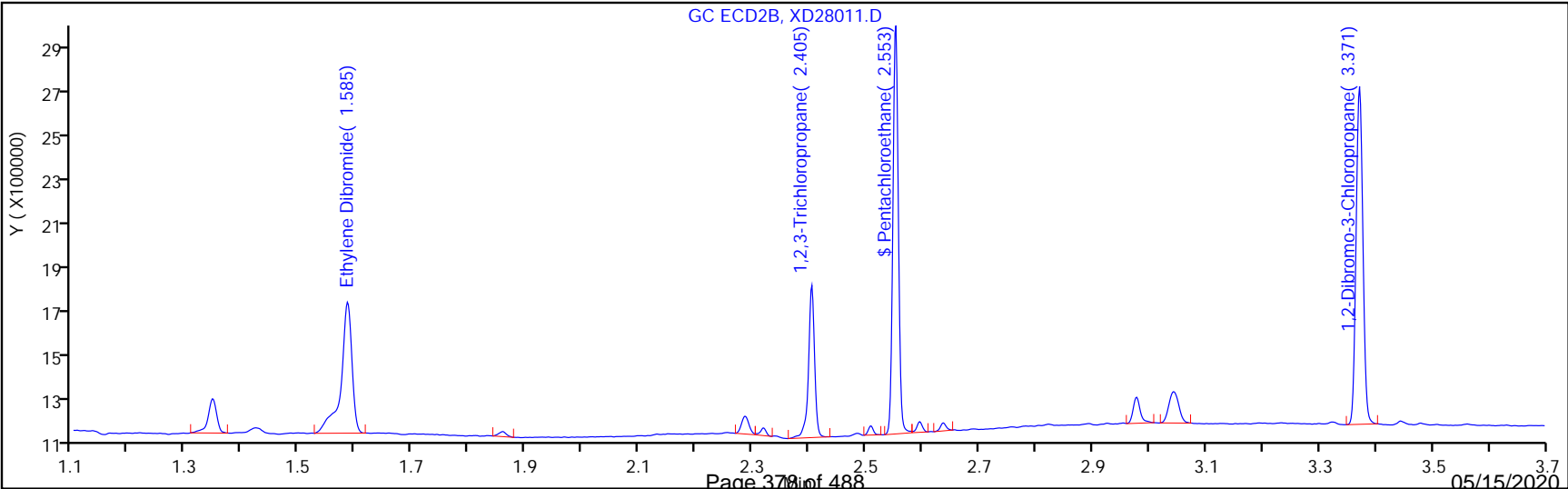
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:08

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28012.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 28-Apr-2020 15:35:58 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:07 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.237	0.001	726620	2.50	2.38	
2	1.586	1.585	0.001	634891	2.50	2.41	
						RPD = 1.34	
3 1,2,3-Trichloropropane							
1	2.168	2.167	0.001	471252	12.5	11.3	
2	2.404	2.405	-0.001	390969	12.5	10.9	
						RPD = 3.31	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	1137535	1.00	0.9108	
2	2.553	2.553	0.000	975661	1.00	0.9456	
						RPD = 3.75	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	1142121	2.50	2.32	
2	3.371	3.371	0.000	1024792	2.50	2.34	
						RPD = 0.77	

Reagents:

504 WS #1_00167 Amount Added: 80.00 Units: uL

Report Date: 29-Apr-2020 14:21:08

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28012.D

Injection Date: 28-Apr-2020 15:35:58

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

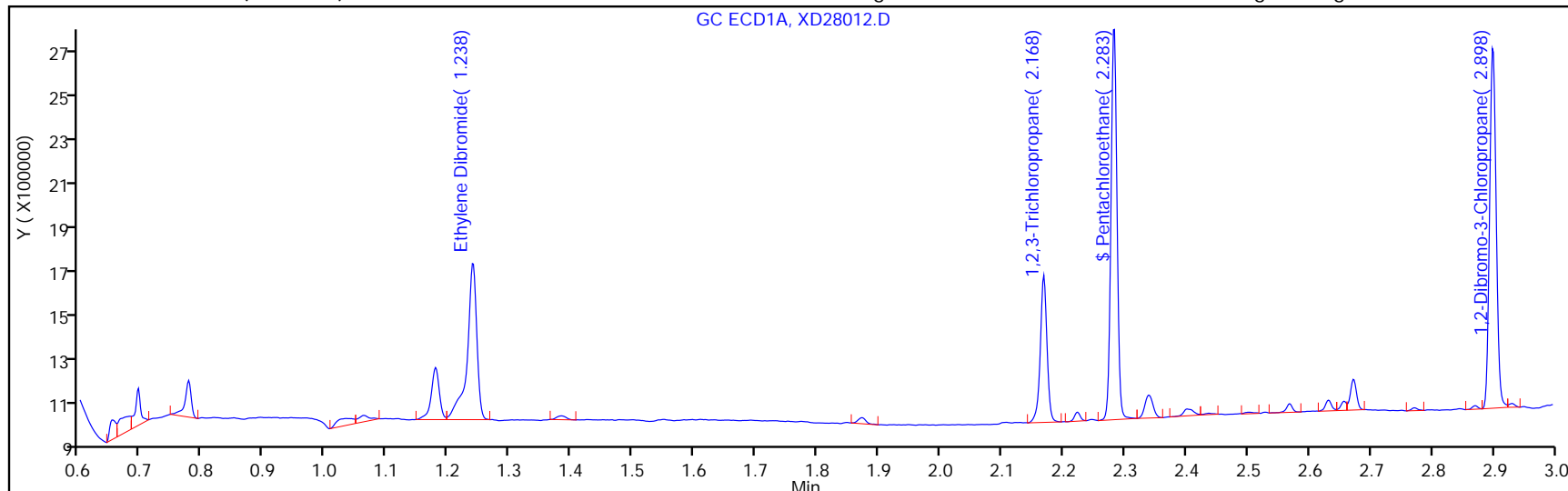
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

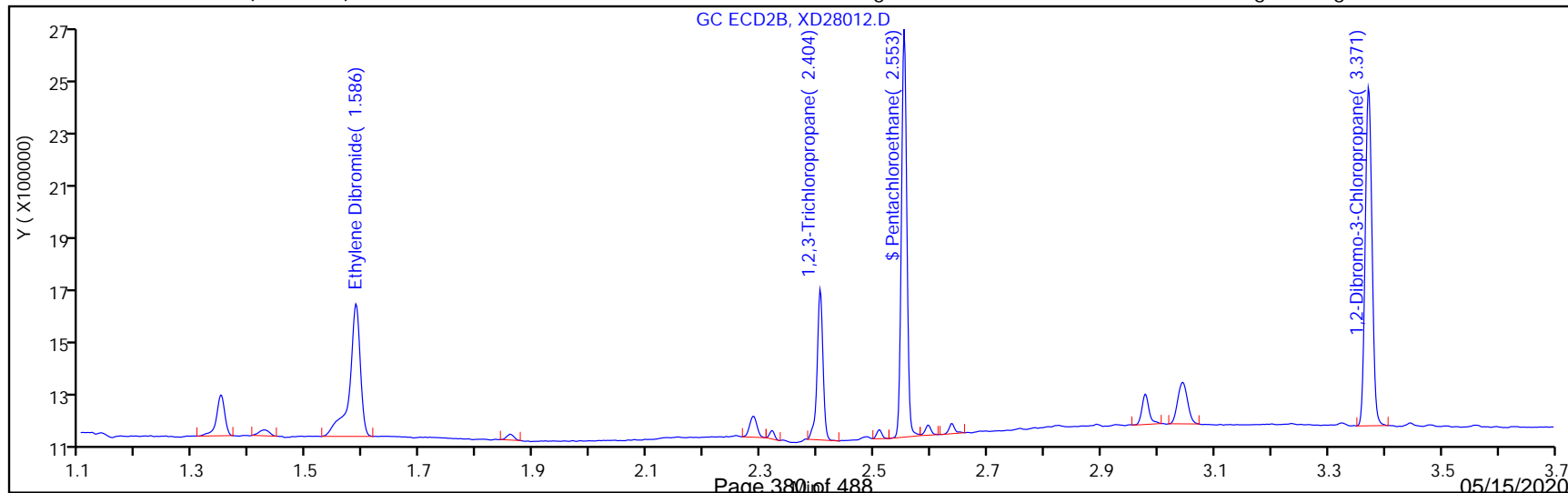
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28013.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 28-Apr-2020 15:45:46 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:09 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide

1	1.238	1.237	0.001	611050	2.03	2.00	
2	1.586	1.585	0.001	515396	2.03	1.96	
							RPD = 2.19

3 1,2,3-Trichloropropane

1	2.168	2.167	0.001	389504	10.2	9.32	
2	2.404	2.405	-0.001	348107	10.2	9.72	
							RPD = 4.13

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	927775	0.8125	0.7429	
2	2.553	2.553	0.000	801014	0.8125	0.7763	
							RPD = 4.41

5 1,2-Dibromo-3-Chloropropane

1	2.898	2.899	-0.001	941474	2.03	1.92	
2	3.371	3.371	0.000	844532	2.03	1.93	
							RPD = 0.75

Reagents:

504 WS #1_00167

Amount Added: 65.00

Units: uL

Report Date: 29-Apr-2020 14:21:09

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28013.D

Injection Date: 28-Apr-2020 15:45:46

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 13

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

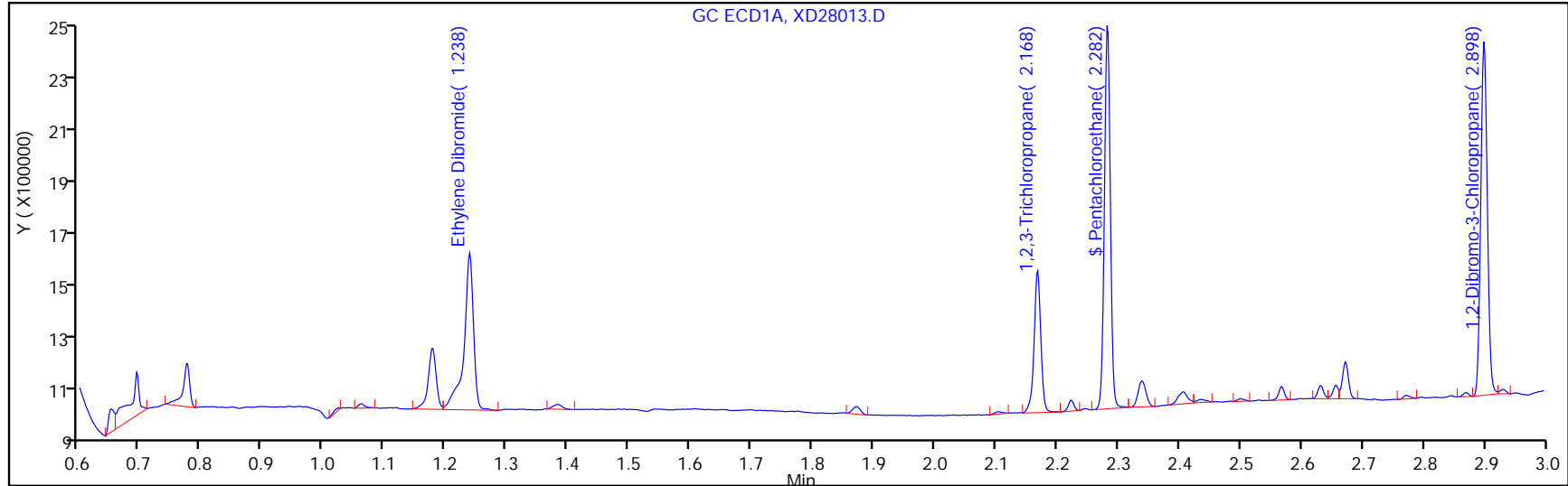
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

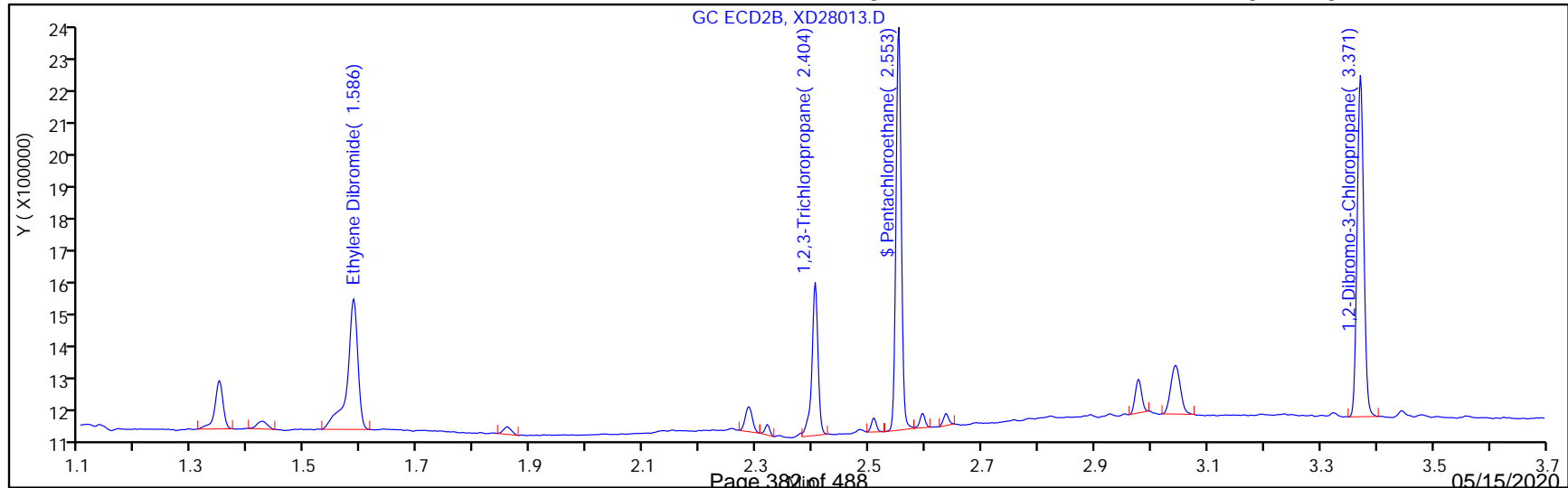
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28014.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 28-Apr-2020 15:55:46 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:10 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:08:13

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	----------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane

1	1.062	1.060	0.002	3831560	7.00	7.00	
2	1.429	1.428	0.001	3357830	7.00	7.00	
							RPD = 0.00

2 Ethylene Dibromide

1	1.238	1.237	0.001	487642	1.56	1.60	
2	1.586	1.585	0.001	405151	1.56	1.54	
							RPD = 3.70

3 1,2,3-Trichloropropane

1	2.168	2.167	0.001	307805	7.81	7.37	M
2	2.404	2.405	-0.001	254785	7.81	7.11	M
							RPD = 3.54

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	802644	0.6250	0.6427	
2	2.553	2.553	0.000	695729	0.6250	0.6743	
							RPD = 4.80

5 1,2-Dibromo-3-Chloropropane

1	2.898	2.899	-0.001	758081	1.56	1.54	
2	3.371	3.371	0.000	672931	1.56	1.54	
							RPD = 0.30

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Reagents:

504 WS #1_00167

Amount Added: 50.00

Units: uL

504-DBCM_00131

Amount Added: 50.00

Units: uL

Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28014.D

Injection Date: 28-Apr-2020 15:55:46

Instrument ID: CSGX

Operator ID:
Worklist Smp#: 14

Lims ID: IC Iv15

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

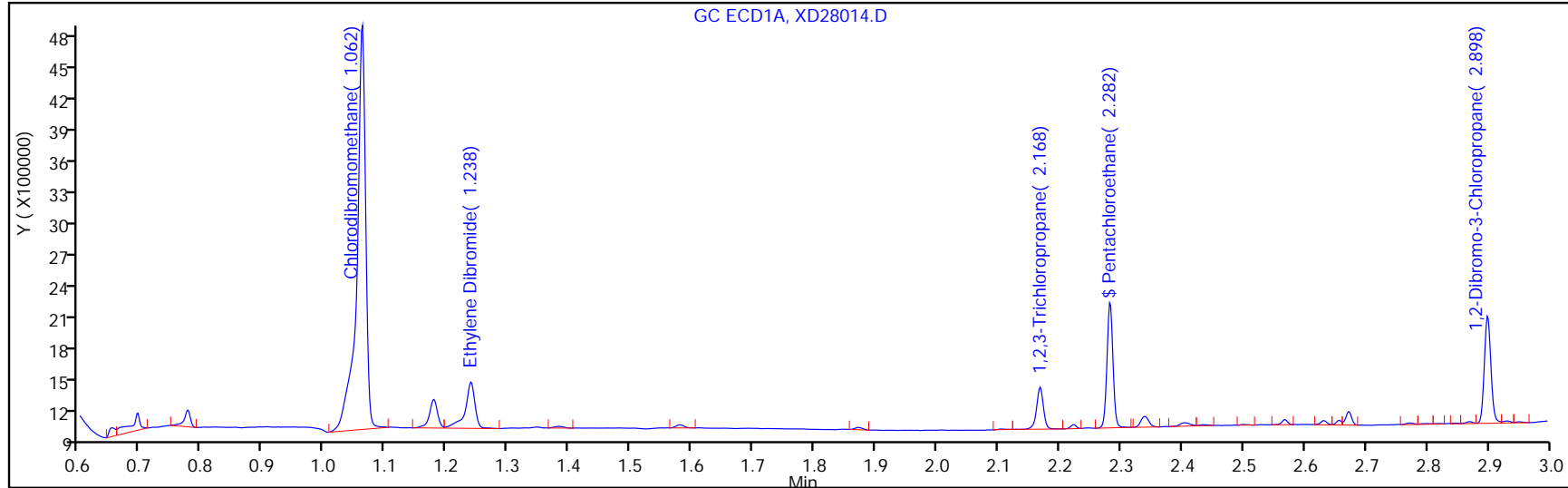
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

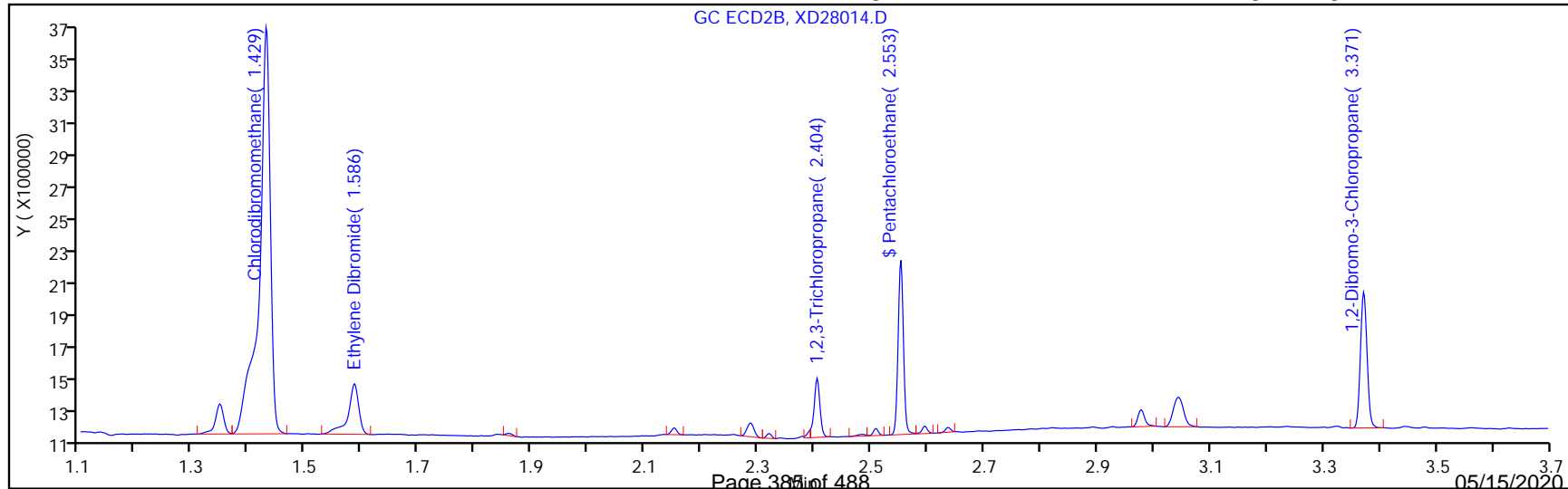
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:10

Chrom Revision: 2.3 11-Mar-2020 18:53:20
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28014.D

Injection Date: 28-Apr-2020 15:55:46

Instrument ID: CSGX

Lims ID: IC IV5

Client ID:

Operator ID:

ALS Bottle#:

14

Worklist Smp#:

14

Injection Vol: 2.0 ul

Dil. Factor:

1.0000

Method: EDBDBCP_CSGX

Limit Group:

504.1

Column: CLPesticides II (0.25 mm)

Detector

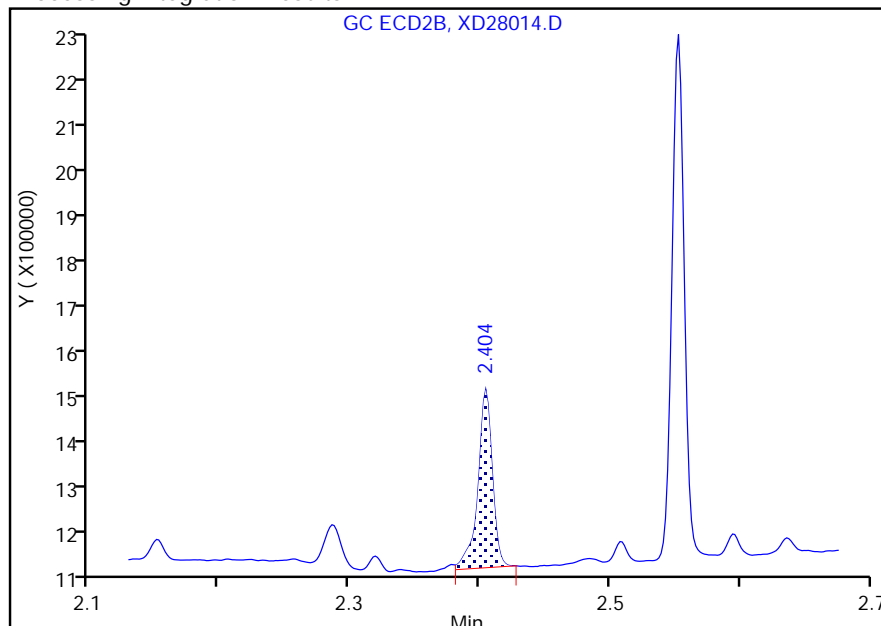
GC ECD2B

3 1,2,3-Trichloropropane, CAS: 96-18-4

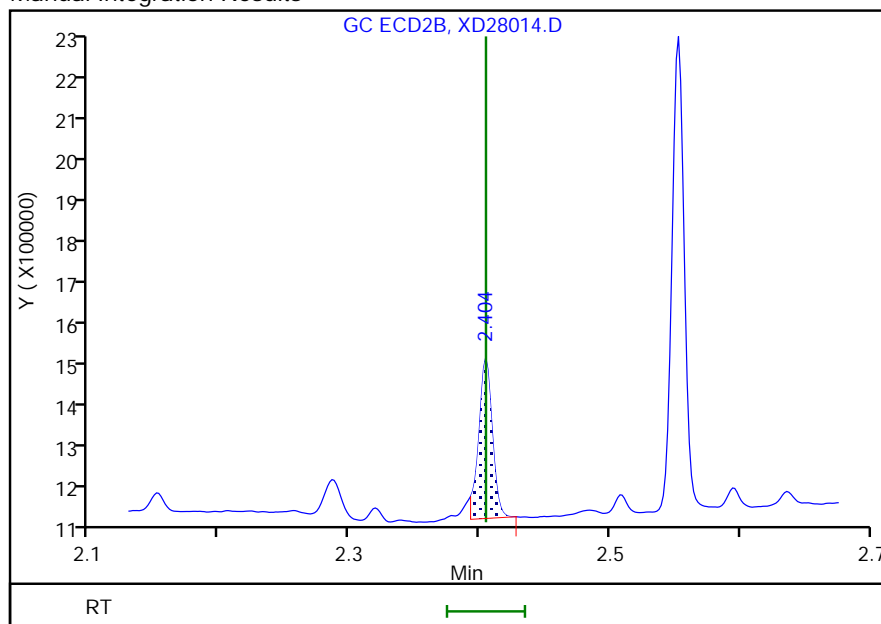
Signal: 2

RT: 2.40
Area: 273236
Amount: 7.639160
Amount Units: ng/ml

Processing Integration Results

RT: 2.40
Area: 254785
Amount: 7.112519
Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:08:07

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Page 386 of 488

05/15/2020

September 2020

Report Date: 29-Apr-2020 14:21:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28015.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 28-Apr-2020 16:05:37 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-015
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:12 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:07:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							
1	1.237	1.237	0.000	341486	1.09	1.12	
2	1.585	1.585	0.000	276637	1.09	1.05	
						RPD = 6.22	
3 1,2,3-Trichloropropane							
1	2.167	2.167	0.000	220307	5.47	5.27	M
2	2.405	2.405	0.000	180613	5.47	5.04	M
						RPD = 4.50	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	636953	0.4375	0.5100	
2	2.553	2.553	0.000	535546	0.4375	0.5190	
						RPD = 1.76	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	529588	1.09	1.08	
2	3.371	3.371	0.000	471511	1.09	1.08	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 35.00

Units: uL

Report Date: 29-Apr-2020 14:21:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28015.D

Injection Date: 28-Apr-2020 16:05:37

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 15

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

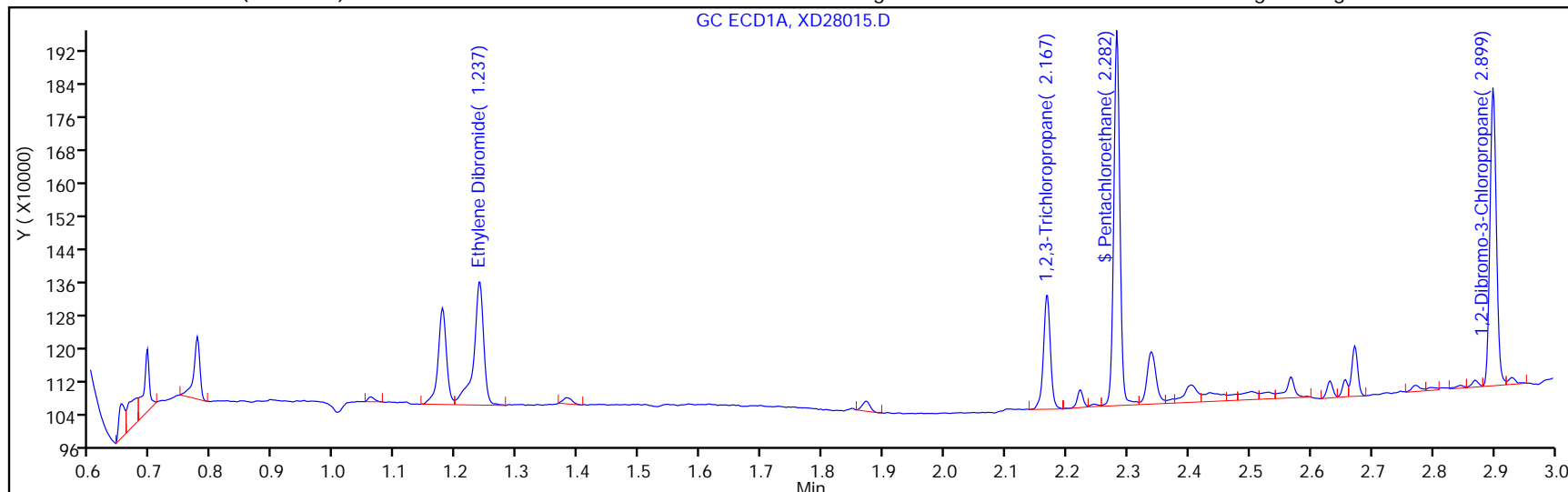
ALS Bottle#: 15

Method: EDBDBCP_CSGX

Limit Group: 504.1

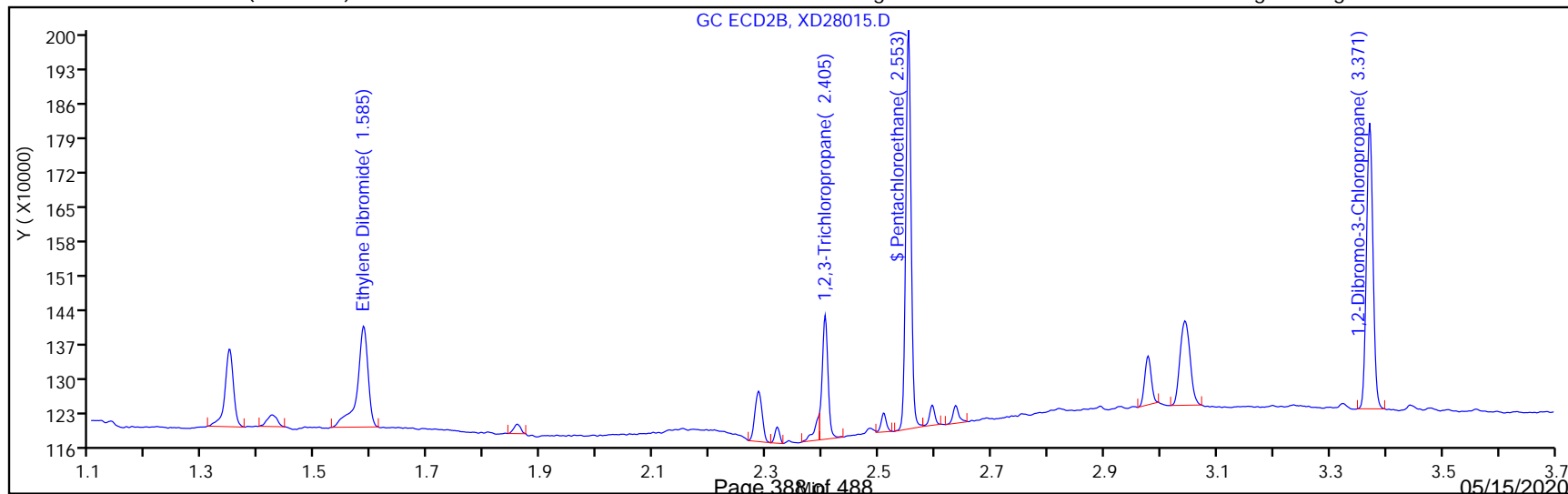
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:12

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

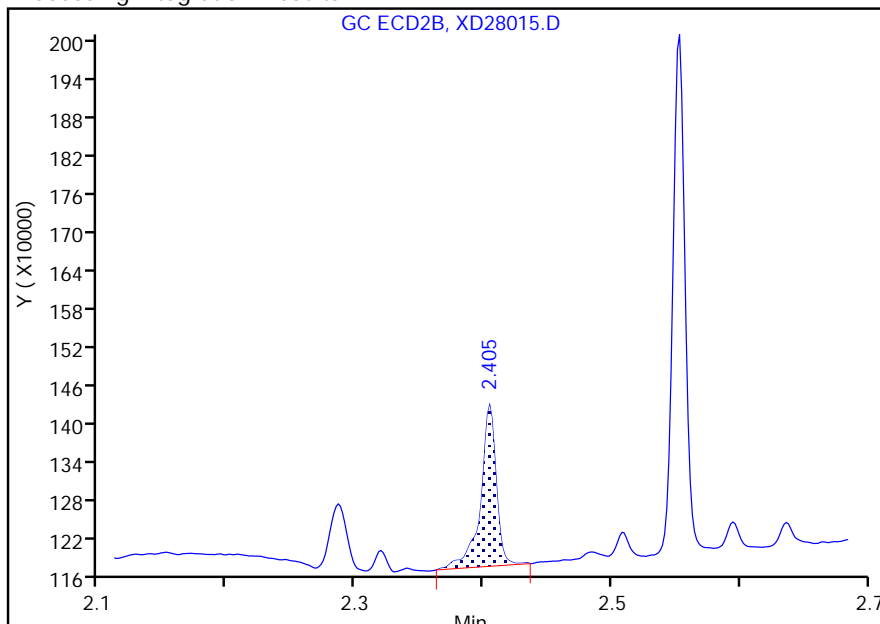
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28015.D	Instrument ID:	CSGX
Injection Date:	28-Apr-2020 16:05:37	ALS Bottle#:	15
Lims ID:	IC IV4	Dil. Factor:	1.0000
Client ID:		Limit Group:	504.1
Operator ID:		Detector:	GC ECD2B
Injection Vol:	2.0 ul	Worklist Smp#:	15
Method:	EDBDBCP_CSGX		
Column:	CLPesticides II (0.25 mm)		

3 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 2

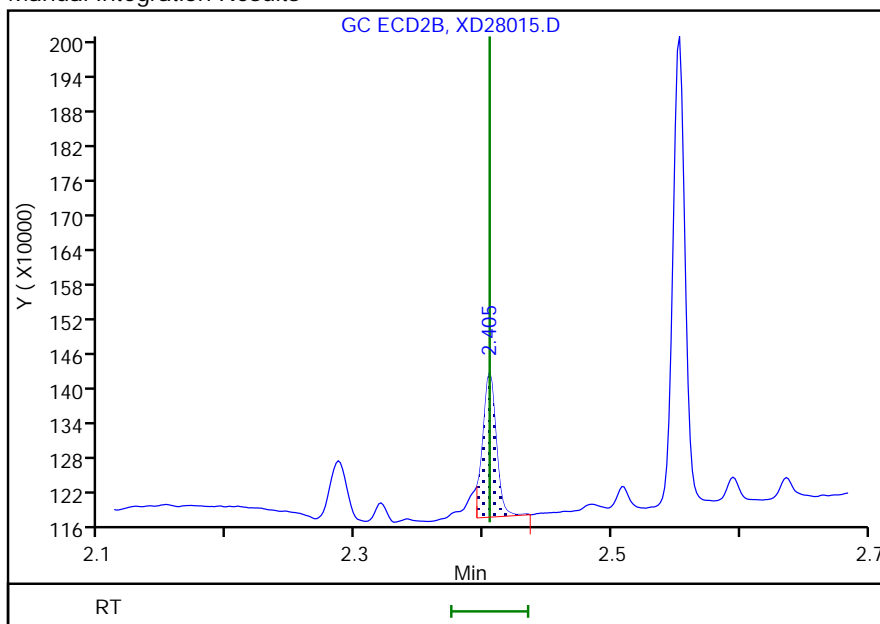
RT: 2.40
 Area: 212916
 Amount: 5.832331
 Amount Units: ng/ml

Processing Integration Results



RT: 2.40
 Area: 180613
 Amount: 5.041951
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:07:05
 Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Report Date: 29-Apr-2020 14:21:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28016.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 28-Apr-2020 16:15:25 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-016
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:13 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:06:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.238	1.237	0.001	198179	0.6250	0.6492	M
2	1.586	1.585	0.001	166411	0.6250	0.6323	M
						RPD = 2.63	
3 1,2,3-Trichloropropane							
1	2.168	2.167	0.001	136059	3.13	3.26	M
2	2.404	2.405	-0.001	111629	3.13	3.12	M
						RPD = 4.43	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	294718	0.2500	0.2360	
2	2.553	2.553	0.000	252670	0.2500	0.2449	
						RPD = 3.71	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	310622	0.6250	0.6319	
2	3.371	3.371	0.000	282718	0.6250	0.6460	
						RPD = 2.20	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 20.00

Units: uL

Report Date: 29-Apr-2020 14:21:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28016.D

Injection Date: 28-Apr-2020 16:15:25

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 16

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

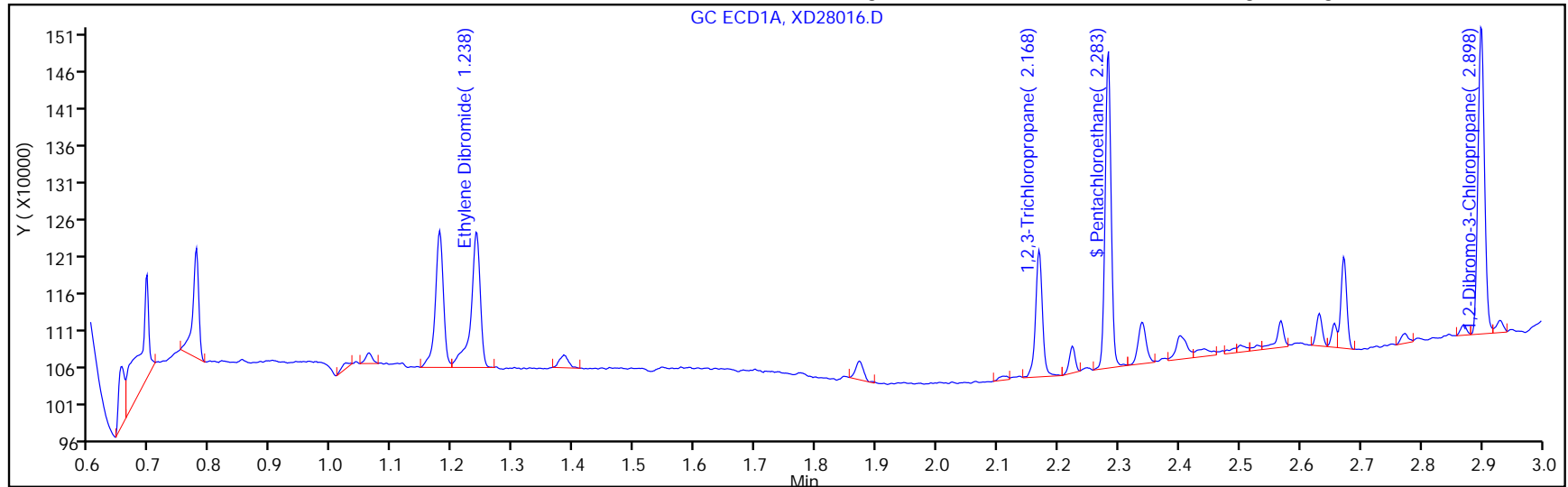
ALS Bottle#: 16

Method: EDBDBCP_CSGX

Limit Group: 504.1

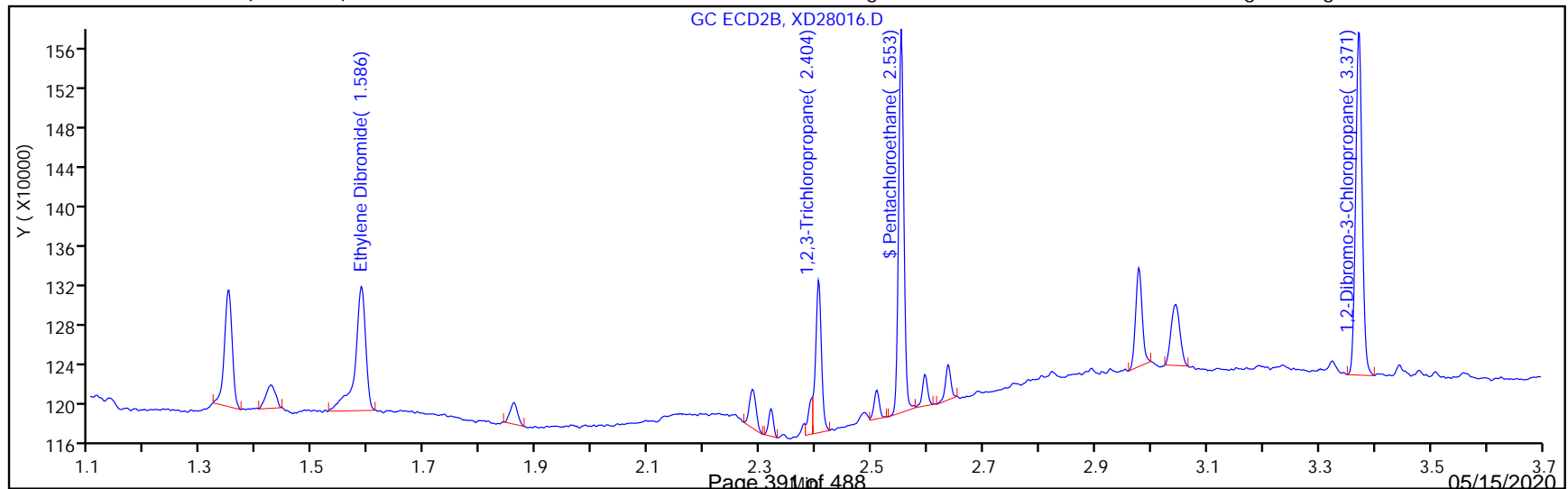
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

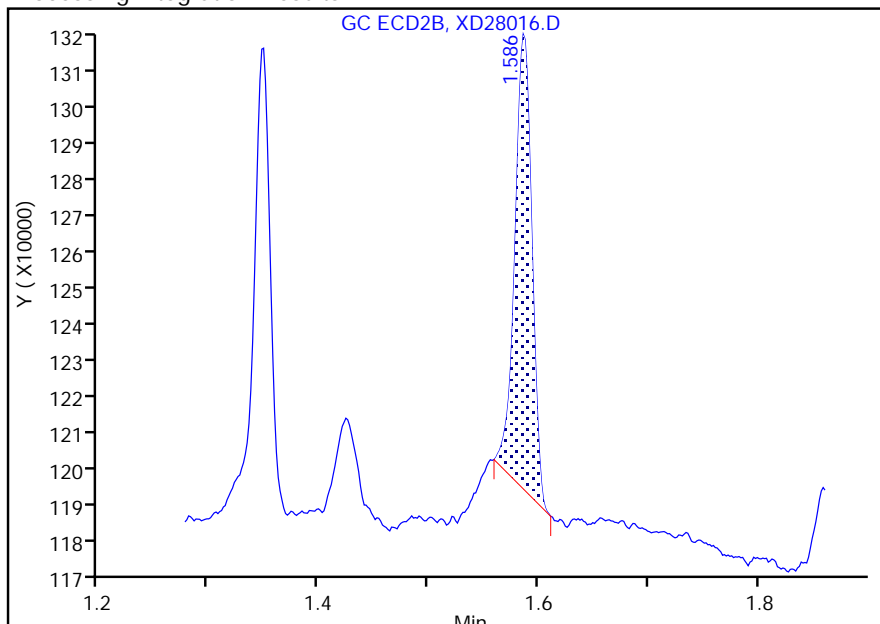
Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28016.D
 Injection Date: 28-Apr-2020 16:15:25 Instrument ID: CSGX
 Lims ID: IC IV3
 Client ID:
 Operator ID: ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides II (0.25 mm) Detector: GC ECD2B

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

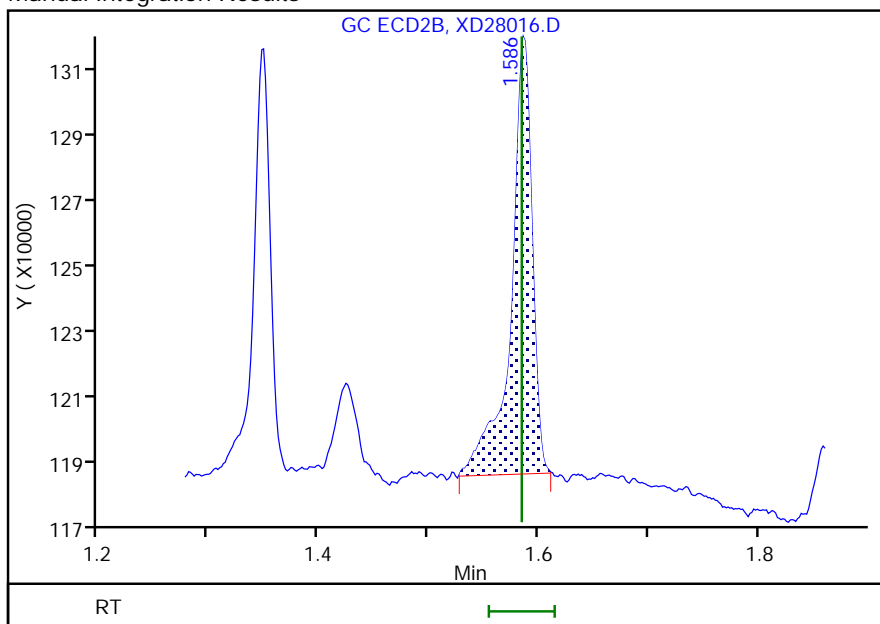
RT: 1.59
 Area: 126083
 Amount: 0.528968
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 166411
 Amount: 0.632343
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:09:11
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 29-Apr-2020 14:21:14

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

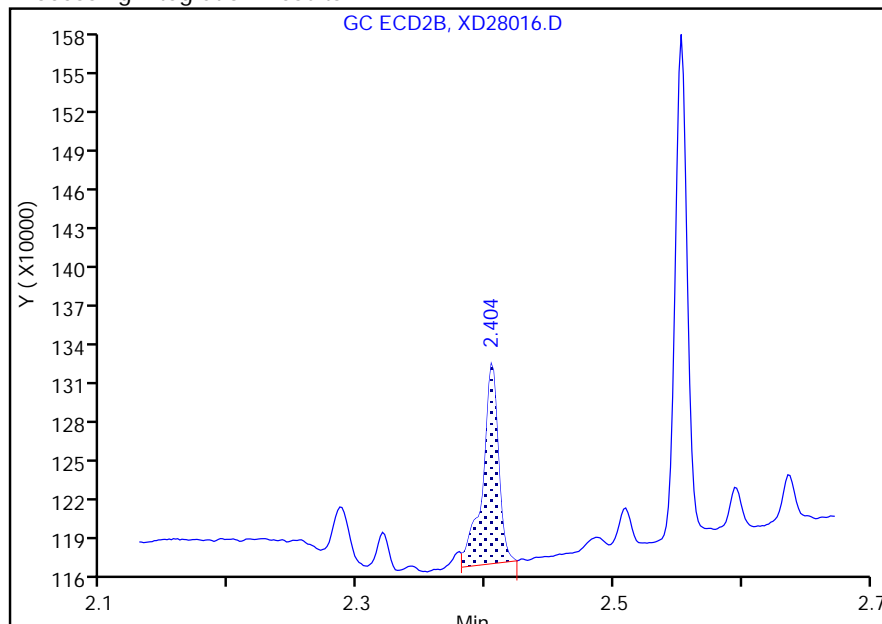
Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28016.D
 Injection Date: 28-Apr-2020 16:15:25 Instrument ID: CSGX
 Lims ID: IC IV3
 Client ID:
 Operator ID: ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides II (0.25 mm) Detector: GC ECD2B

3 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 2

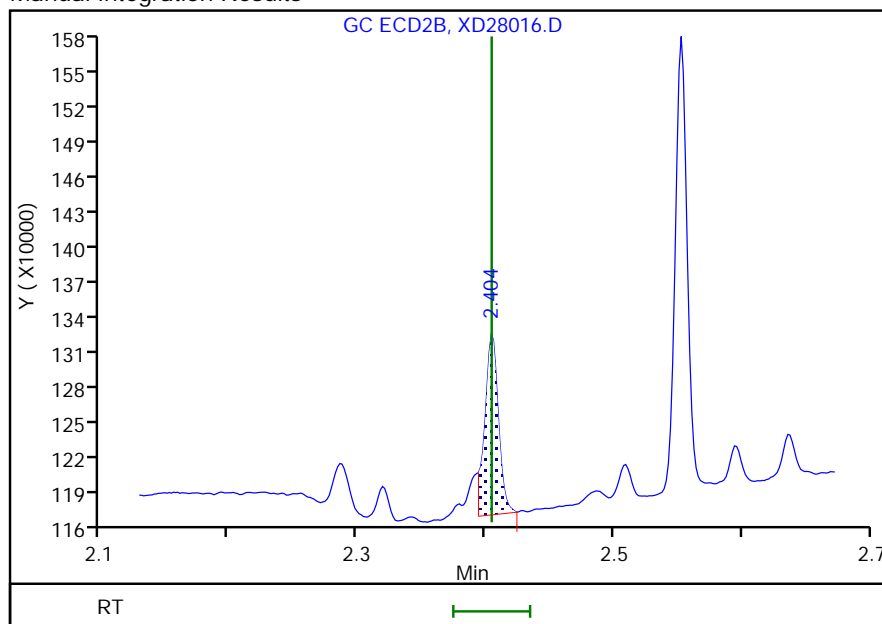
RT: 2.40
 Area: 131397
 Amount: 3.523003
 Amount Units: ng/ml

Processing Integration Results



RT: 2.40
 Area: 111629
 Amount: 3.116209
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:06:48
 Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 28-Apr-2020 16:25:17 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-017
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:15 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:10:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.237	1.237	0.000	98265	0.3125	0.3219	M
2	1.585	1.585	0.000	85575	0.3125	0.3252	M
						RPD = 1.01	
3 1,2,3-Trichloropropane							
1	2.167	2.167	0.000	70506	1.56	1.69	
2	2.405	2.405	0.000	61474	1.56	1.72	
						RPD = 1.65	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	167866	0.1250	0.1344	M
2	2.551	2.553	-0.002	131762	0.1250	0.1277	
						RPD = 5.12	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	167411	0.3125	0.3406	
2	3.371	3.371	0.000	143442	0.3125	0.3277	
						RPD = 3.84	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 10.00

Units: uL

Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D

Injection Date: 28-Apr-2020 16:25:17

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 17

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

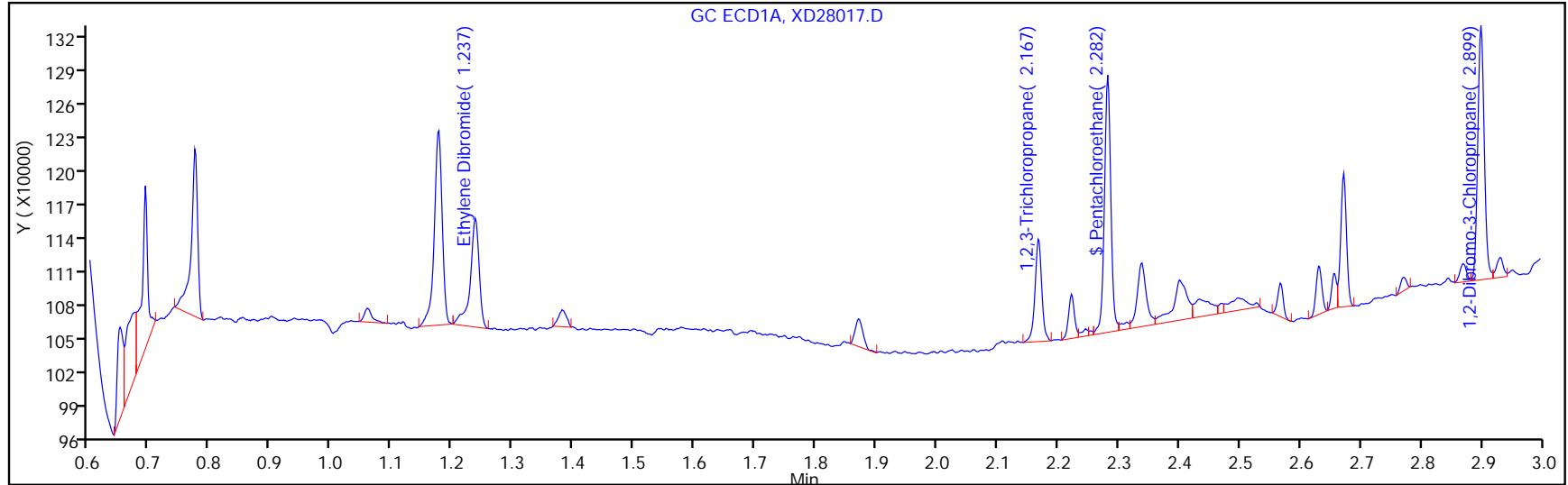
ALS Bottle#: 17

Method: EDBDBCP_CSGX

Limit Group: 504.1

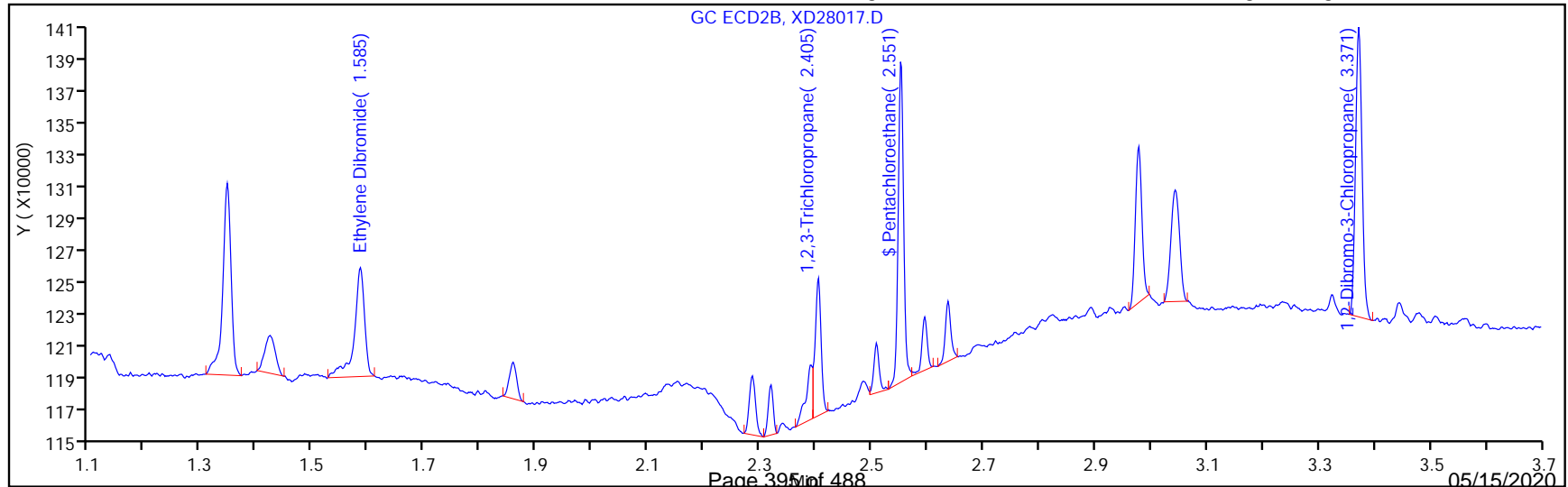
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:15

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

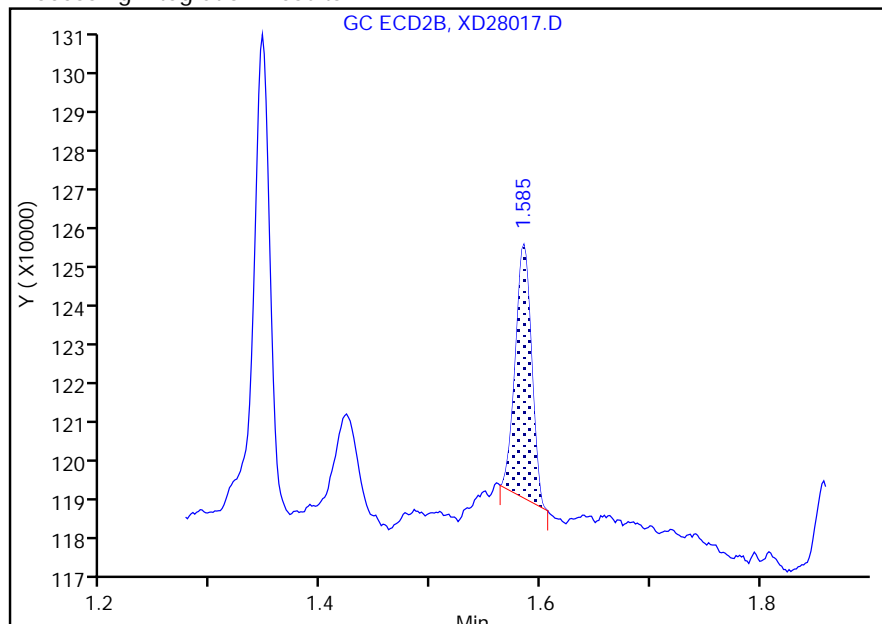
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28017.D		
Injection Date:	28-Apr-2020 16:25:17	Instrument ID:	CSGX
Lims ID:	IC IV2		
Client ID:			
Operator ID:	ALS Bottle#:	17	Worklist Smp#: 17
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	EDBDBCP_CSGX	Limit Group:	504.1
Column:	CLPesticides II (0.25 mm)	Detector:	GC ECD2B

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

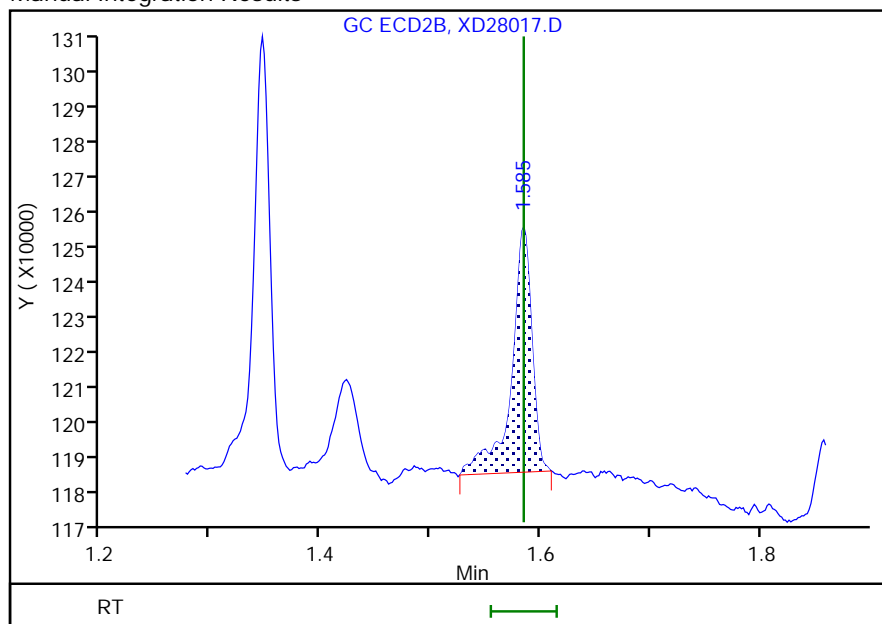
RT: 1.58
 Area: 62794
 Amount: 0.254823
 Amount Units: ng/ml

Processing Integration Results



RT: 1.58
 Area: 85575
 Amount: 0.325175
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:09:45
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 29-Apr-2020 14:21:17

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 28-Apr-2020 16:35:07 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-018
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:21:17 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:11:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.239	1.237	0.002	48811	0.1563	0.1599	M
2	1.586	1.585	0.001	44845	0.1563	0.1704	M
							RPD = 6.36
3 1,2,3-Trichloropropane							
1	2.169	2.167	0.002	40403	0.7813	0.9673	
2	2.405	2.405	0.000	35691	0.7813	1.00	
							RPD = 2.96
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	96061	0.0625	0.0769	
2	2.553	2.553	0.000	70290	0.0625	0.0681	
							RPD = 12.12
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	87191	0.1563	0.1774	
2	3.371	3.371	0.000	78340	0.1563	0.1790	
							RPD = 0.91

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00167

Amount Added: 5.00

Units: uL

Report Date: 29-Apr-2020 14:21:17

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D

Injection Date: 28-Apr-2020 16:35:07

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 18

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

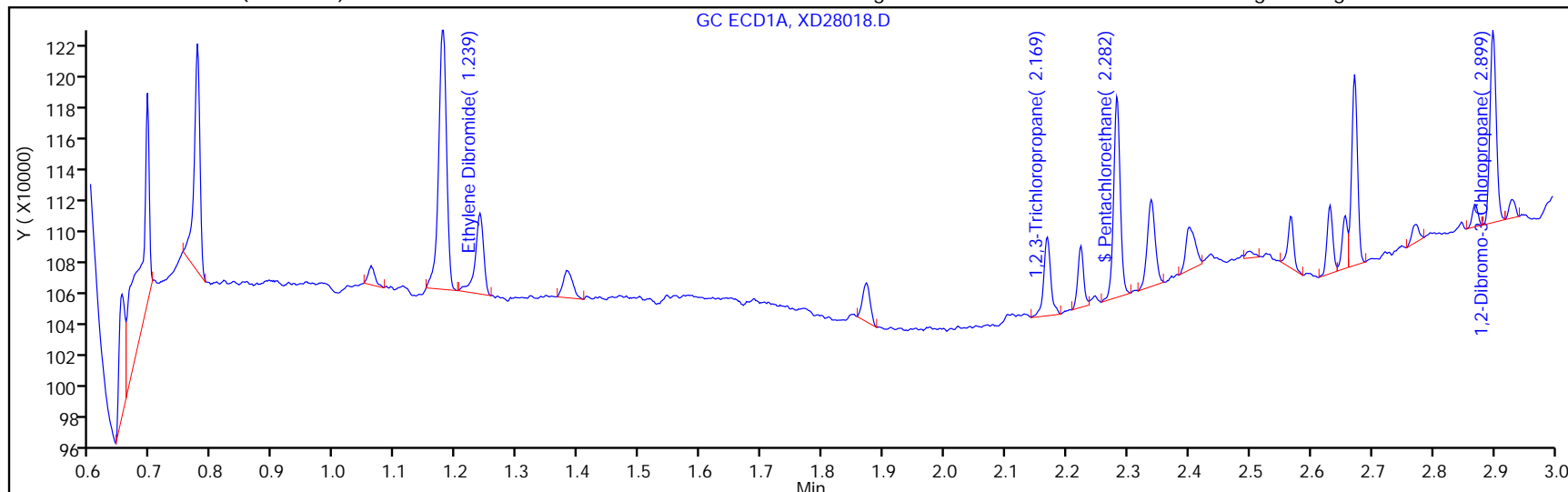
ALS Bottle#: 18

Method: EDBDBCP_CSGX

Limit Group: 504.1

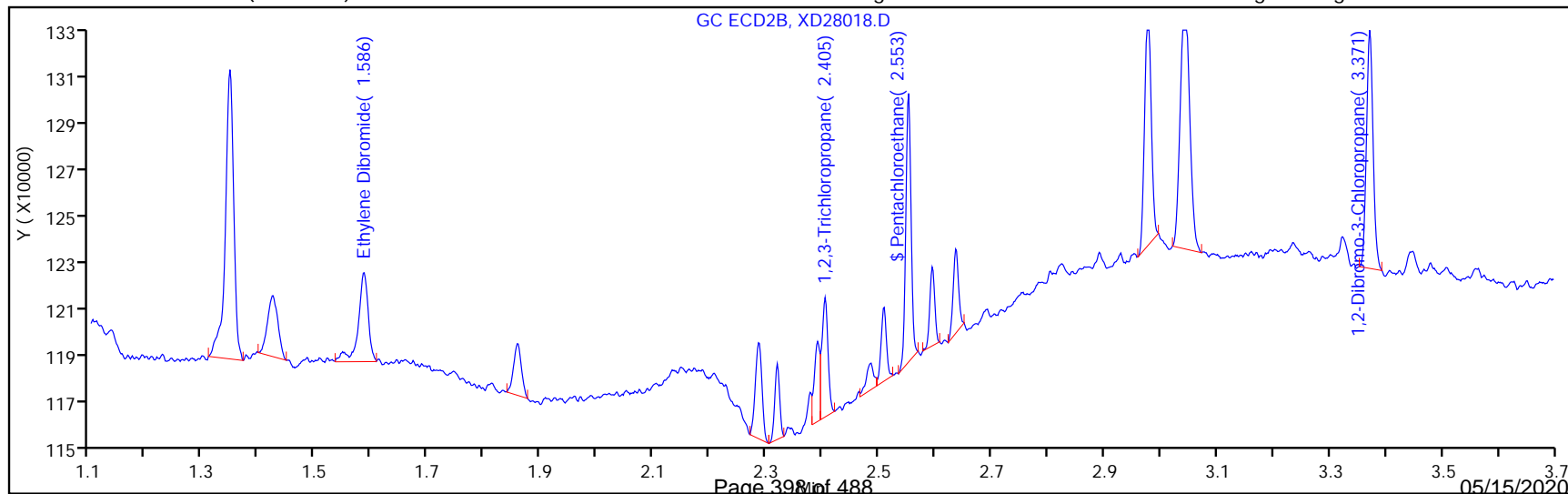
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 29-Apr-2020 14:21:17

Chrom Revision: 2.3 11-Mar-2020 18:53:20
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

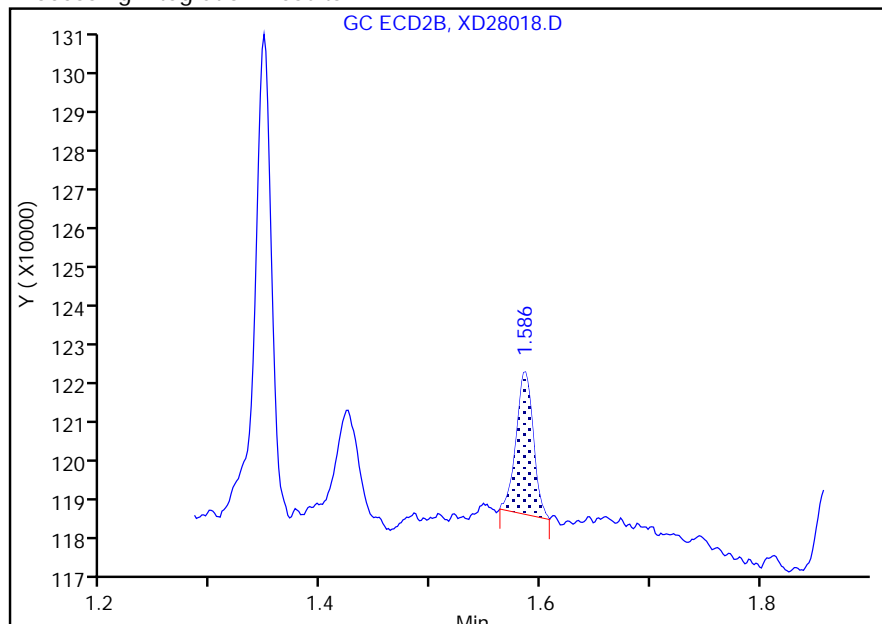
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D	Instrument ID:	CSGX
Injection Date:	28-Apr-2020 16:35:07		
Lims ID:	IC IV1		
Client ID:			
Operator ID:		ALS Bottle#:	18
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	EDBDBCP_CSGX	Limit Group:	504.1
Column:	CLPesticides II (0.25 mm)	Detector:	GC ECD2B
		Worklist Smp#:	18

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

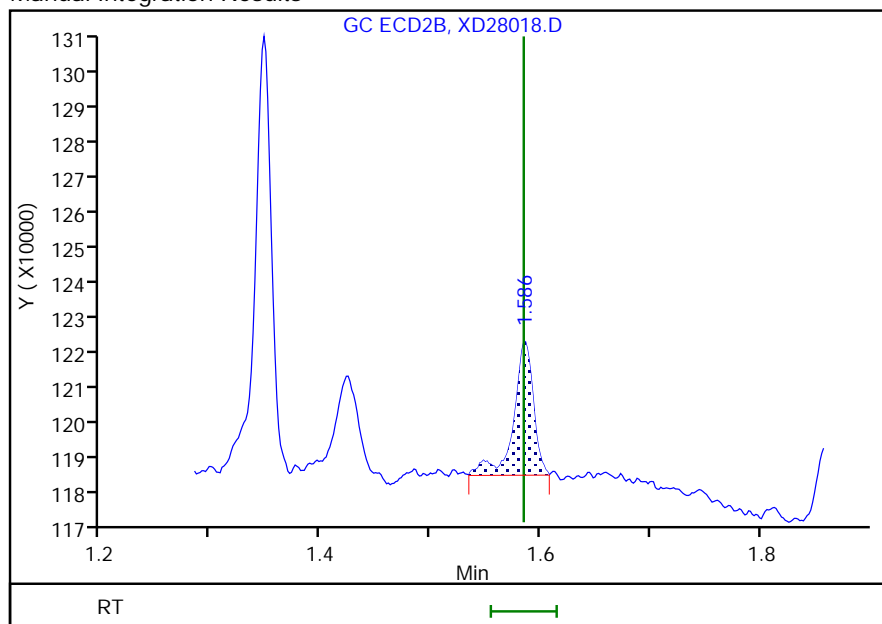
RT: 1.59
 Area: 36906
 Amount: 0.144427
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 44845
 Amount: 0.170406
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 29-Apr-2020 14:10:37
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616788/19 Calibration Date: 04/28/2020 16:44
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XD28019.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	305255	290883		1.67	1.75	-4.7	30.0
1,2,3-Trichloropropane	Ave	41770	35841		7.51	8.75	-14.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	491565	475564		1.69	1.75	-3.3	30.0
Pentachloroethane	Ave	1248939	1017694		0.356	0.438	-18.5	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616788/19 Calibration Date: 04/28/2020 16:44
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XD28019.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 29-Apr-2020 14:42:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28019.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 28-Apr-2020 16:44:58 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-019
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:42:52 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:21:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.237	1.237	0.000	509046	1.75	1.67	
2	1.584	1.585	-0.001	446237	1.75	1.70	
						RPD = 1.67	

3 1,2,3-Trichloropropane

1	2.168	2.167	0.001	313612	8.75	7.51	
2	2.404	2.405	-0.001	288072	8.75	8.04	
						RPD = 6.86	

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	445241	0.4375	0.3565	
2	2.553	2.553	0.000	386058	0.4375	0.3742	
						RPD = 4.84	

5 1,2-Dibromo-3-Chloropropane

1	2.898	2.899	-0.001	832237	1.75	1.69	
2	3.371	3.371	0.000	736781	1.75	1.68	
						RPD = 0.57	

Reagents:

504 Spike_00155 Amount Added: 35.00 Units: uL
 504_NewSurr_00125 Amount Added: 35.00 Units: uL

Report Date: 29-Apr-2020 14:42:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28019.D

Injection Date: 28-Apr-2020 16:44:58

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 19

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

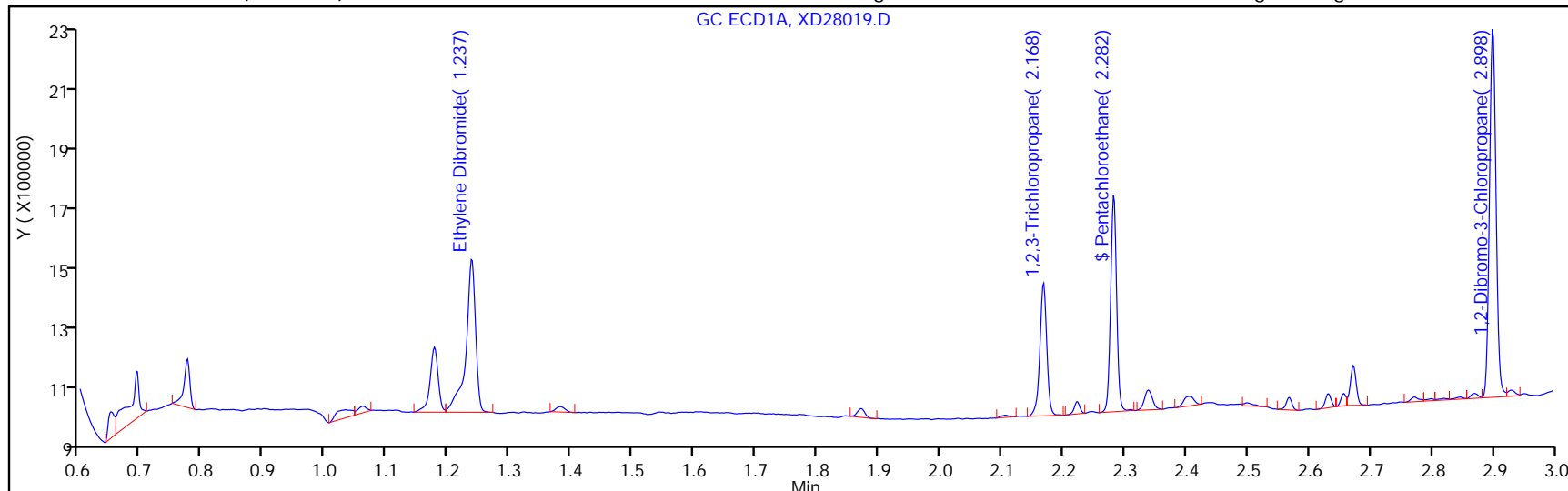
ALS Bottle#: 19

Method: EDBDBCP_CSGX

Limit Group: 504.1

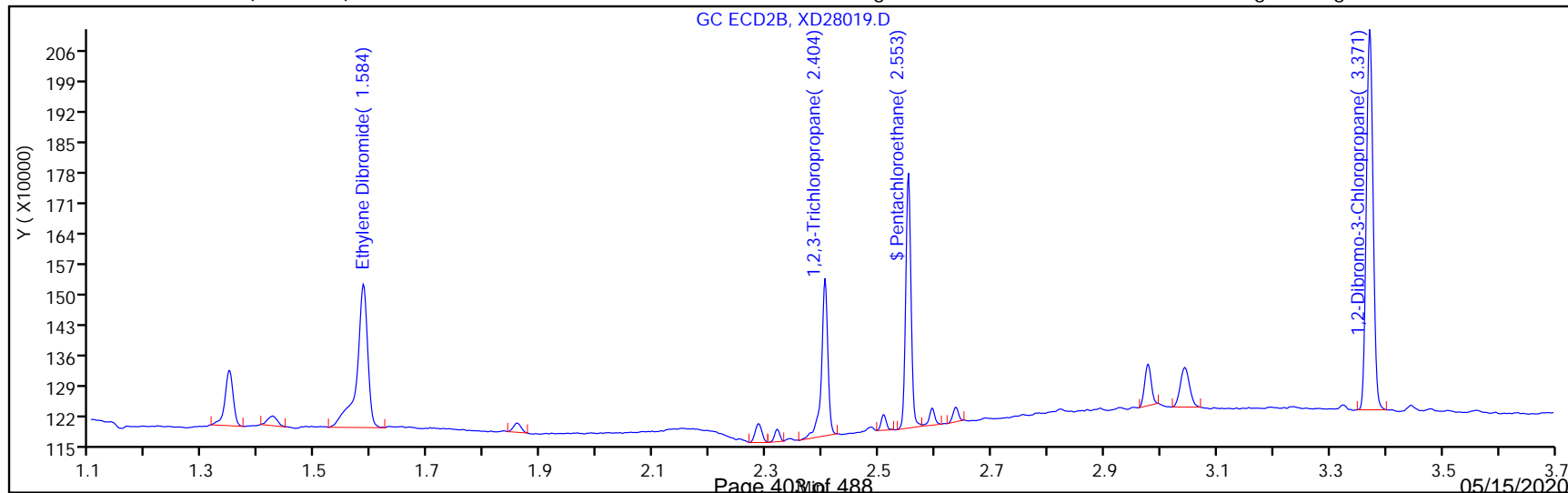
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616788/19 Calibration Date: 04/28/2020 16:44
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XD28019.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263166	254993		1.70	1.75	-3.1	30.0
1,2,3-Trichloropropane	Ave	35822	32923		8.04	8.75	-8.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	437668	421018		1.68	1.75	-3.8	30.0
Pentachloroethane	Ave	1031792	882418		0.374	0.438	-14.5	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: ICV 680-616788/19 Calibration Date: 04/28/2020 16:44
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XD28019.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.58	1.56	1.62
1,2,3-Trichloropropane	2.40	2.38	2.44
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 29-Apr-2020 14:42:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28019.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 28-Apr-2020 16:44:58 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063442-019
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 29-Apr-2020 14:42:52 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0325

First Level Reviewer: canadyd Date: 29-Apr-2020 14:21:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.237	1.237	0.000	509046	1.75	1.67	
2	1.584	1.585	-0.001	446237	1.75	1.70	
							RPD = 1.67

3 1,2,3-Trichloropropane

1	2.168	2.167	0.001	313612	8.75	7.51	
2	2.404	2.405	-0.001	288072	8.75	8.04	
							RPD = 6.86

\$ 4 Pentachloroethane

1	2.282	2.282	0.000	445241	0.4375	0.3565	
2	2.553	2.553	0.000	386058	0.4375	0.3742	
							RPD = 4.84

5 1,2-Dibromo-3-Chloropropane

1	2.898	2.899	-0.001	832237	1.75	1.69	
2	3.371	3.371	0.000	736781	1.75	1.68	
							RPD = 0.57

Reagents:

504 Spike_00155 Amount Added: 35.00 Units: uL
 504_NewSurr_00125 Amount Added: 35.00 Units: uL

Report Date: 29-Apr-2020 14:42:53

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28019.D

Injection Date: 28-Apr-2020 16:44:58

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 19

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

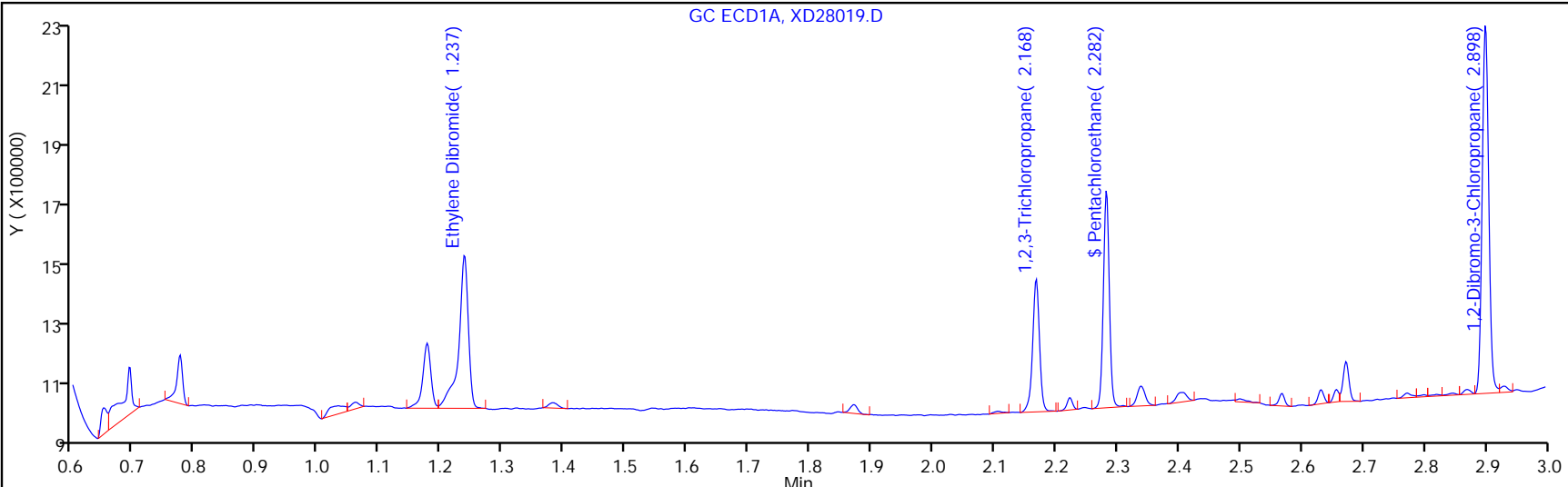
ALS Bottle#: 19

Method: EDBDBCP_CSGX

Limit Group: 504.1

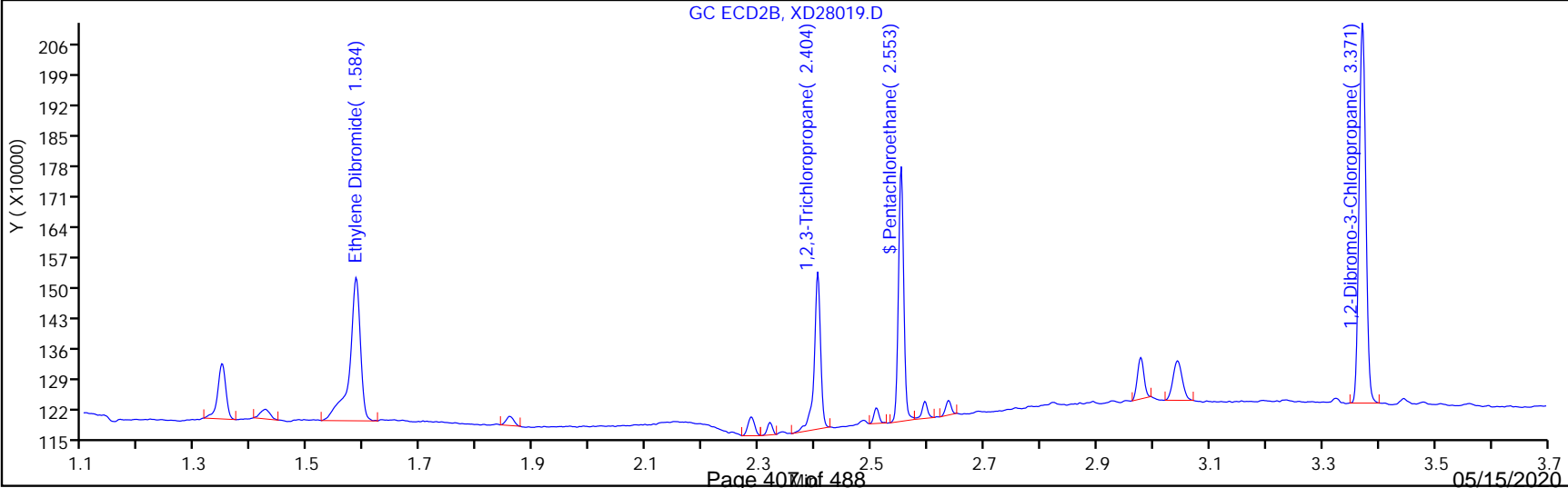
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/6 Calibration Date: 05/08/2020 15:21
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08006.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	305255	329676		1.69	1.56	8.0	30.0
1,2,3-Trichloropropane	Ave	41770	42185		7.89	7.81	1.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	491565	508895		1.62	1.56	3.5	30.0
Pentachloroethane	Ave	1248939	1089624		0.545	0.625	-12.8	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/6 Calibration Date: 05/08/2020 15:21
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 11-May-2020 15:25:44

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08006.D
 Lims ID: CCV IvI5
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2020 15:21:48 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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1 Chlorodibromomethane							
1	1.060	1.060	0.000	3957763	7.00	7.23	
2	1.430	1.430	0.000	3347958	7.00	6.98	
						RPD = 3.53	
2 Ethylene Dibromide							
1	1.239	1.239	0.000	515118	1.56	1.69	
2	1.585	1.585	0.000	419314	1.56	1.59	
						RPD = 5.74	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	329572	7.81	7.89	
2	2.404	2.404	0.000	306943	7.81	8.57	
						RPD = 8.24	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	681015	0.6250	0.5453	
2	2.552	2.552	0.000	550434	0.6250	0.5335	
						RPD = 2.19	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	795148	1.56	1.62	
2	3.370	3.370	0.000	682434	1.56	1.56	
						RPD = 3.67	

Reagents:

504 WS #1_00167 Amount Added: 50.00 Units: uL
 504-DBCM_00131 Amount Added: 50.00 Units: uL

Report Date: 11-May-2020 15:25:44

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08006.D

Injection Date: 08-May-2020 15:21:48

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

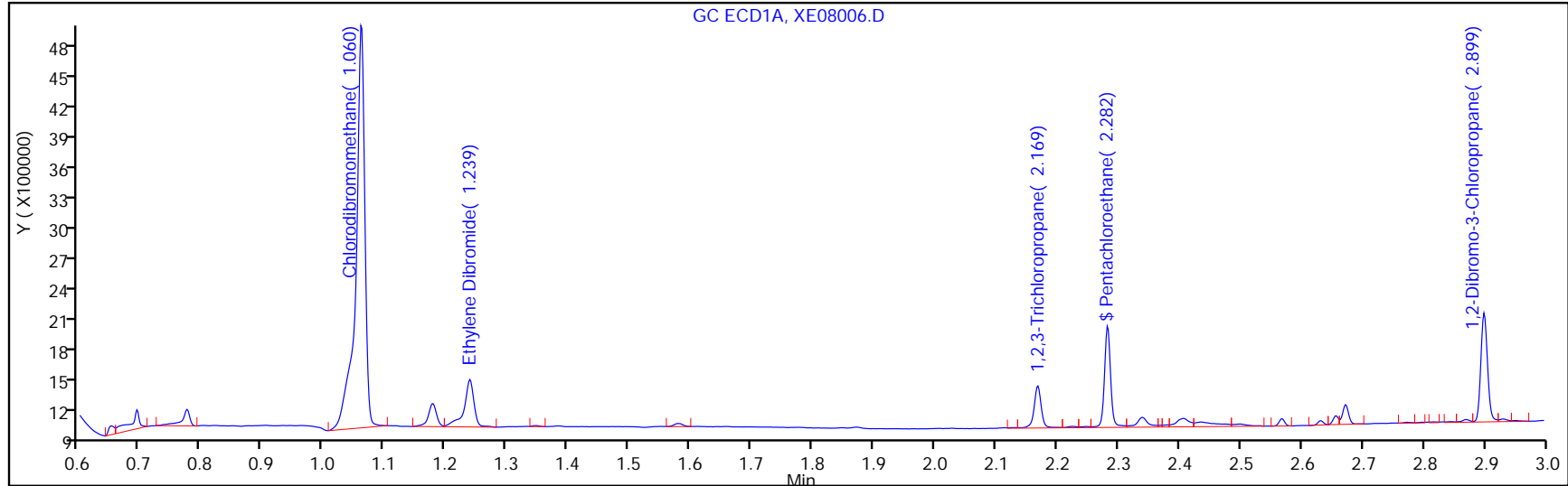
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

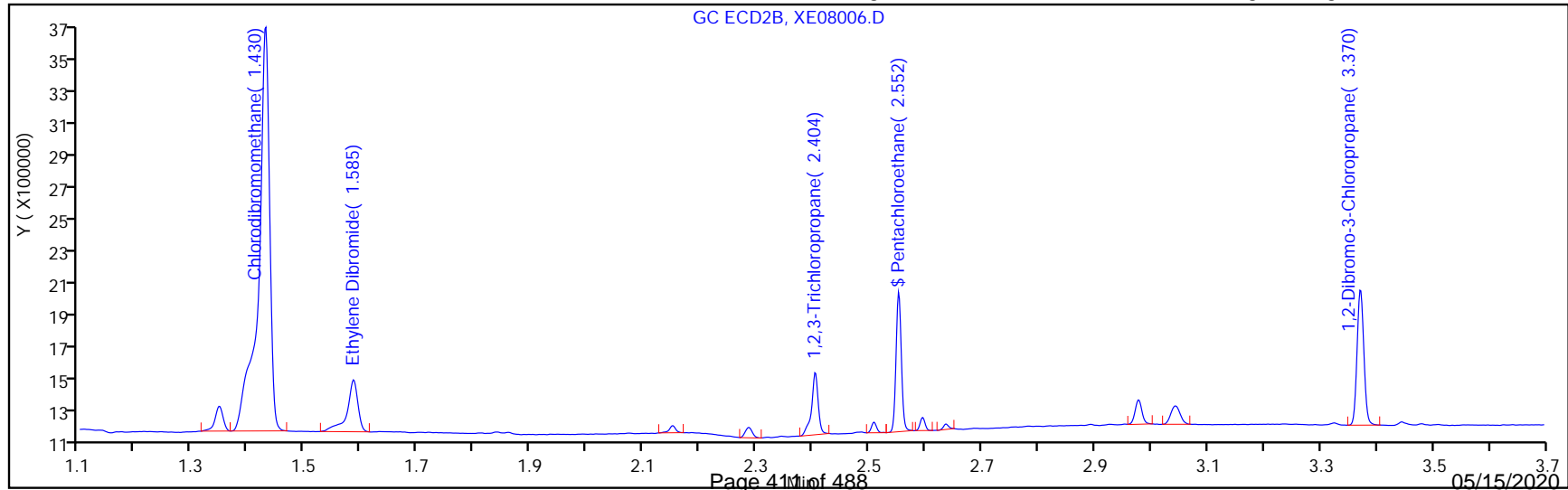
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/6 Calibration Date: 05/08/2020 15:21
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08006.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263166	268361		1.59	1.56	2.0	30.0
1,2,3-Trichloropropane	Ave	35822	39289		8.57	7.81	9.7	30.0
1,2-Dibromo-3-Chloropropane	Ave	437668	436758		1.56	1.56	-0.2	30.0
Pentachloroethane	Ave	1031792	880694		0.533	0.625	-14.6	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/6 Calibration Date: 05/08/2020 15:21
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.40	2.37	2.43
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 11-May-2020 15:25:44

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08006.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2020 15:21:48 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.060	1.060	0.000	3957763	7.00	7.23	
2	1.430	1.430	0.000	3347958	7.00	6.98	
						RPD = 3.53	
2 Ethylene Dibromide							
1	1.239	1.239	0.000	515118	1.56	1.69	
2	1.585	1.585	0.000	419314	1.56	1.59	
						RPD = 5.74	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	329572	7.81	7.89	
2	2.404	2.404	0.000	306943	7.81	8.57	
						RPD = 8.24	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	681015	0.6250	0.5453	
2	2.552	2.552	0.000	550434	0.6250	0.5335	
						RPD = 2.19	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	795148	1.56	1.62	
2	3.370	3.370	0.000	682434	1.56	1.56	
						RPD = 3.67	

Reagents:

504 WS #1_00167 Amount Added: 50.00 Units: uL
 504-DBCM_00131 Amount Added: 50.00 Units: uL

Report Date: 11-May-2020 15:25:44

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08006.D

Injection Date: 08-May-2020 15:21:48

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

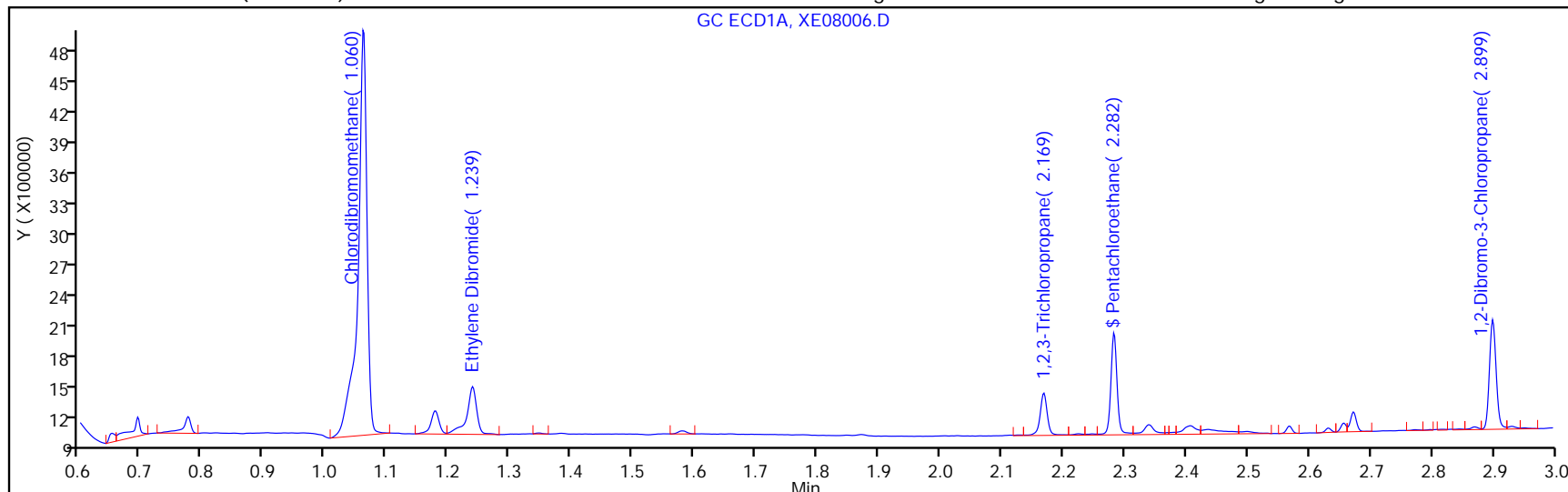
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

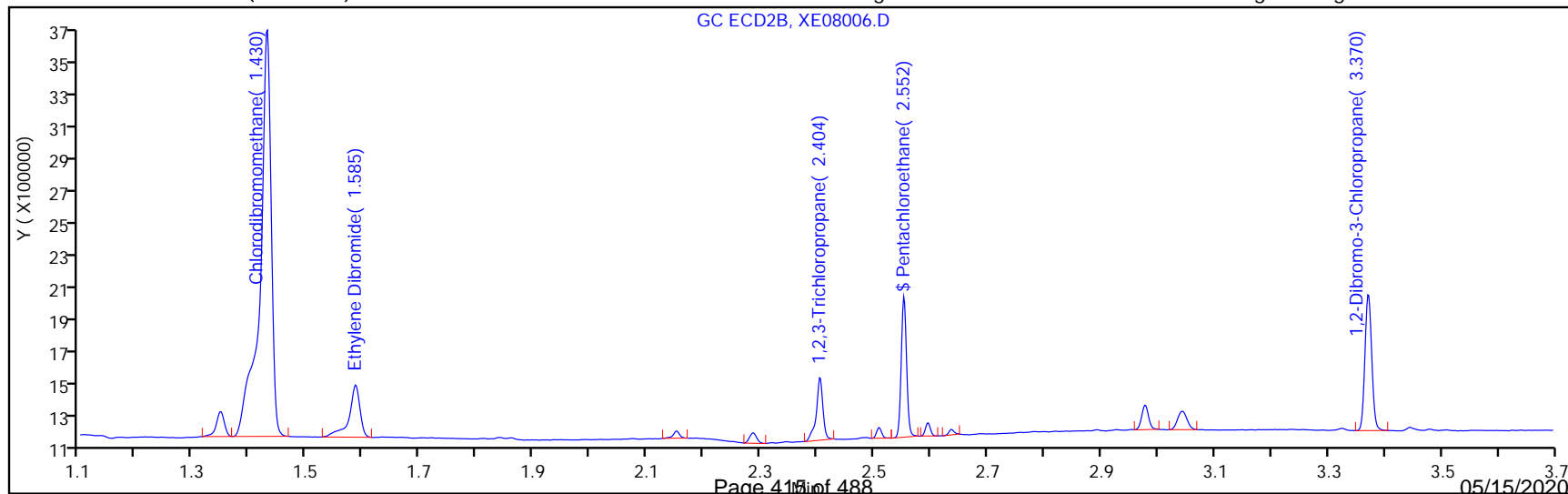
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/29 Calibration Date: 05/08/2020 19:08
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08029.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	305255	330608		1.18	1.09	8.3	30.0
1,2,3-Trichloropropane	Ave	41770	41850		5.48	5.47	0.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	491565	524667		1.17	1.09	6.7	30.0
Pentachloroethane	Ave	1248939	1075033		0.377	0.438	-13.9	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/29 Calibration Date: 05/08/2020 19:08
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08029.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 11-May-2020 15:25:59

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08029.D
 Lims ID: CCV lvl4
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2020 19:08:34 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-029
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:59 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	361602	1.09	1.18	
2	1.587	1.587	0.000	288966	1.09	1.10	
						RPD = 7.58	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	228869	5.47	5.48	
2	2.404	2.404	0.000	213423	5.47	5.96	
						RPD = 8.37	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	470327	0.4375	0.3766	
2	2.552	2.552	0.000	372696	0.4375	0.3612	
						RPD = 4.17	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	573854	1.09	1.17	
2	3.371	3.371	0.000	495161	1.09	1.13	
						RPD = 3.14	

Reagents:

504 WS #1_00167 Amount Added: 35.00 Units: uL

Report Date: 11-May-2020 15:25:59

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08029.D

Injection Date: 08-May-2020 19:08:34

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl4

Worklist Smp#: 29

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

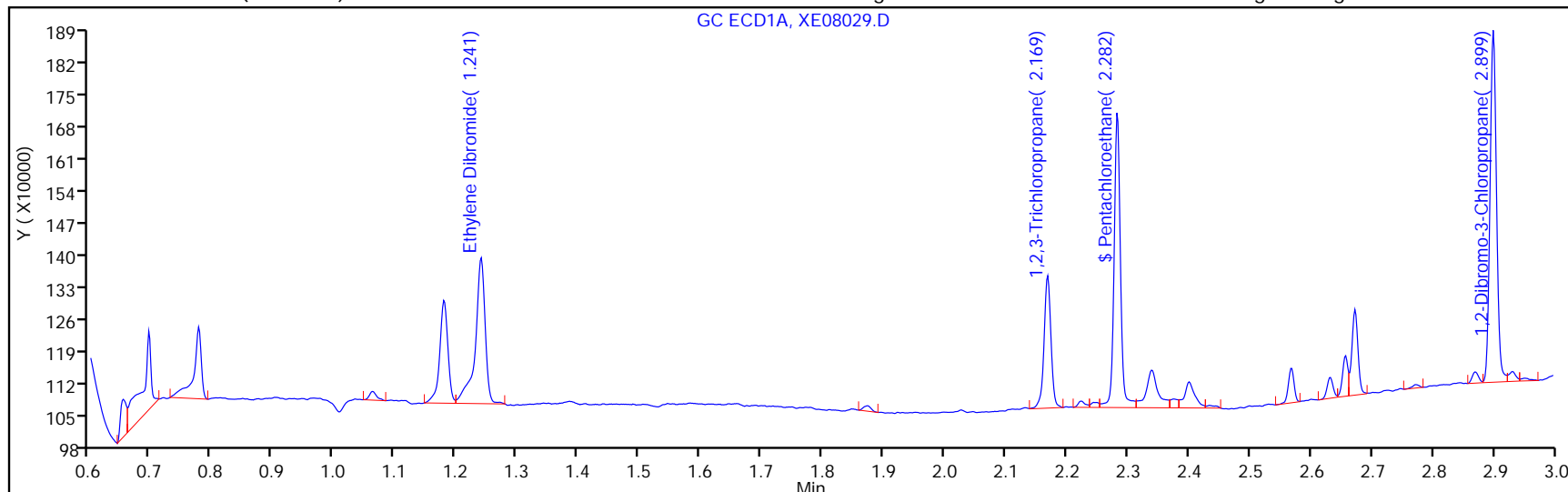
ALS Bottle#: 29

Method: EDBDBCP_CSGX

Limit Group: 504.1

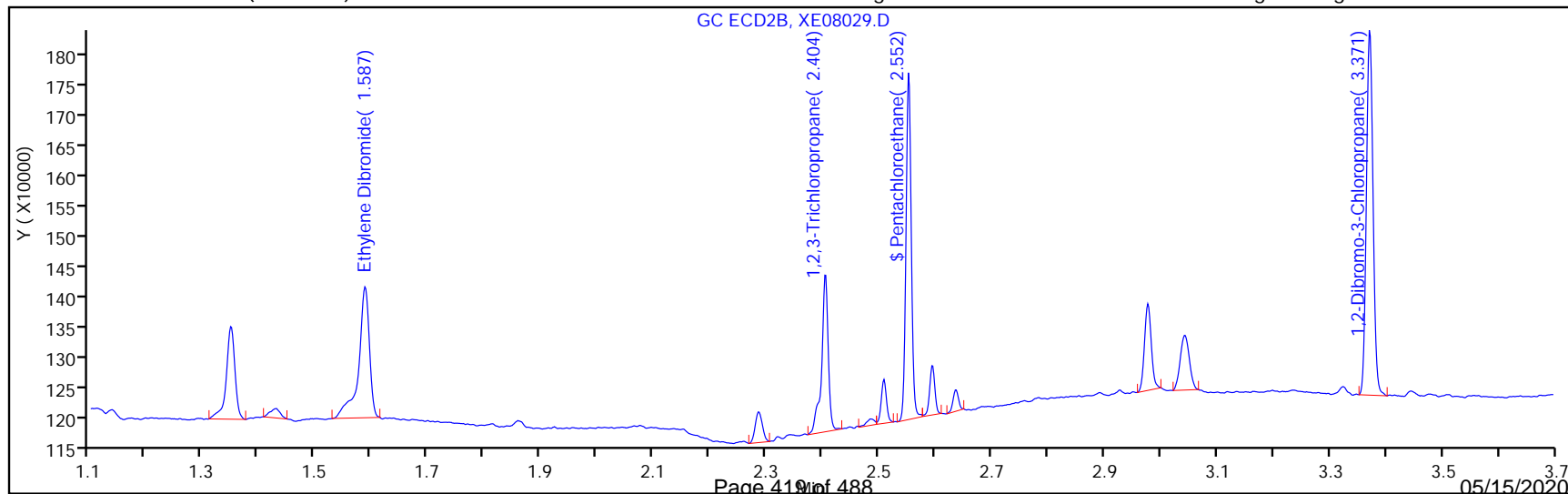
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/29 Calibration Date: 05/08/2020 19:08
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08029.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263166	264197		1.10	1.09	0.4	30.0
1,2,3-Trichloropropane	Ave	35822	39026		5.96	5.47	8.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	437668	452719		1.13	1.09	3.4	30.0
Pentachloroethane	Ave	1031792	851877		0.361	0.438	-17.4	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Lab Sample ID: CCV 680-618077/29 Calibration Date: 05/08/2020 19:08
 Instrument ID: CSGX Calib Start Date: 04/28/2020 15:26
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 04/28/2020 16:35
 Lab File ID: XE08029.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.40	2.37	2.43
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 11-May-2020 15:25:59

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08029.D
 Lims ID: CCV Iv4
 Client ID:
 Sample Type: CCV
 Inject. Date: 08-May-2020 19:08:34 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-029
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:59 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	361602	1.09	1.18	
2	1.587	1.587	0.000	288966	1.09	1.10	
						RPD = 7.58	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	228869	5.47	5.48	
2	2.404	2.404	0.000	213423	5.47	5.96	
						RPD = 8.37	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	470327	0.4375	0.3766	
2	2.552	2.552	0.000	372696	0.4375	0.3612	
						RPD = 4.17	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	573854	1.09	1.17	
2	3.371	3.371	0.000	495161	1.09	1.13	
						RPD = 3.14	

Reagents:

504 WS #1_00167 Amount Added: 35.00 Units: uL

Report Date: 11-May-2020 15:25:59

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08029.D

Injection Date: 08-May-2020 19:08:34

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl4

Worklist Smp#: 29

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

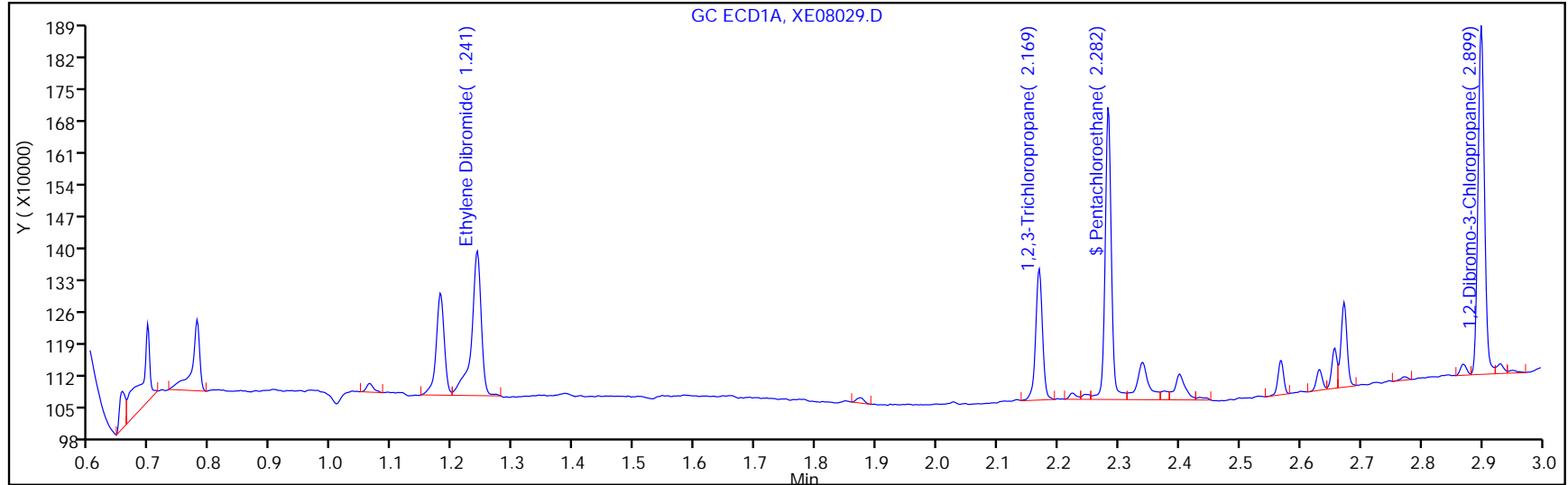
ALS Bottle#: 29

Method: EDBDBCP_CSGX

Limit Group: 504.1

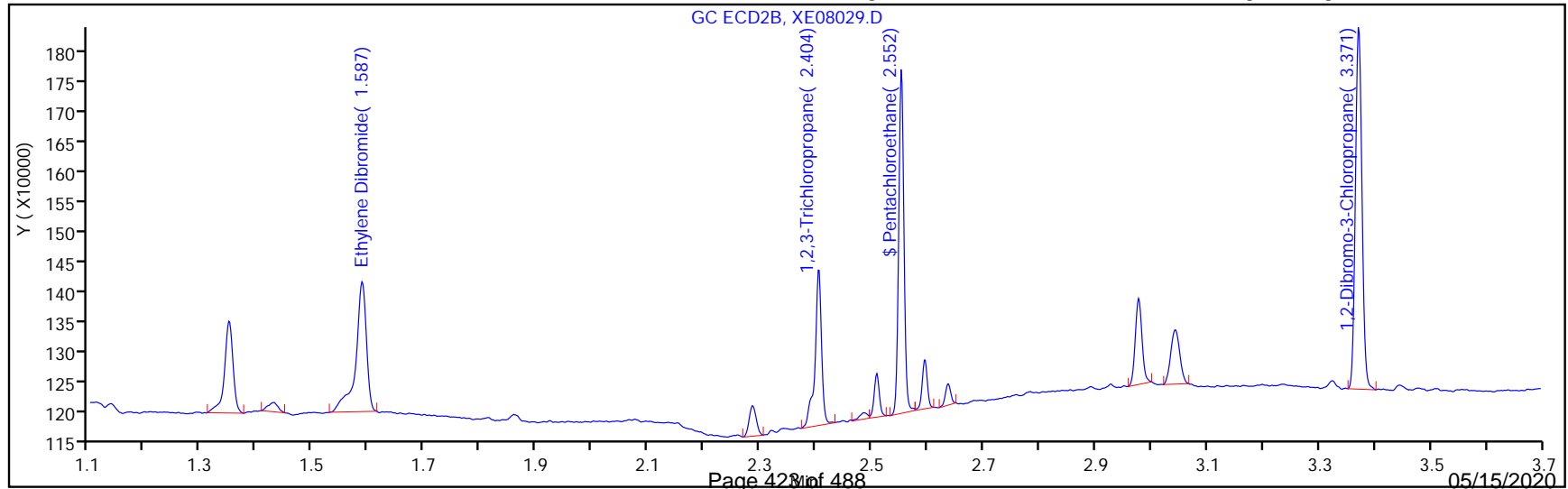
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-618071/3-A
 Matrix: Water Lab File ID: XE08008.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35(mL) Date Analyzed: 05/08/2020 15:41
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08008.D
 Lims ID: MB 680-618071/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2020 15:41:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.283	2.282	0.001	460127	0.4375	0.3684	
2	2.553	2.552	0.001	384533	0.4375	0.3727	
						RPD = 1.15	

Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08008.D

Injection Date: 08-May-2020 15:41:30

Instrument ID: CSGX

Operator ID:

Lims ID: MB 680-618071/3-A

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

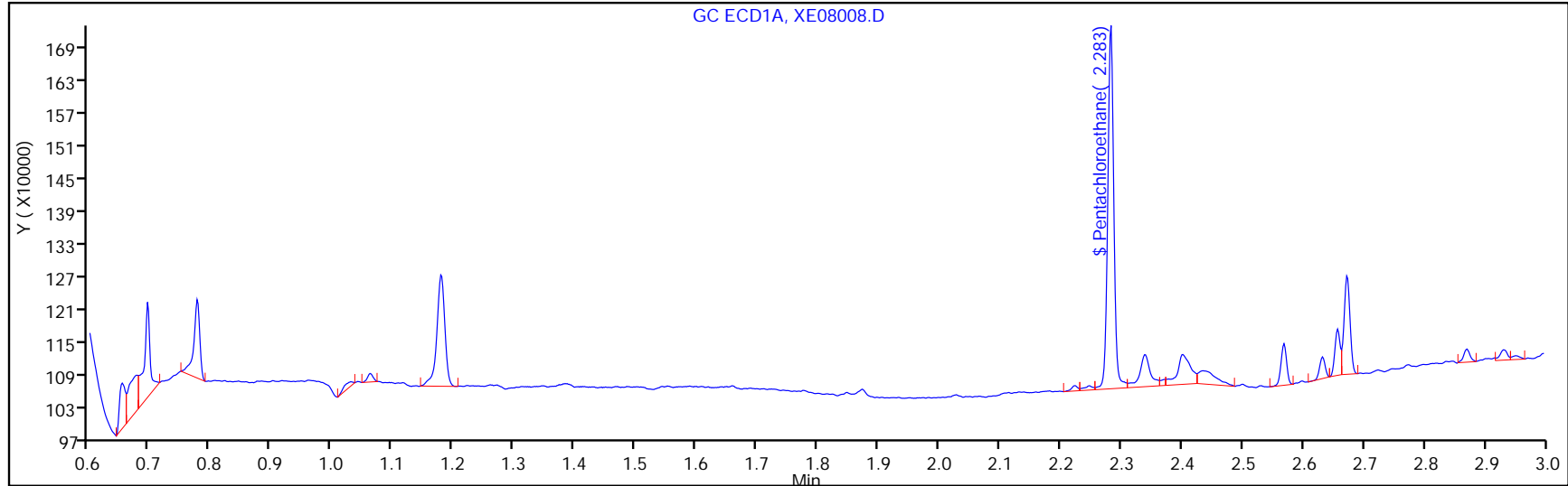
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

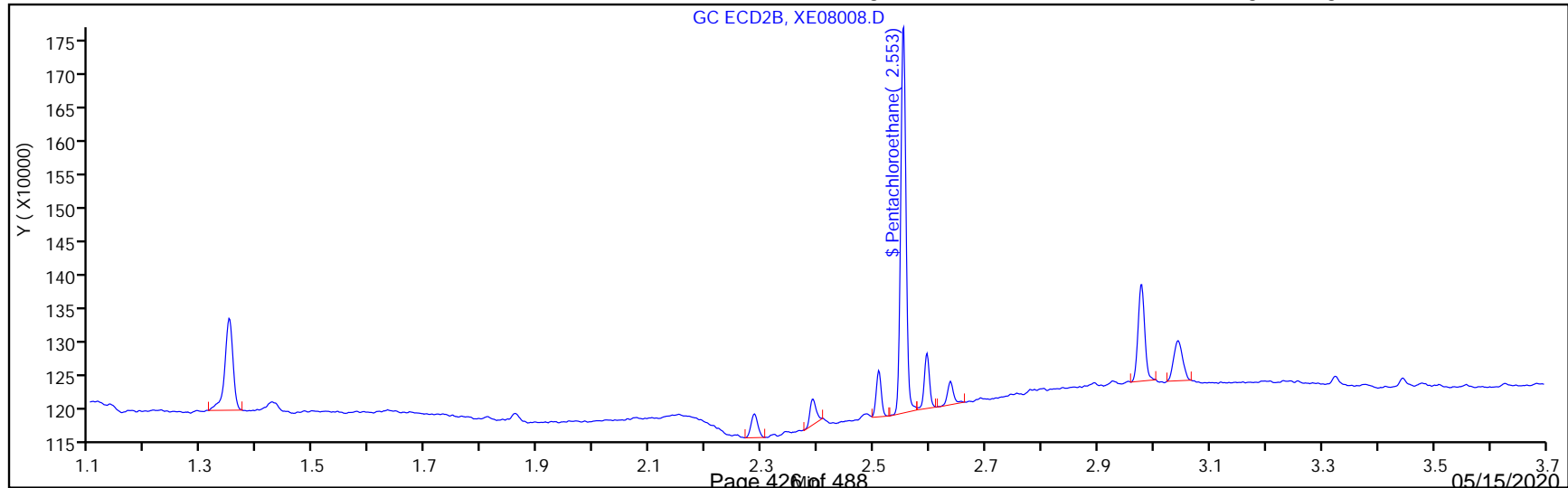
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08008.D
 Lims ID: MB 680-618071/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2020 15:41:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3684	84.21

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3727	85.19

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-618071/3-A
 Matrix: Water Lab File ID: XE08008.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35 (mL) Date Analyzed: 05/08/2020 15:41
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	85		70-130

Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08008.D
 Lims ID: MB 680-618071/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2020 15:41:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	------------------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.282	0.001	460127	0.4375	0.3684	
2	2.553	2.552	0.001	384533	0.4375	0.3727	

RPD = 1.15

Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08008.D

Injection Date: 08-May-2020 15:41:30

Instrument ID: CSGX

Operator ID:

Lims ID: MB 680-618071/3-A

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

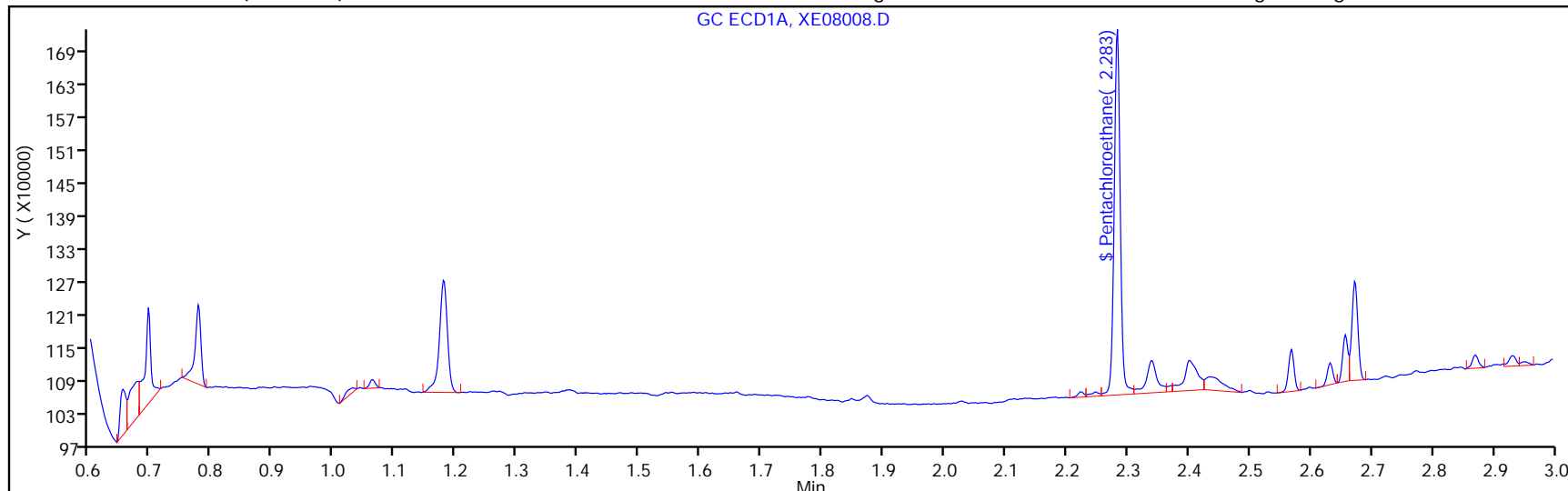
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

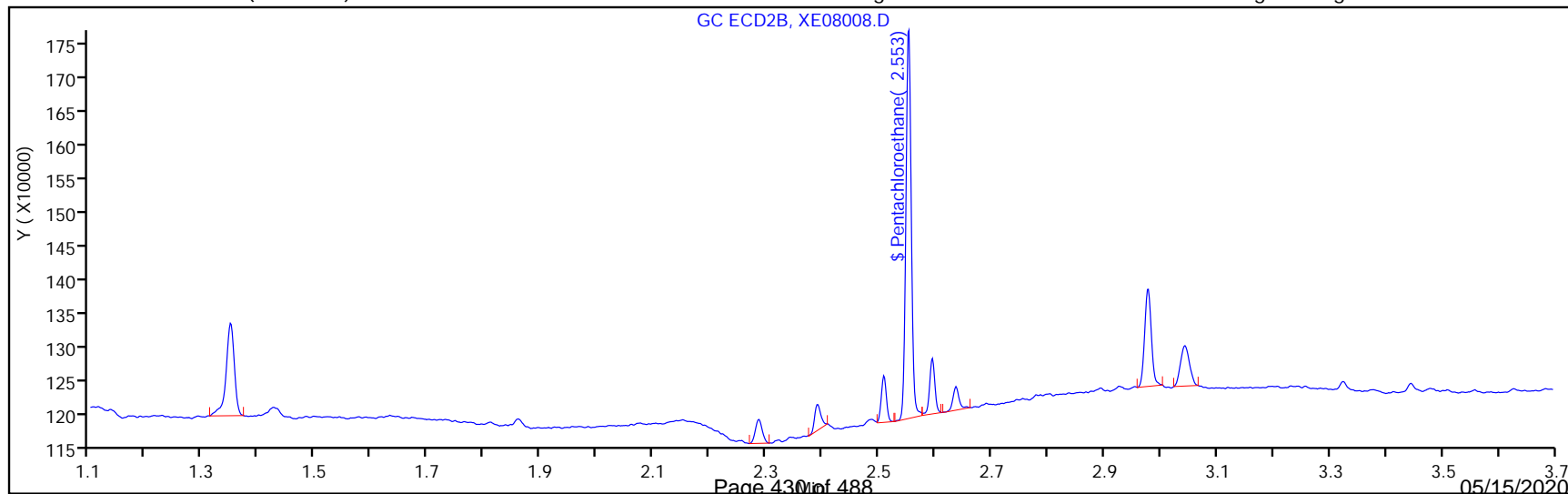
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08008.D
 Lims ID: MB 680-618071/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 08-May-2020 15:41:30 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3684	84.21

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3727	85.19

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-618077/7
 Matrix: Water Lab File ID: XE08007.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2020 15:31
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08007.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2020 15:31:33 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-007
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08007.D

Injection Date: 08-May-2020 15:31:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

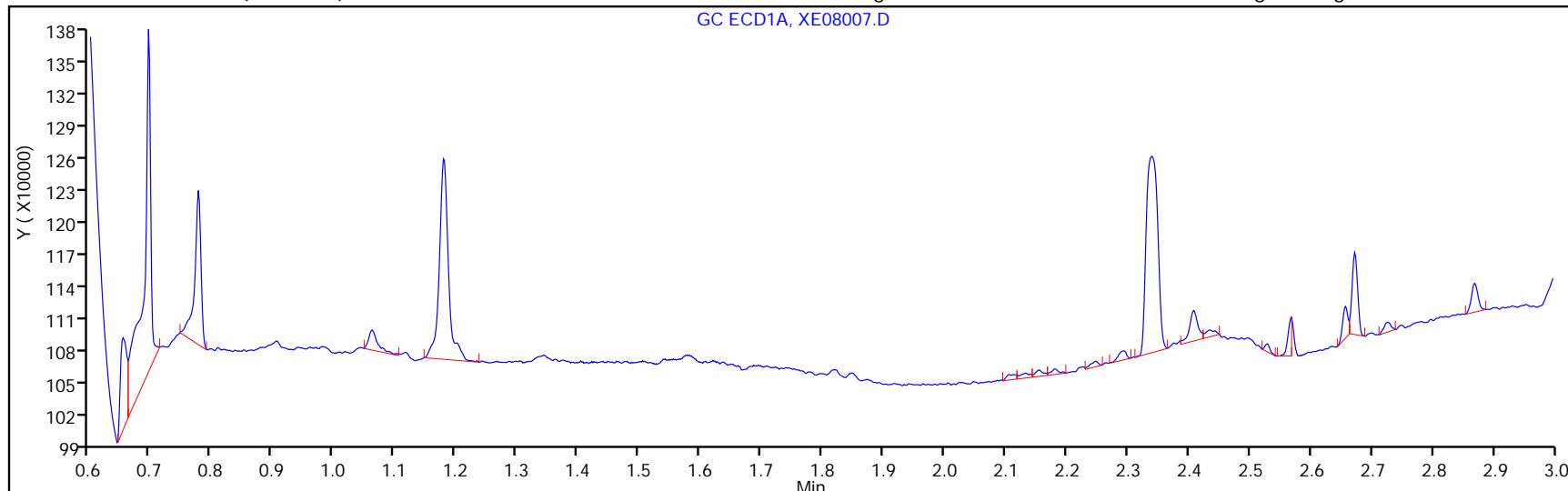
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

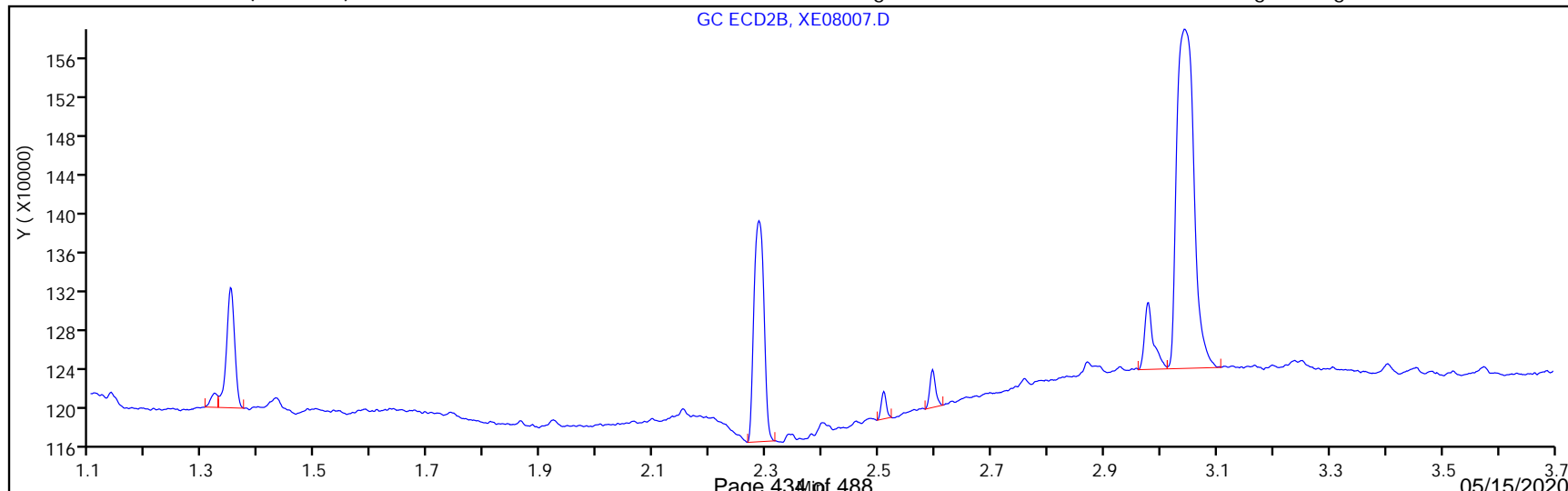
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-618077/7
 Matrix: Water Lab File ID: XE08007.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2020 15:31
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08007.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2020 15:31:33 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-007
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 11-May-2020 15:25:45

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08007.D

Injection Date: 08-May-2020 15:31:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

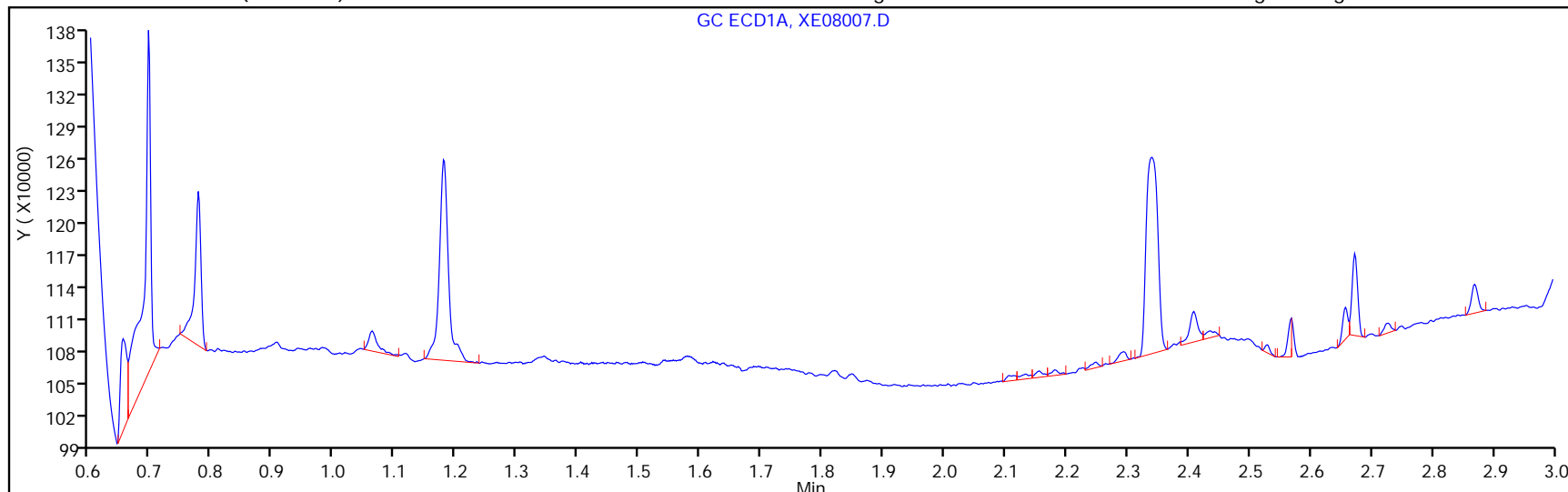
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

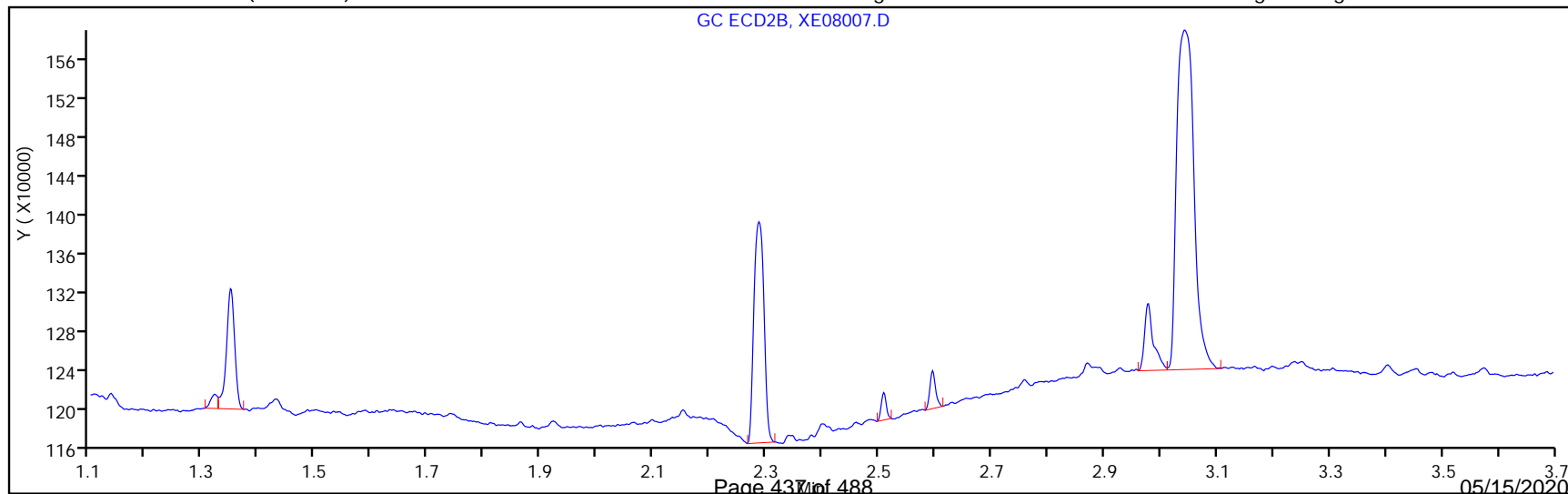
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-618077/30
 Matrix: Water Lab File ID: XE08030.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2020 19:18
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 11-May-2020 15:26:01

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08030.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2020 19:18:25 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-030
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:59 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 11-May-2020 15:26:01

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08030.D

Injection Date: 08-May-2020 19:18:25

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 30

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

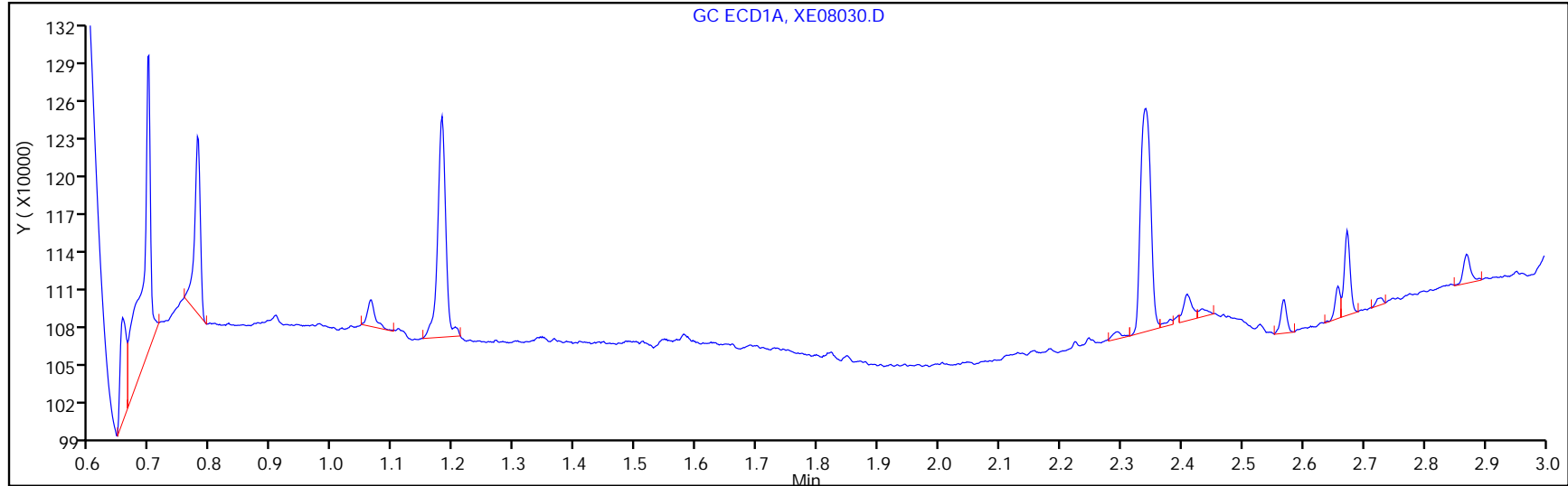
ALS Bottle#: 30

Method: EDBDBCP_CSGX

Limit Group: 504.1

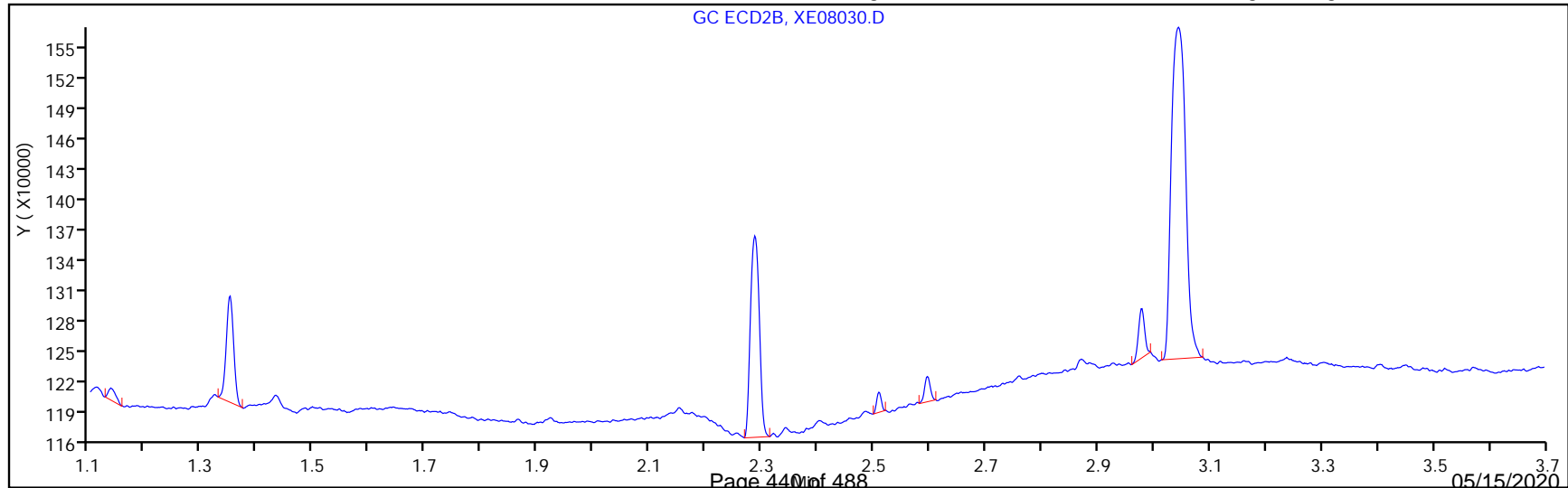
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-618077/30
 Matrix: Water Lab File ID: XE08030.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 05/08/2020 19:18
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 11-May-2020 15:26:01

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08030.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 08-May-2020 19:18:25 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-030
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:59 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 11-May-2020 15:26:01

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08030.D

Injection Date: 08-May-2020 19:18:25

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 30

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

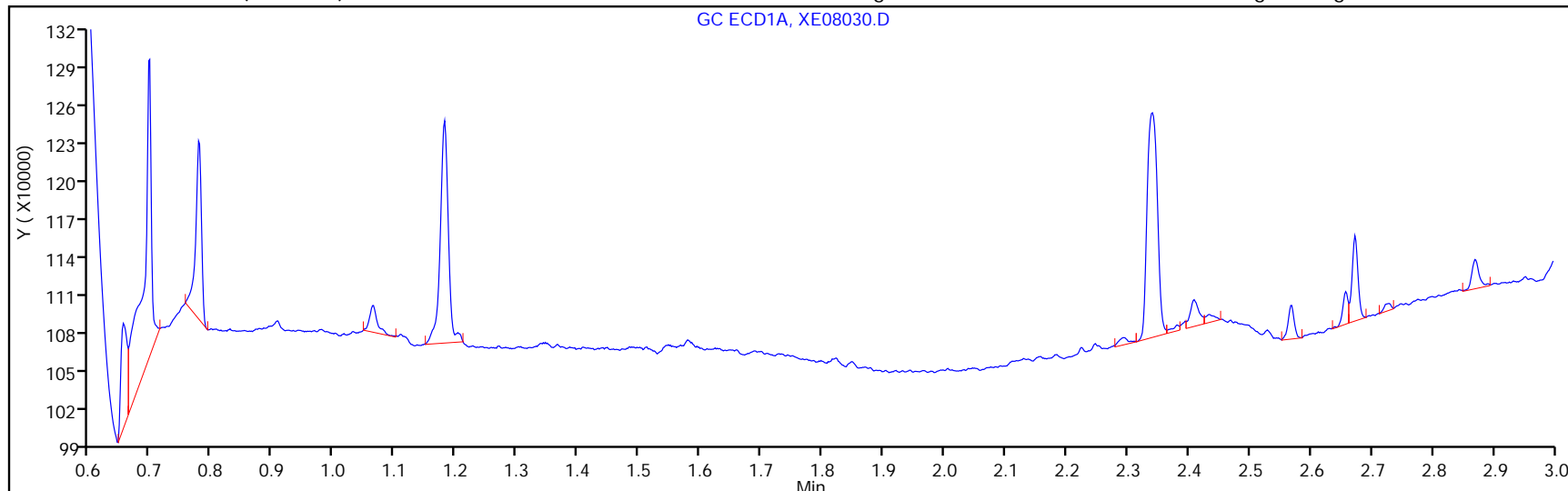
ALS Bottle#: 30

Method: EDBDBCP_CSGX

Limit Group: 504.1

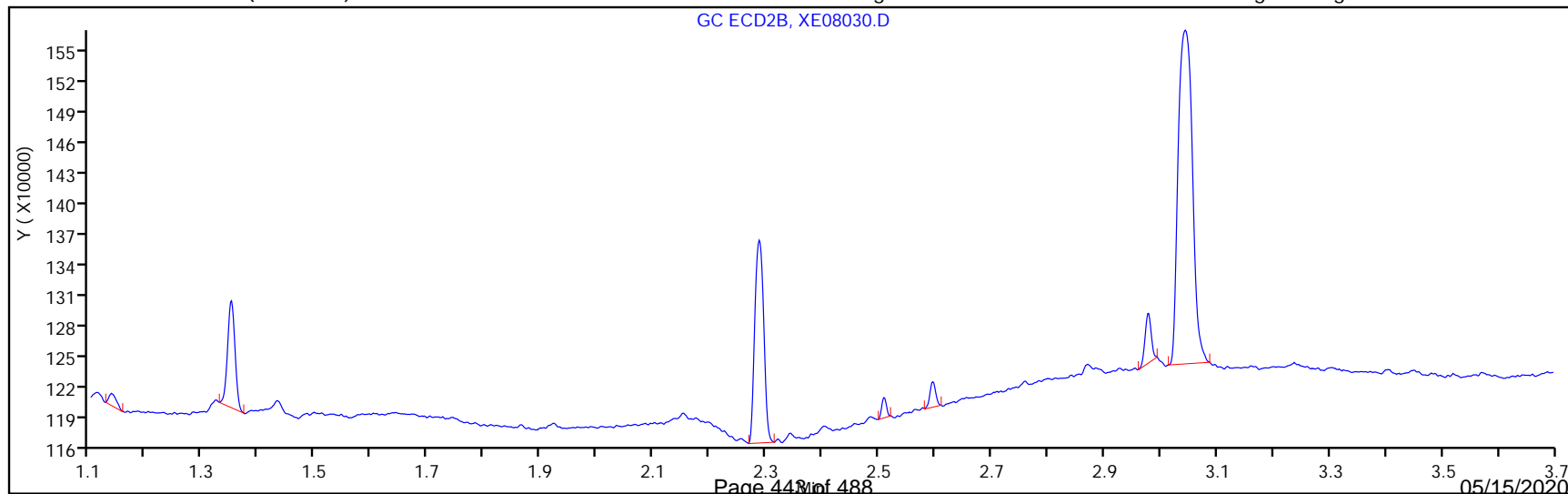
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-618071/4-A
 Matrix: Water Lab File ID: XE08009.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35(mL) Date Analyzed: 05/08/2020 15:51
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.103		0.018	0.0025

Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08009.D
 Lims ID: LCS 680-618071/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2020 15:51:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.239	0.001	551351	1.75	1.81	
2	1.586	1.585	0.001	448363	1.75	1.70	
						RPD = 5.84	
3 1,2,3-Trichloropropane							
1	2.168	2.169	-0.001	321603	8.75	7.70	
2	2.405	2.404	0.001	297272	8.75	8.30	
						RPD = 7.49	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	454687	0.4375	0.3641	
2	2.553	2.552	0.001	392498	0.4375	0.3804	
						RPD = 4.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.899	0.001	881956	1.75	1.79	
2	3.371	3.370	0.001	764493	1.75	1.75	
						RPD = 2.68	

Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08009.D

Injection Date: 08-May-2020 15:51:22

Instrument ID: CSGX

Operator ID:

Lims ID: LCS 680-618071/4-A

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

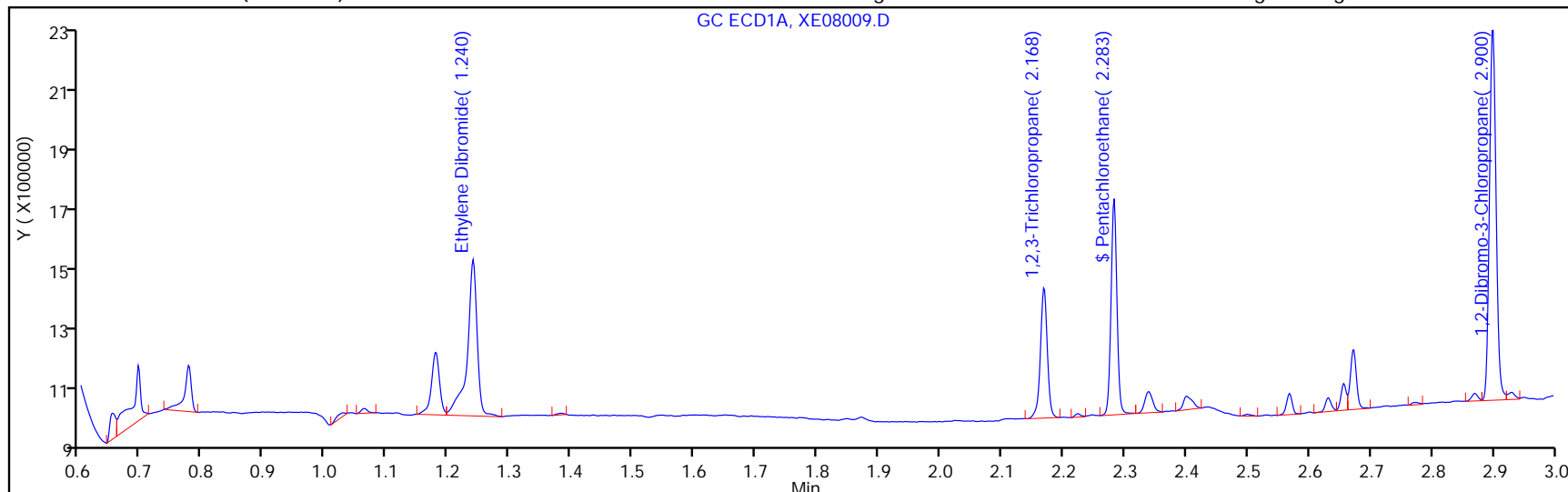
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

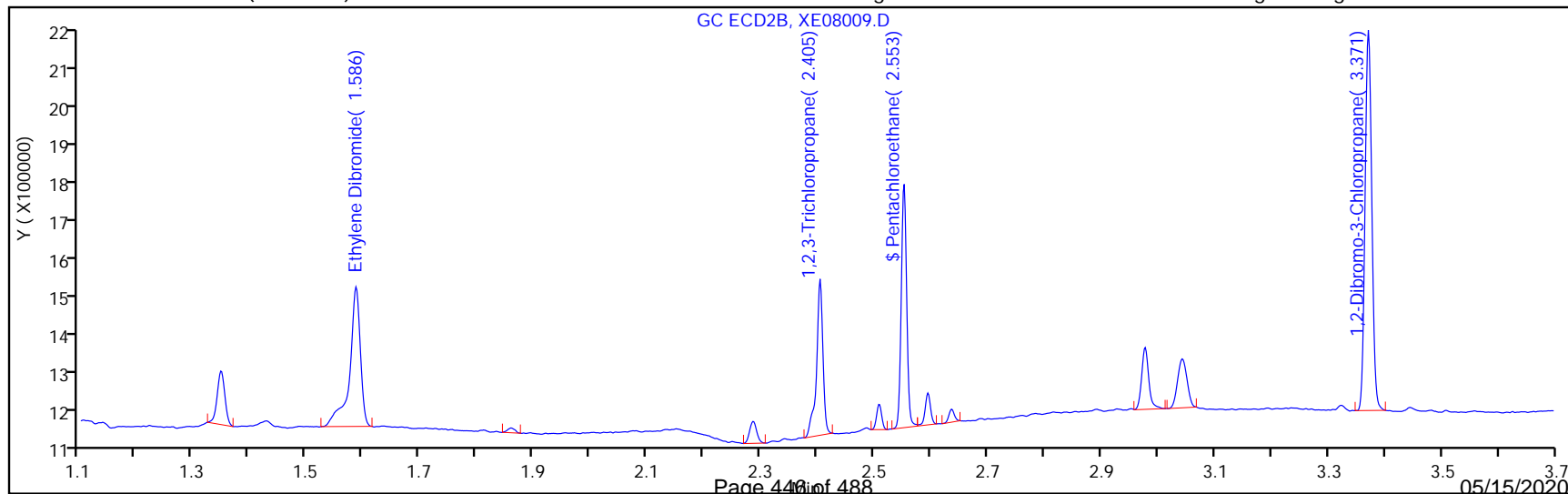
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08009.D
 Lims ID: LCS 680-618071/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2020 15:51:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3641	83.21

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3804	86.95

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-618071/4-A
 Matrix: Water Lab File ID: XE08009.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35 (mL) Date Analyzed: 05/08/2020 15:51
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	87		70-130

Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08009.D
 Lims ID: LCS 680-618071/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2020 15:51:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.239	0.001	551351	1.75	1.81	
2	1.586	1.585	0.001	448363	1.75	1.70	
						RPD = 5.84	
3 1,2,3-Trichloropropane							
1	2.168	2.169	-0.001	321603	8.75	7.70	
2	2.405	2.404	0.001	297272	8.75	8.30	
						RPD = 7.49	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	454687	0.4375	0.3641	
2	2.553	2.552	0.001	392498	0.4375	0.3804	
						RPD = 4.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.899	0.001	881956	1.75	1.79	
2	3.371	3.370	0.001	764493	1.75	1.75	
						RPD = 2.68	

Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08009.D

Injection Date: 08-May-2020 15:51:22

Instrument ID: CSGX

Operator ID:

Lims ID: LCS 680-618071/4-A

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

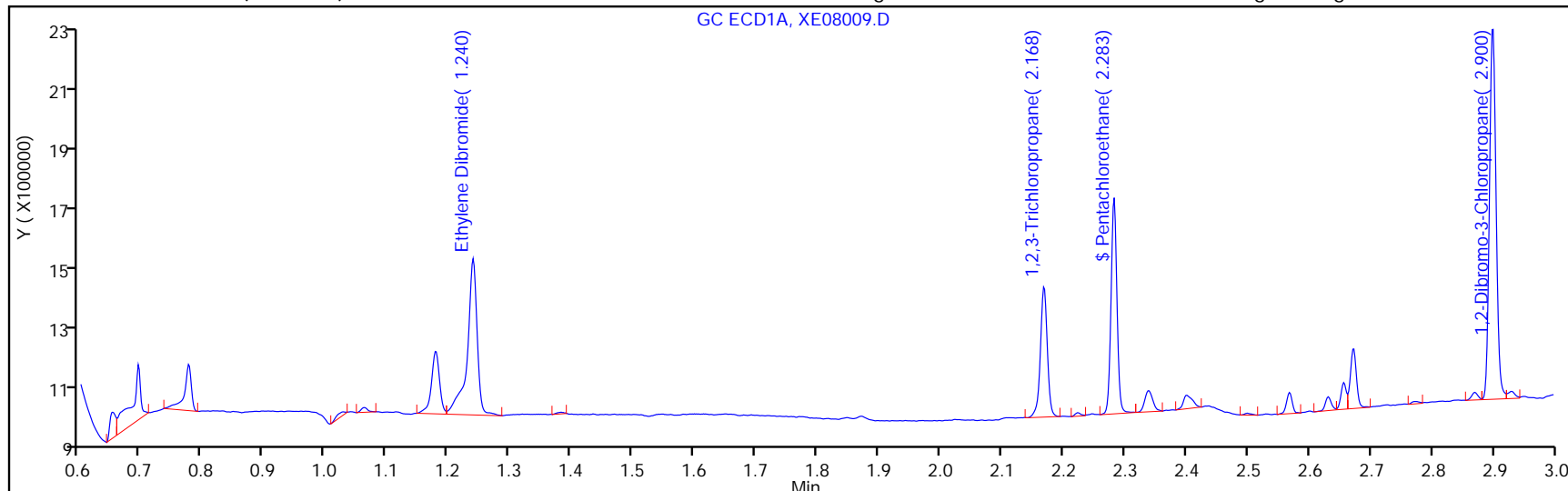
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

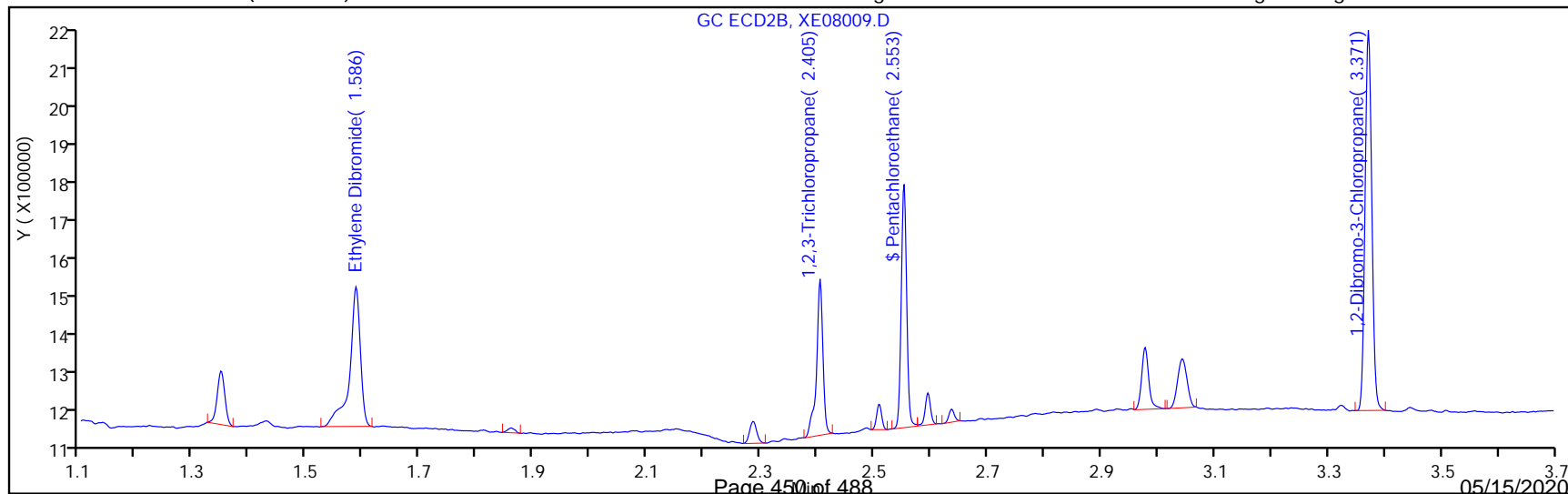
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:46

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08009.D
 Lims ID: LCS 680-618071/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 08-May-2020 15:51:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3641	83.21

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3804	86.95

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-618071/5-A
 Matrix: Water Lab File ID: XE08010.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35 (mL) Date Analyzed: 05/08/2020 16:01
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.104		0.018	0.0025

Report Date: 11-May-2020 15:25:47

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08010.D
 Lims ID: LCSD 680-618071/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 08-May-2020 16:01:13 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.239	0.001	557449	1.75	1.83	
2	1.587	1.585	0.002	459107	1.75	1.74	
						RPD = 4.57	
3 1,2,3-Trichloropropane							
1	2.168	2.169	-0.001	322866	8.75	7.73	
2	2.405	2.404	0.001	309098	8.75	8.63	
						RPD = 10.99	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	456662	0.4375	0.3656	
2	2.553	2.552	0.001	392334	0.4375	0.3802	
						RPD = 3.92	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	891188	1.75	1.81	
2	3.372	3.370	0.002	769873	1.75	1.76	
						RPD = 3.02	

Report Date: 11-May-2020 15:25:47

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08010.D

Injection Date: 08-May-2020 16:01:13

Instrument ID: CSGX

Operator ID:

Lims ID: LCSD 680-618071/5-A

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

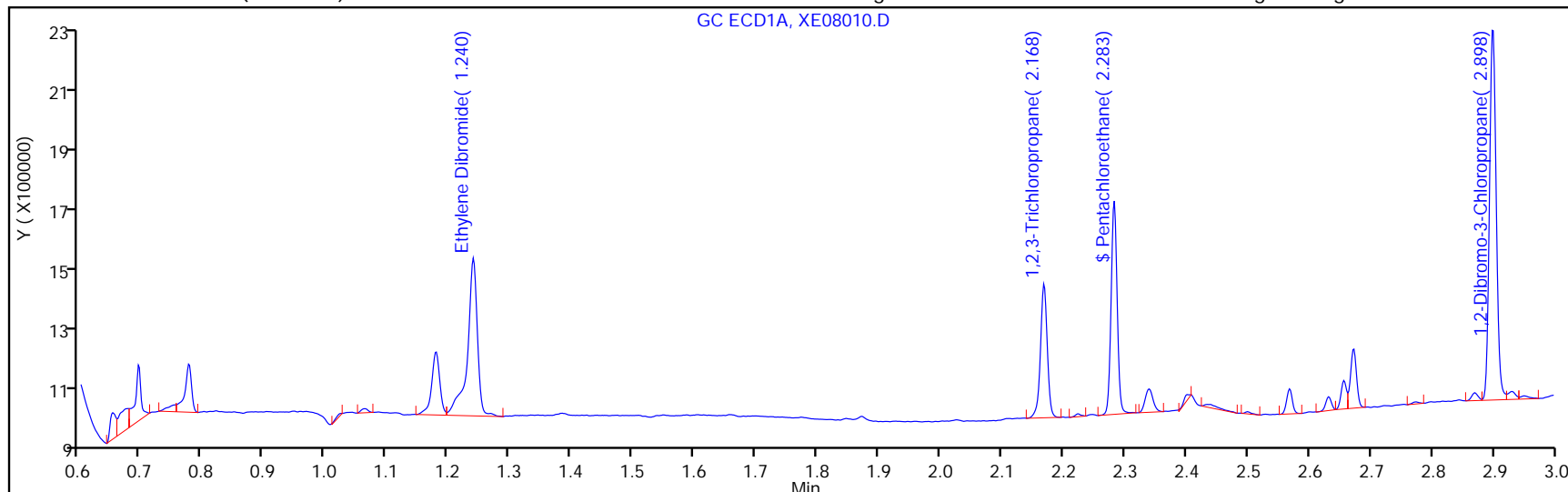
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

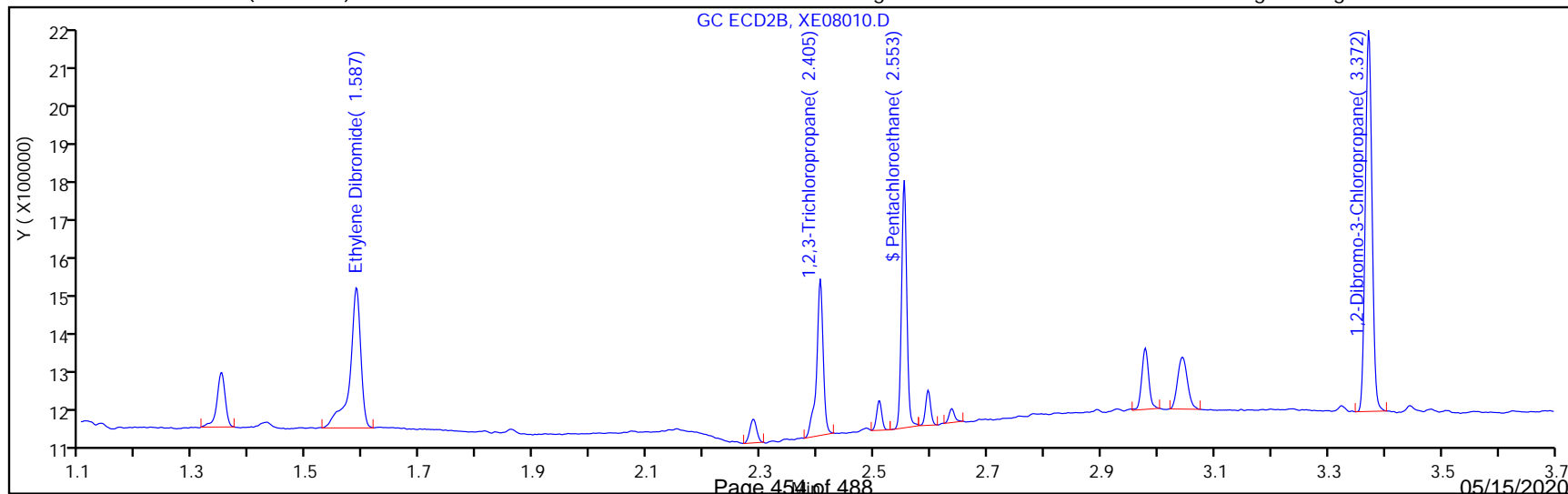
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:47

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08010.D
 Lims ID: LCSD 680-618071/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 08-May-2020 16:01:13 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3656	83.57

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3802	86.91

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-618071/5-A
 Matrix: Water Lab File ID: XE08010.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35 (mL) Date Analyzed: 05/08/2020 16:01
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	87		70-130

Report Date: 11-May-2020 15:25:47

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08010.D
 Lims ID: LCSD 680-618071/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 08-May-2020 16:01:13 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.239	0.001	557449	1.75	1.83	
2	1.587	1.585	0.002	459107	1.75	1.74	
						RPD = 4.57	
3 1,2,3-Trichloropropane							
1	2.168	2.169	-0.001	322866	8.75	7.73	
2	2.405	2.404	0.001	309098	8.75	8.63	
						RPD = 10.99	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	456662	0.4375	0.3656	
2	2.553	2.552	0.001	392334	0.4375	0.3802	
						RPD = 3.92	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.899	-0.001	891188	1.75	1.81	
2	3.372	3.370	0.002	769873	1.75	1.76	
						RPD = 3.02	

Report Date: 11-May-2020 15:25:47

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08010.D

Injection Date: 08-May-2020 16:01:13

Instrument ID: CSGX

Operator ID:

Lims ID: LCSD 680-618071/5-A

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

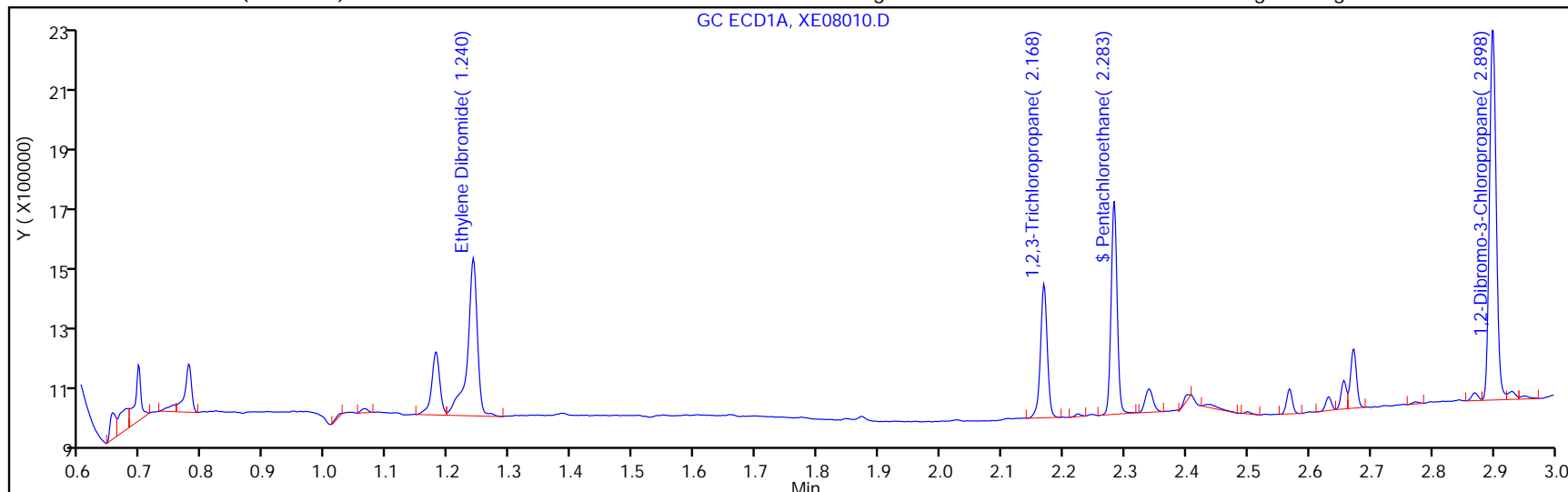
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

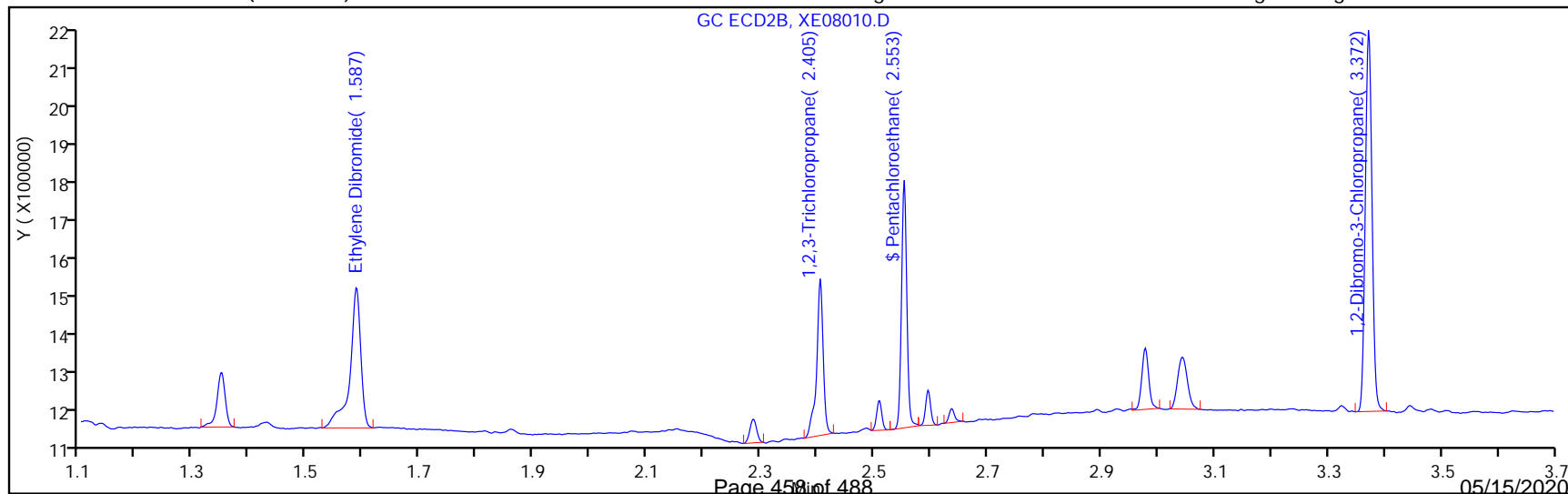
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:47

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08010.D
 Lims ID: LCSD 680-618071/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 08-May-2020 16:01:13 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3656	83.57

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.3802	86.91

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MS Lab Sample ID: 680-183527-2 MS
 Matrix: Water Lab File ID: XE08015.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 09:33
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.7 (mL) Date Analyzed: 05/08/2020 16:50
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.0966		0.018	0.0025

Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08015.D
 Lims ID: 680-183527-D-2-A MS
 Client ID: GWK016-2022
 Sample Type: MS
 Inject. Date: 08-May-2020 16:50:36 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-015
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							
1	1.238	1.239	-0.001	526414		1.72	
2	1.586	1.585	0.001	437402		1.66	
						RPD = 3.69	
3 1,2,3-Trichloropropane							
1	2.168	2.169	-0.001	320684		7.68	
2	2.404	2.404	0.000	264253		7.38	
						RPD = 3.99	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	417882		0.3346	
2	2.553	2.552	0.001	368114		0.3568	
						RPD = 6.42	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	879435		1.79	
2	3.371	3.370	0.001	753608		1.72	
						RPD = 3.83	

Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08015.D

Injection Date: 08-May-2020 16:50:36

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-D-2-A MS

Worklist Smp#: 15

Client ID: GWK016-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

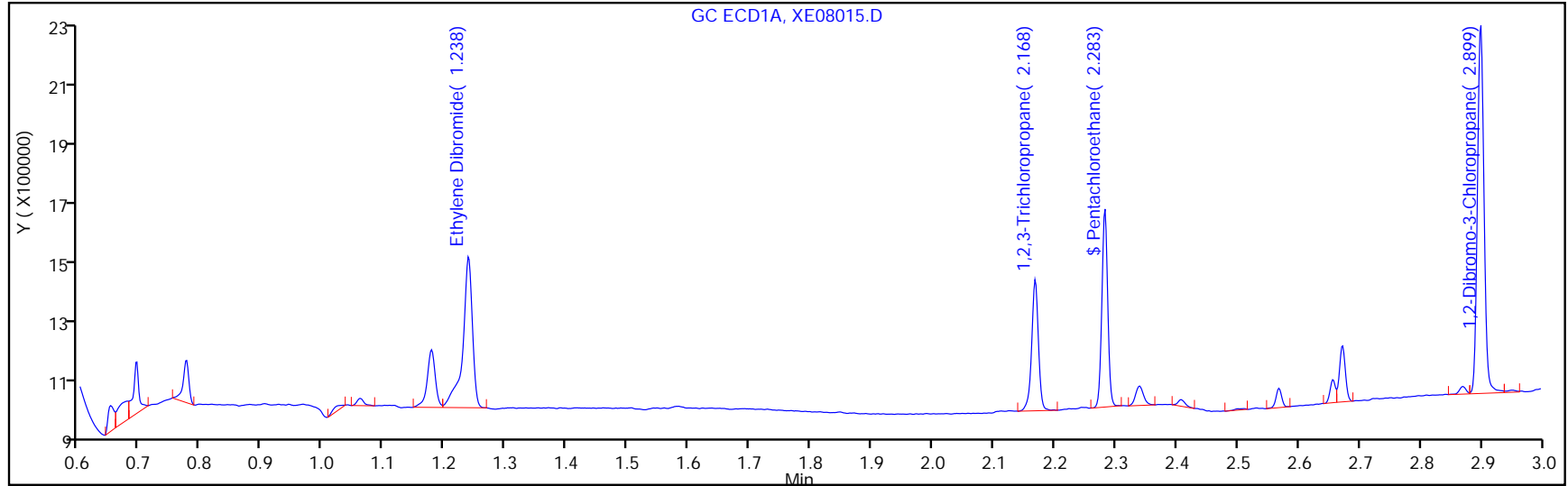
ALS Bottle#: 15

Method: EDBDBCP_CSGX

Limit Group: 504.1

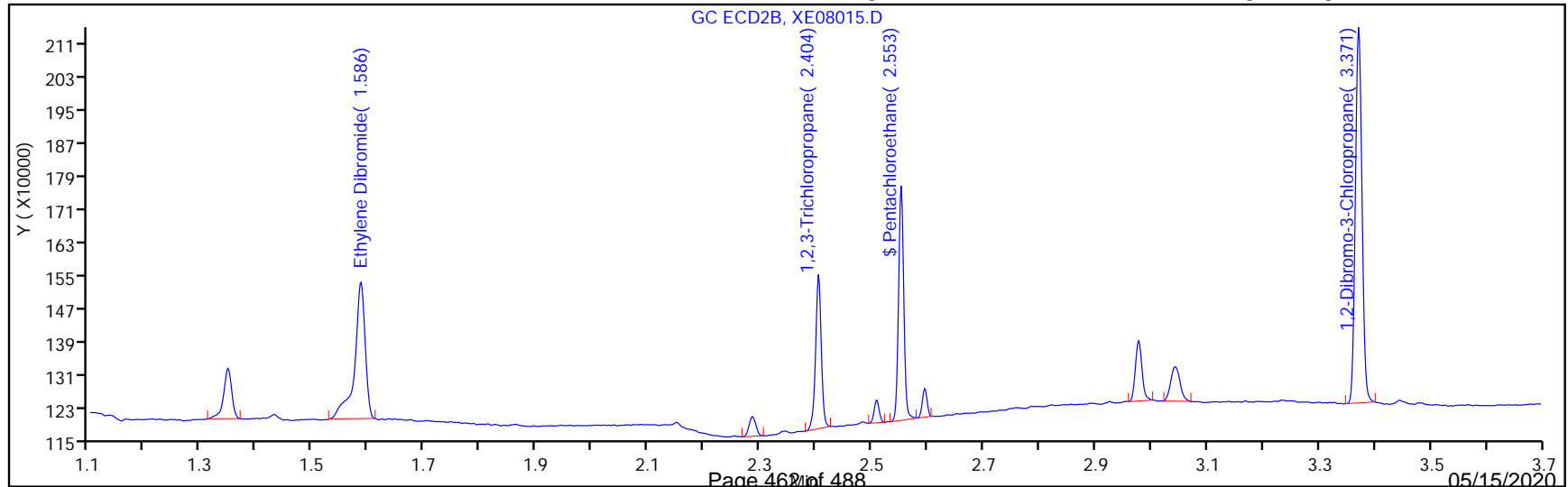
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08015.D
 Lims ID: 680-183527-D-2-A MS
 Client ID: GWK016-2022
 Sample Type: MS
 Inject. Date: 08-May-2020 16:50:36 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-015
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3346	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3568	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MS Lab Sample ID: 680-183527-2 MS
 Matrix: Water Lab File ID: XE08015.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 09:33
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 35.7 (mL) Date Analyzed: 05/08/2020 16:50
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	82		70-130

Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08015.D
 Lims ID: 680-183527-D-2-A MS
 Client ID: GWK016-2022
 Sample Type: MS
 Inject. Date: 08-May-2020 16:50:36 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-015
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							
1	1.238	1.239	-0.001	526414		1.72	
2	1.586	1.585	0.001	437402		1.66	
						RPD =	3.69
3 1,2,3-Trichloropropane							
1	2.168	2.169	-0.001	320684		7.68	
2	2.404	2.404	0.000	264253		7.38	
						RPD =	3.99
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	417882		0.3346	
2	2.553	2.552	0.001	368114		0.3568	
						RPD =	6.42
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	879435		1.79	
2	3.371	3.370	0.001	753608		1.72	
						RPD =	3.83

Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08015.D

Injection Date: 08-May-2020 16:50:36

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-D-2-A MS

Worklist Smp#: 15

Client ID: GWK016-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

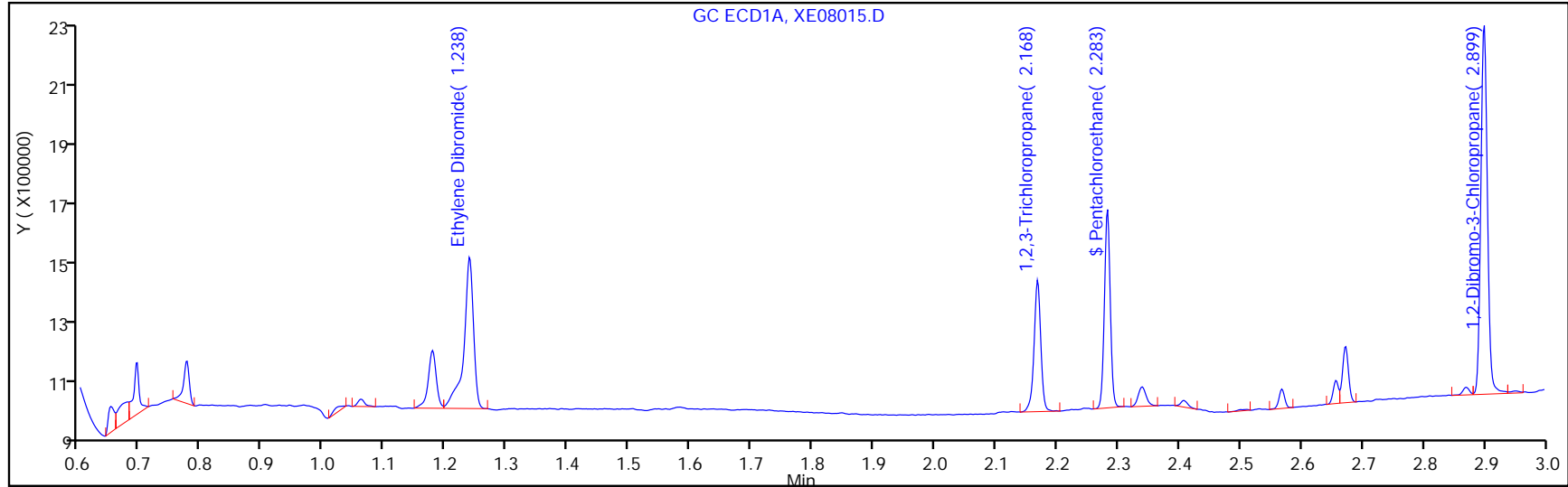
ALS Bottle#: 15

Method: EDBDBCP_CSGX

Limit Group: 504.1

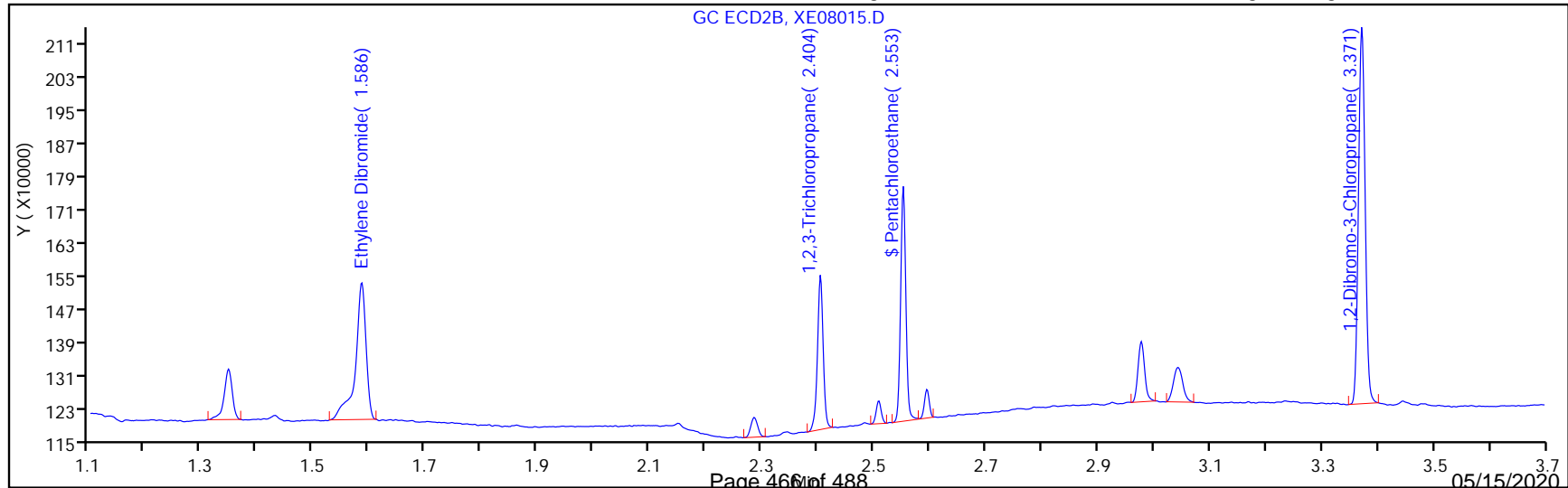
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08015.D
 Lims ID: 680-183527-D-2-A MS
 Client ID: GWK016-2022
 Sample Type: MS
 Inject. Date: 08-May-2020 16:50:36 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-015
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3346	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3568	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MSD Lab Sample ID: 680-183527-2 MSD
 Matrix: Water Lab File ID: XE08016.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 09:33
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 36.3 (mL) Date Analyzed: 05/08/2020 17:00
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.0998		0.017	0.0024

Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08016.D
 Lims ID: 680-183527-E-2-B MSD
 Client ID: GWK016-2022
 Sample Type: MSD
 Inject. Date: 08-May-2020 17:00:23 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide

1	1.239	1.239	0.000	553085		1.81	
2	1.588	1.585	0.003	455173		1.73	
						RPD = 4.65	

3 1,2,3-Trichloropropane

1	2.169	2.169	0.000	328556		7.87	
2	2.404	2.404	0.000	268641		7.50	
						RPD = 4.77	

\$ 4 Pentachloroethane

1	2.283	2.282	0.001	458800		0.3674	
2	2.553	2.552	0.001	395166		0.3830	
						RPD = 4.17	

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	896597		1.82	
2	3.371	3.370	0.001	775349		1.77	
						RPD = 2.92	

Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08016.D

Injection Date: 08-May-2020 17:00:23

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-2-B MSD

Worklist Smp#: 16

Client ID: GWK016-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

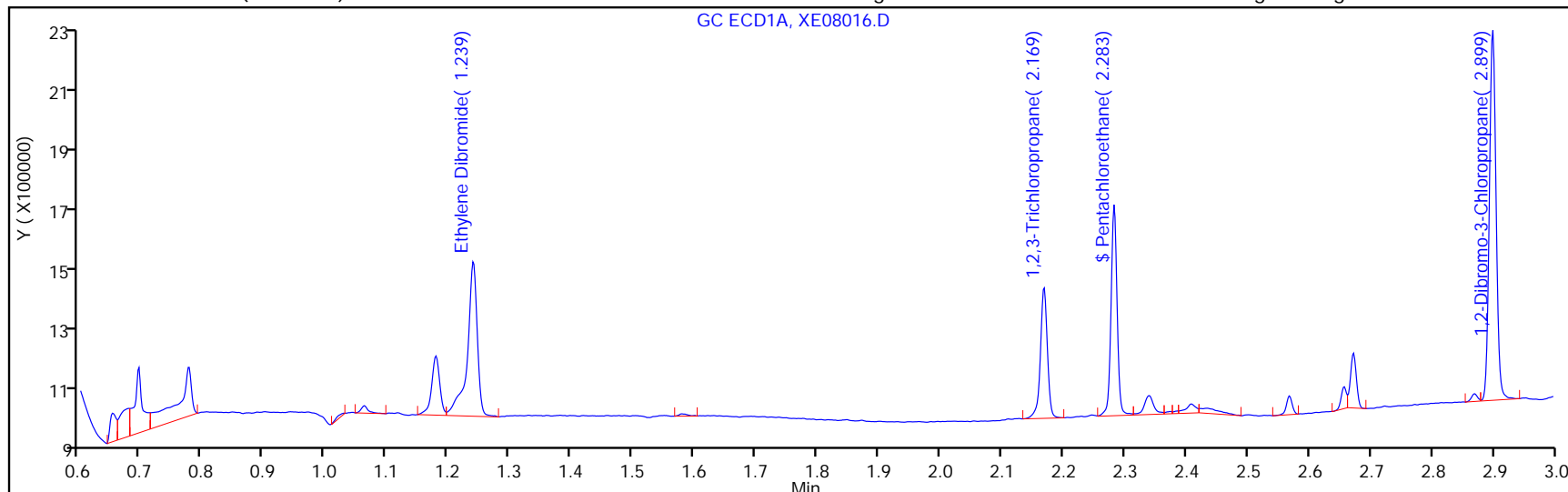
ALS Bottle#: 16

Method: EDBDBCP_CSGX

Limit Group: 504.1

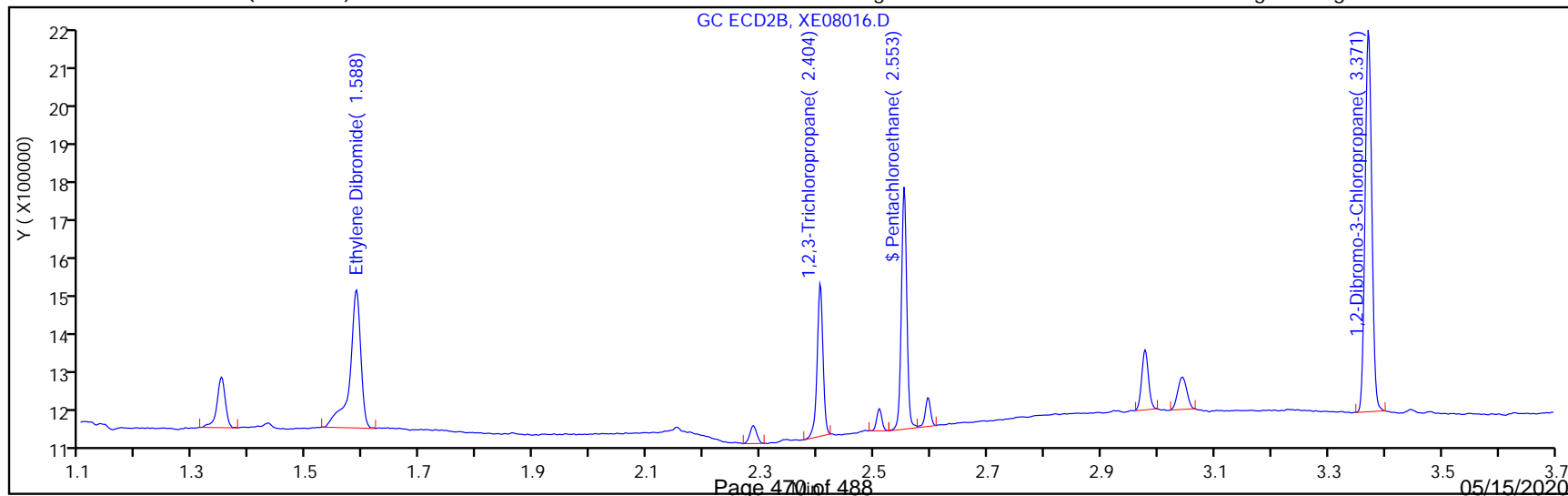
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:51

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08016.D
 Lims ID: 680-183527-E-2-B MSD
 Client ID: GWK016-2022
 Sample Type: MSD
 Inject. Date: 08-May-2020 17:00:23 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3674	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3830	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1
 SDG No.: _____
 Client Sample ID: GWK016-2022 MSD Lab Sample ID: 680-183527-2 MSD
 Matrix: Water Lab File ID: XE08016.D
 Analysis Method: 504.1 Date Collected: 05/05/2020 09:33
 Extraction Method: 504.1 Date Extracted: 05/08/2020 13:35
 Sample wt/vol: 36.3 (mL) Date Analyzed: 05/08/2020 17:00
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 618077 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	88		70-130

Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08016.D
 Lims ID: 680-183527-E-2-B MSD
 Client ID: GWK016-2022
 Sample Type: MSD
 Inject. Date: 08-May-2020 17:00:23 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.239	1.239	0.000	553085		1.81	
2	1.588	1.585	0.003	455173		1.73	
						RPD = 4.65	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	328556		7.87	
2	2.404	2.404	0.000	268641		7.50	
						RPD = 4.77	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	458800		0.3674	
2	2.553	2.552	0.001	395166		0.3830	
						RPD = 4.17	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	896597		1.82	
2	3.371	3.370	0.001	775349		1.77	
						RPD = 2.92	

Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08016.D

Injection Date: 08-May-2020 17:00:23

Instrument ID: CSGX

Operator ID:

Lims ID: 680-183527-E-2-B MSD

Worklist Smp#: 16

Client ID: GWK016-2022

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

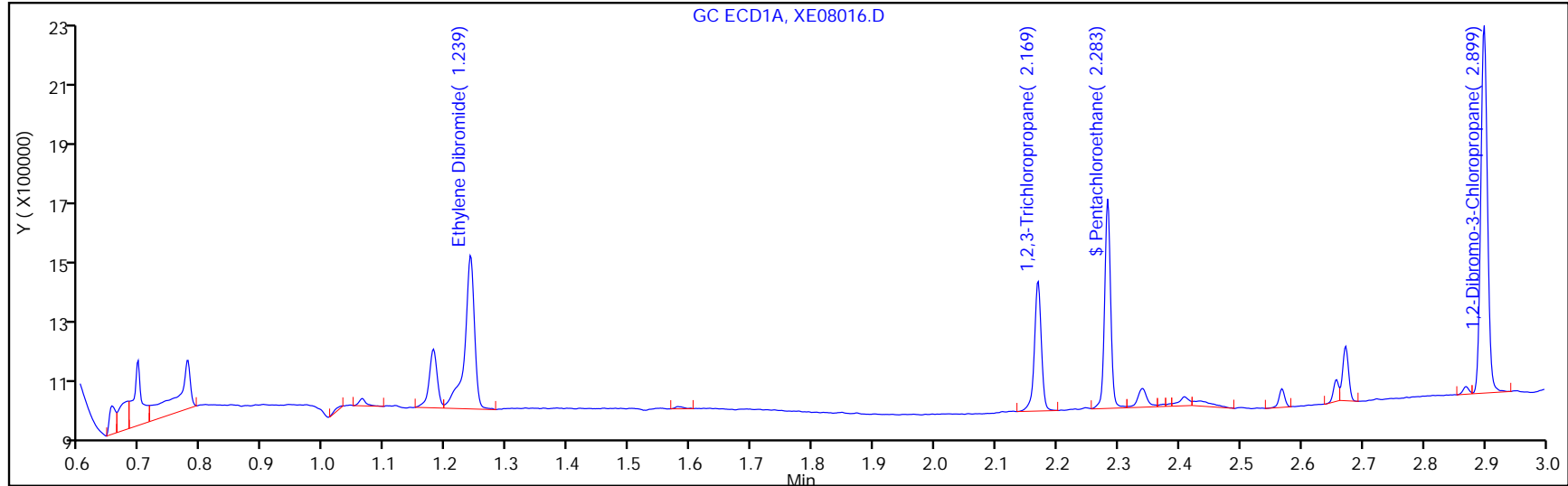
ALS Bottle#: 16

Method: EDBDBCP_CSGX

Limit Group: 504.1

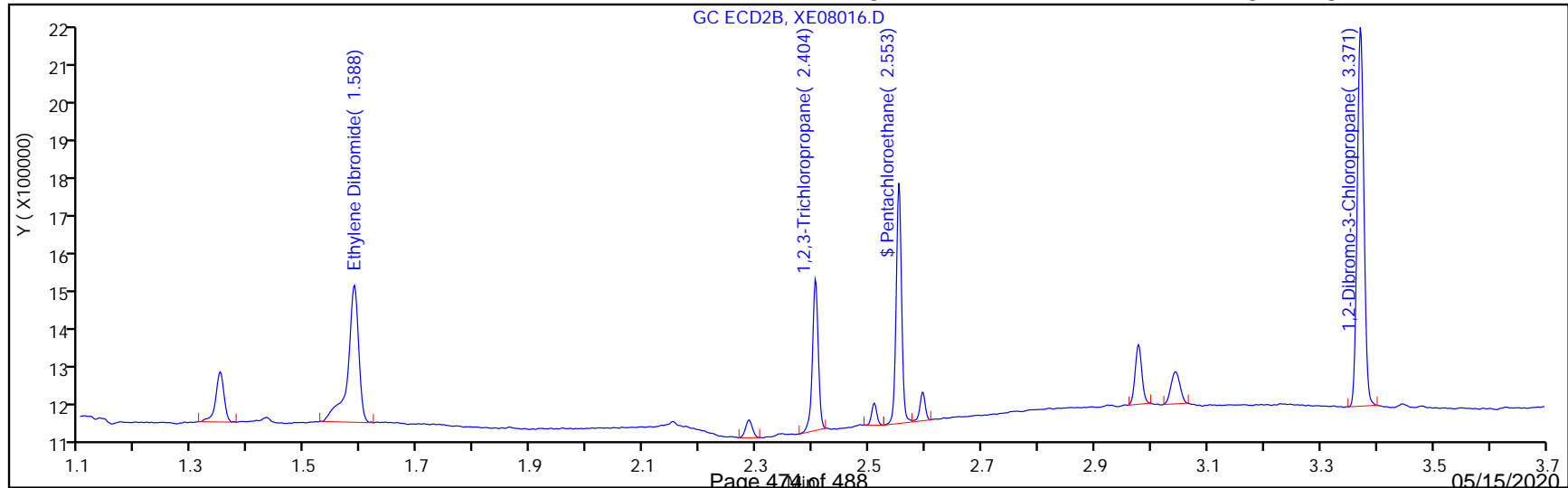
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 11-May-2020 15:25:52

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\XE08016.D
 Lims ID: 680-183527-E-2-B MSD
 Client ID: GWK016-2022
 Sample Type: MSD
 Inject. Date: 08-May-2020 17:00:23 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063643-016
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200508-63643.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 11-May-2020 15:25:44 Calib Date: 28-Apr-2020 16:35:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200428-63442.b\XD28018.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX0315

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3674	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3830	0.00

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-183527-1

SDG No.:

Instrument ID: CSGX

Start Date: 04/28/2020 15:26

Analysis Batch Number: 616788

End Date: 04/28/2020 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-616788/11		04/28/2020 15:26	1	XD28011.D	CLP I 0.25 0.25 (mm)
IC 680-616788/11		04/28/2020 15:26	1	XD28011.D	CLP II 0.25 0.25 (mm)
IC 680-616788/12		04/28/2020 15:35	1	XD28012.D	CLP I 0.25 0.25 (mm)
IC 680-616788/12		04/28/2020 15:35	1	XD28012.D	CLP II 0.25 0.25 (mm)
IC 680-616788/13		04/28/2020 15:45	1	XD28013.D	CLP I 0.25 0.25 (mm)
IC 680-616788/13		04/28/2020 15:45	1	XD28013.D	CLP II 0.25 0.25 (mm)
IC 680-616788/14		04/28/2020 15:55	1	XD28014.D	CLP I 0.25 0.25 (mm)
IC 680-616788/14		04/28/2020 15:55	1	XD28014.D	CLP II 0.25 0.25 (mm)
IC 680-616788/15		04/28/2020 16:05	1	XD28015.D	CLP I 0.25 0.25 (mm)
IC 680-616788/15		04/28/2020 16:05	1	XD28015.D	CLP II 0.25 0.25 (mm)
IC 680-616788/16		04/28/2020 16:15	1	XD28016.D	CLP I 0.25 0.25 (mm)
IC 680-616788/16		04/28/2020 16:15	1	XD28016.D	CLP II 0.25 0.25 (mm)
IC 680-616788/17		04/28/2020 16:25	1	XD28017.D	CLP I 0.25 0.25 (mm)
IC 680-616788/17		04/28/2020 16:25	1	XD28017.D	CLP II 0.25 0.25 (mm)
IC 680-616788/18		04/28/2020 16:35	1	XD28018.D	CLP I 0.25 0.25 (mm)
IC 680-616788/18		04/28/2020 16:35	1	XD28018.D	CLP II 0.25 0.25 (mm)
ICV 680-616788/19 CCV		04/28/2020 16:44	1	XD28019.D	CLP I 0.25 0.25 (mm)
ICV 680-616788/19 CCV		04/28/2020 16:44	1	XD28019.D	CLP II 0.25 0.25 (mm)
PIBLK 680-616788/20		04/28/2020 16:54	1		CLP I 0.25 0.25 (mm)
PIBLK 680-616788/20		04/28/2020 16:54	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:04	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:04	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:14	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:14	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:24	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:24	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:34	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:34	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:44	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:44	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:54	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 17:54	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 18:03	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 18:03	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 18:13	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 18:13	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 18:23	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 18:23	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 19:32	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 19:32	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 19:42	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 19:42	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 19:51	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 19:51	1		CLP II 0.25 0.25 (mm)

504.1

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CSGX Start Date: 04/28/2020 15:26Analysis Batch Number: 616788 End Date: 04/28/2020 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/28/2020 20:01	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 20:01	1		CLP II 0.25 0.25 (mm)
ZZZZZ		04/28/2020 21:10	1		CLP I 0.25 0.25 (mm)
ZZZZZ		04/28/2020 21:10	1		CLP II 0.25 0.25 (mm)
CCV 680-616788/47		04/28/2020 21:20	1		CLP I 0.25 0.25 (mm)
CCV 680-616788/47		04/28/2020 21:20	1		CLP II 0.25 0.25 (mm)
PIBLK 680-616788/48		04/28/2020 21:30	1		CLP I 0.25 0.25 (mm)
PIBLK 680-616788/48		04/28/2020 21:30	1		CLP II 0.25 0.25 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CSGX Start Date: 05/08/2020 15:21

Analysis Batch Number: 618077 End Date: 05/08/2020 19:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-618077/6		05/08/2020 15:21	1	XE08006.D	CLP I 0.25 0.25 (mm)
CCV 680-618077/6		05/08/2020 15:21	1	XE08006.D	CLP II 0.25 0.25 (mm)
PIBLK 680-618077/7		05/08/2020 15:31	1	XE08007.D	CLP I 0.25 0.25 (mm)
PIBLK 680-618077/7		05/08/2020 15:31	1	XE08007.D	CLP II 0.25 0.25 (mm)
MB 680-618071/3-A		05/08/2020 15:41	1	XE08008.D	CLP I 0.25 0.25 (mm)
MB 680-618071/3-A		05/08/2020 15:41	1	XE08008.D	CLP II 0.25 0.25 (mm)
LCS 680-618071/4-A		05/08/2020 15:51	1	XE08009.D	CLP I 0.25 0.25 (mm)
LCS 680-618071/4-A		05/08/2020 15:51	1	XE08009.D	CLP II 0.25 0.25 (mm)
LCS 680-618071/5-A		05/08/2020 16:01	1	XE08010.D	CLP I 0.25 0.25 (mm)
LCS 680-618071/5-A		05/08/2020 16:01	1	XE08010.D	CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 16:11	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 16:11	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 16:20	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 16:20	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 16:30	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 16:30	1		CLP II 0.25 0.25 (mm)
680-183527-2		05/08/2020 16:40	1	XE08014.D	CLP I 0.25 0.25 (mm)
680-183527-2		05/08/2020 16:40	1	XE08014.D	CLP II 0.25 0.25 (mm)
680-183527-2 MS		05/08/2020 16:50	1	XE08015.D	CLP I 0.25 0.25 (mm)
680-183527-2 MS		05/08/2020 16:50	1	XE08015.D	CLP II 0.25 0.25 (mm)
680-183527-2 MSD		05/08/2020 17:00	1	XE08016.D	CLP I 0.25 0.25 (mm)
680-183527-2 MSD		05/08/2020 17:00	1	XE08016.D	CLP II 0.25 0.25 (mm)
680-183527-3		05/08/2020 17:10	1	XE08017.D	CLP I 0.25 0.25 (mm)
680-183527-3		05/08/2020 17:10	1	XE08017.D	CLP II 0.25 0.25 (mm)
680-183527-4		05/08/2020 17:20	1	XE08018.D	CLP I 0.25 0.25 (mm)
680-183527-4		05/08/2020 17:20	1	XE08018.D	CLP II 0.25 0.25 (mm)
680-183527-5		05/08/2020 17:29	1	XE08019.D	CLP I 0.25 0.25 (mm)
680-183527-5		05/08/2020 17:29	1	XE08019.D	CLP II 0.25 0.25 (mm)
680-183527-6		05/08/2020 17:39	1	XE08020.D	CLP I 0.25 0.25 (mm)
680-183527-6		05/08/2020 17:39	1	XE08020.D	CLP II 0.25 0.25 (mm)
680-183527-1		05/08/2020 17:49	1	XE08021.D	CLP I 0.25 0.25 (mm)
680-183527-1		05/08/2020 17:49	1	XE08021.D	CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 17:59	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 17:59	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:09	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:09	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:19	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:19	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:29	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:29	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:38	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/08/2020 18:38	1		CLP II 0.25 0.25 (mm)
CCV 680-618077/29		05/08/2020 19:08	1	XE08029.D	CLP I 0.25 0.25 (mm)
CCV 680-618077/29		05/08/2020 19:08	1	XE08029.D	CLP II 0.25 0.25 (mm)
PIBLK 680-618077/30		05/08/2020 19:18	1	XE08030.D	CLP I 0.25 0.25 (mm)

504.1

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Instrument ID: CSGX Start Date: 05/08/2020 15:21Analysis Batch Number: 618077 End Date: 05/08/2020 19:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 680-618077/30		05/08/2020 19:18	1	XE08030.D	CLP II 0.25 0.25 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Batch Number: 618071 Batch Start Date: 05/08/20 13:35 Batch Analyst: Canady, Daniel

Batch Method: 504.1 Batch End Date: 05/08/20 14:18

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ResidualChloCheck	504 Spike 00155
MB 680-618071/3		504.1, 504.1				35 mL	2 mL		
LCS 680-618071/4		504.1, 504.1				35 mL	2 mL		35 uL
LCSD 680-618071/5		504.1, 504.1				35 mL	2 mL		35 uL
680-183527-E-2	GWK016-2022	504.1, 504.1	T	62.34 g	27.02 g	35.3 mL	2 mL	No	
680-183527-D-2 MS	GWK016-2022	504.1, 504.1	T	62.56 g	26.85 g	35.7 mL	2 mL	No	35 uL
680-183527-E-2 MSD	GWK016-2022	504.1, 504.1	T	63.26 g	26.92 g	36.3 mL	2 mL	No	35 uL
680-183527-E-3	TB2022-02	504.1, 504.1	T	63.00 g	26.98 g	36 mL	2 mL	No	
680-183527-D-4	GWVA2-2022	504.1, 504.1	T	62.85 g	26.72 g	36.1 mL	2 mL	No	
680-183527-E-5	GWVA2-6022	504.1, 504.1	T	62.71 g	26.97 g	35.7 mL	2 mL	No	
680-183527-E-6	TB2022-01	504.1, 504.1	T	62.59 g	27.01 g	35.6 mL	2 mL	No	
680-183527-F-1	GWK003-2022	504.1, 504.1	T	62.70 g	26.90 g	35.8 mL	2 mL	No	

Lab Sample ID	Client Sample ID	Method Chain	Basis	504 NewSurr 00125	AnalysisComment				
MB 680-618071/3		504.1, 504.1		35 uL					
LCS 680-618071/4		504.1, 504.1		35 uL					
LCSD 680-618071/5		504.1, 504.1		35 uL					
680-183527-E-2	GWK016-2022	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-D-2 MS	GWK016-2022	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-E-2 MSD	GWK016-2022	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-E-3	TB2022-02	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-D-4	GWVA2-2022	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-E-5	GWVA2-6022	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-E-6	TB2022-01	504.1, 504.1	T	35 uL	Na2S2O3				
680-183527-F-1	GWK003-2022	504.1, 504.1	T	35 uL	Na2S2O3				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

504.1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-183527-1

SDG No.: _____

Batch Number: 618071 Batch Start Date: 05/08/20 13:35 Batch Analyst: Canady, DanielBatch Method: 504.1 Batch End Date: 05/08/20 14:18

Batch Notes	
Balance ID	36
Analyst ID - Extraction	CanadyD
NaCl ID	6495298
Pipette/Syringe/Dispenser ID	SG6
Prep Solvent ID	6541515
Residual Chlorine Indicator ID	6541571
Analyst ID - Spike Analyst	CanadyD
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

504.1


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05/15/2020

September 2020

Shipping and Receiving Documents

EA		CHAIN-OF-CUSTODY RECORD		COC NUMBER COC-K003-2022
225 Schling Circle, Suite 400 Hunt Valley, MD Tel No: (410) 584-7000 Fax No: (410) 771-1625		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020 QUARTER: 2 - May
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@east.com EA Amanda Smith: asmith@east.com EA FAX AND MAIL REPORTS/EDD TO: Pam Mess: pmess@east.com EA		
PROJECT SITE AND PHASE: ST106/SS111	LAB PO NUMBER: 16065	LAB CONTACT: 1 (912) 354-7858		
ANALYSIS REQUIRED (Specify number of bottles)				
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS
1	GWK003-2022	5/5/2020	1003	 680-183527 Chain of Custody
2				
3				
4				
5				
6				
				(4500 S2CF) Sulfide
				(4500NH3B/C) Ammonia Nitrogen
				(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)
				(353.2) Nitrate-Nitrite
				(300.0A) Chloride, bromide, sulfate
				(6010C) Dissolved Fe, Mn
				(6020A/6010C) Total (As, Pb, Ca, K, Na, Mg)
				(EPA Method 504.1) EDB
				(EPA Method 524.2) BTEXN
				(EPA Method 524.2) BTEX
				(EPA Method 524.2) VOCs
				Total Number of Bottles

SAMPLER(S): G. Bacht	RELINQUISHED BY:	DATE	TIME
Printed Name and Signature: <i>G. Bacht</i>	Printed Name and Signature: <i>G. Bacht</i>	5/5/2020	1400
Printed Name and Signature:	Printed Name and Signature:		
Printed Name and Signature:	Printed Name and Signature:		

COURIER AND SHIPPING NUMBER: FedEx 1483 5473 0800	RECEIVED BY:	DATE	TIME
	Printed Name and Signature: <i>CB Saunders</i>	05-06-20	0950
	Printed Name and Signature:		
	Printed Name and Signature:		


3.9 (CF) 4.3c


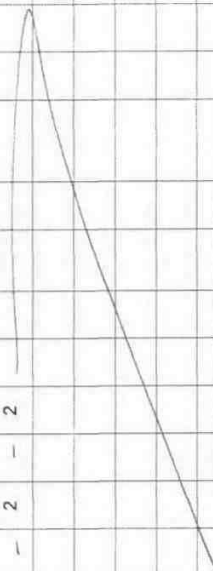
TB2022-02

EA		CHAIN-OF-CUSTODY RECORD		COC NUMBER COC-K016-2022	
225 Schilling Circle, Suite 400 Hunt Valley MD Tel No: (410) 594-7000 Fax No: (410) 771-1625		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020	
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@east.com EA Amanda Smith: asmith@east.com EA		QUARTER: 2 - May	
PROJECT NUMBER: 62735DM02		FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@east.com EA			
PROJECT SITE AND PHASE: ST106/SS111		LAB CONTACT: 1 (912) 354-7858			
LAB PO NUMBER: 16065		ANALYSIS REQUIRED (Specify number of bottles)		COMMENTS	
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED		
1	GWK016-2022	5-5-2020	0933	18	Additional volume provided for MS/MSD
2					
3					
4					
5					
6					
				(4500 S2CF) Sulfide	
				(4500NH3B/C) Ammonia Nitrogen	
				(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	
				(353.2) Nitrate-Nitrite	
				(300.0A) Chloride, bromide, sulfate	
				(6010C) Dissolved Fe, Mn	
				(6020A/6010C) Total (As, Pb, Ca, K, Na, Mg)	
				(EPA Method 504.1) EDB	
				(EPA Method 524.2) BTEXN	
				(EPA Method 524.2) BTEX	
				(EPA Method 524.2) VOCs	
				Total Number of Bottles	


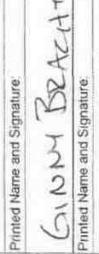
3.9 (CF) 4.3%

TB2022-02

SAMPLER(S): G. Bracht	RELINQUISHED BY:	DATE	TIME	COURIER AND SHIPPING NUMBER:	RECEIVED BY:	DATE	TIME
Printed Name and Signature: GINNY BRACHT		5/5/2020	1400	FedEx 1483 5473 0800	CSBanda	05-06-20	0950
Printed Name and Signature:					Printed Name and Signature:		
Printed Name and Signature:					Printed Name and Signature:		

 <p>225 Schilling Circle Suite 400 Hunt Valley MD Tel No. (410) 584-7000 Fax No. (410) 771-1625</p>		<h2>CHAIN-OF-CUSTODY RECORD</h2>		COC NUMBER COC-TB2022-02	
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020 QUARTER: 2 - May	
PROJECT NUMBER: 62735DM02		FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/IEDD TO: Pam Moss: pmoss@eaest.com EA			
PROJECT SITE AND PHASE: ST106/SS111		LAB PO NUMBER: 16065		LAB CONTACT: 1 (912) 354-7888	
		ANALYSIS REQUIRED (Specify number of bottles)			
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS	
1	TB2022-02	5/15/2020	0800		
2					
3					
4					
5					
6					
				(4500 S2CF) Sulfide	
				(4500NH3B/C) Ammonia Nitrogen	
				(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	
				(353.2) Nitrate-Nitrite	
				(300.0A) Chloride, bromide, sulfate	
				(6010C) Dissolved Fe, Mn	
				(6020A/6010C) Total (As, Pb, Ca, K, Na, Mg)	
				(EPA Method 504.1) EDB	
				(EPA Method 524.2) BTEXN	
				(EPA Method 524.2) BTEX	
				(EPA Method 524.2) VOCs	
				Total Number of Bottles	4

Associated with:
 GWK003-2022
 GWK016-2022
 3.9 (CF) 4.3°C

SAMPLER(S):	G. BRACHT	RELINQUISHED BY:	
Printed Name and Signature:		Printed Name and Signature:	
	GUNN BRACHT	Printed Name and Signature:	
		Printed Name and Signature:	
		Printed Name and Signature:	

COURIER AND SHIPPING NUMBER:	FedEx 1483 5473 0800	RECEIVED BY:	
Printed Name and Signature:		Printed Name and Signature:	
		Printed Name and Signature:	

EA 225 Schilling Circle Suite 400 Hart Valley, MD Tel No (410) 584-7000 Fax No (410) 771-1025		CHAIN-OF-CUSTODY RECORD		COC NUMBER COC-VA2-2022	
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020	QUARTER: 2 - May
PROJECT NUMBER: 62735DM02		FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@east.com Amanda Smith: asmith@east.com Pam Moss: pmoss@east.com		EA	EA
PROJECT SITE AND PHASE: ST106/SS111		LAB CONTACT: 1 (912) 354-7858			
		ANALYSIS REQUIRED (Specify number of bottles)		COMMENTS	
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED		
1	GWVA2-2022	5-5-2020	1030	6	• Please also report results for TCE, PCE, and VC
2	GWVA2-6022	5-5-2020	1030	6	• Please also report results for TCE, PCE, and VC
3					
4					
5					
6					
				(4500 S2CF) Sulfide	
				(4500NH3B/C) Ammonia Nitrogen	
				(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	
				(353.2) Nitrate-Nitrite	
				(300.0A) Chloride, bromide, sulfate	
				(6010C) Dissolved Fe, Mn	
				(6020A/6010C) Total (As,Pb,Ca,K,Na,Mg)	
				(EPA Method 504.1) EDB	3
				(EPA Method 524.2) BTEXN	3
				(EPA Method 524.2) BTEX *	3
				(EPA Method 524.2) VOCs	3
				Total Number of Bottles	6
				0.8 (at) 1.2%	
SAMPLER(S): G. Bracht		RELINQUISHED BY: <i>G. Bracht</i>		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7844	
Printed Name and Signature: GUNN BRACHT		DATE: 5/5/2020		DATE: 05-06-20	
Printed Name and Signature:		TIME: 1400		TIME: 0950	
Printed Name and Signature:		RECEIVED BY: <i>ASB Banda</i>		DATE: 05-06-20	
Printed Name and Signature:		Printed Name and Signature:		DATE: 01	

EA		CHAIN-OF-CUSTODY RECORD		COC NUMBER COC-TB2022-01
225 Schilling Circle Suite 400 Hour Valley RD Tel No (410) 584-7000 Fax No (410) 771-1625		LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404		YEAR: 2020 QUARTER: 2 - May
PROJECT NAME: Kirtland AFB Bulk Fuels Facility		FAX AND MAIL REPORTS/EDD TO: Tara Lamond lamonda@east.com EA amsmith@east.com EA prnoss@east.com EA		
PROJECT NUMBER: 62735DM02		FAX AND MAIL REPORTS/EDD TO: Pam Moss pmoss@east.com EA		
PROJECT SITE AND PHASE: ST106/SS111		LAB CONTACT: 1 (912) 354-7858		
LAB PO NUMBER: 16065		ANALYSIS REQUIRED (Specify number of bottles)		
ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS
1	TB2022-01	5/5/2020	0900	
2				
3				
4				
5				
6				
Total Number of Bottles		4	2	
(EPA Method 504.1) EDB		-	2	
(EPA Method 524.2) BTEXN		-	-	
(EPA Method 524.2) BTEX		-	-	
(EPA Method 524.2) VOCs		-	-	
(6010C) Dissolved Fe, Mn		-	-	
(6020A/6010C) Total (As, Pb, Ca, K, Na, Mg)		-	-	
(353.2) Nitrate-Nitrite		-	-	
(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)		-	-	
(4500NH3B/C) Ammonia Nitrogen		-	-	
(4500 S2CF) Sulfide		-	-	
(300.0A) Chloride, bromide, sulfate		-	-	

Associated with:
 GWVAZ-2022
 GWVAZ-6022
 0.8(CF)1.2R

SAMPLER(S): G. BRACHT		COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7844	
RELINQUISHED BY: Printed Name and Signature: GINNY BRACHT	DATE: 5/5/2020	RECEIVED BY: Printed Name and Signature: CS Bourde	DATE: 05-06-20
Printed Name and Signature: _____	TIME: 1400	Printed Name and Signature: _____	TIME: 0950
Printed Name and Signature: _____		Printed Name and Signature: _____	

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 680-183527-1

Login Number: 183527**List Source: Eurofins TestAmerica, Savannah****List Number: 1****Creator: Banda, Christy S**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing
America

ANALYTICAL REPORT

Job Number: 680-184595-1

Job Description: Production/Irrigation Well, Kirtland AFB

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
7995 E. Prentice Ave, Suite 206E
Greenwood Village, CO 80111

Attention: Pamela J Moss

Approved for release.
Darlene F Bandy
Project Manager I
6/17/2020 3:06 PM

Darlene F Bandy, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0188
darlene.bandy@testamericainc.com
06/17/2020

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the Eurofins TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Savannah

5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

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Definitions/Glossary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE**Client: EA Engineering, Science, and Technology****Project: Production/Irrigation Well, Kirtland AFB****Report Number: 680-184595-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 6/3/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.3° C.

Receipt Exceptions

Per client confirmation on 6/4/2020, samples GWVA2-2023 (680-184595-1) and TB2023-1 (680-184595-3) were logged for BTEX + TCE/PCE/VC analysis.

DRINKING WATER VOLATILES (GC-MS)

Samples GWVA2-2023 (680-184595-1), GWK015-2023 (680-184595-2) and TB2023-1 (680-184595-3) were analyzed for drinking water volatiles (GC-MS) in accordance with EPA Method 524.2. The samples were analyzed on 06/15/2020 and 06/16/2020.

Vinyl chloride failed the recovery criteria low for LCSD 680-622508/4. Refer to the QC report for details. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified. The following sample is associated: GWK015-2023 (680-184595-2). As confirmed by the client, Vinyl chloride is not an analyte of concern for this sample, and is not reported for this sample.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 680-622508 and 680-622635. A duplicate LCS (LCSD) was performed for each batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

EDB

Samples GWVA2-2023 (680-184595-1), GWK015-2023 (680-184595-2) and TB2023-1 (680-184595-3) were analyzed for EDB in accordance with EPA Method 504.1. The samples were prepared and analyzed on 06/05/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Client Sample ID: GWVA2-2023

Lab Sample ID: 680-184595-1

No Detections.

Client Sample ID: GWK015-2023

Lab Sample ID: 680-184595-2

No Detections.

Client Sample ID: TB2023-1

Lab Sample ID: 680-184595-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Client Sample ID: GWVA2-2023

Lab Sample ID: 680-184595-1

Date Collected: 06/02/20 11:30

Matrix: Water

Date Received: 06/03/20 10:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/16/20 16:14	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/16/20 16:14	1
Tetrachloroethene	ND		0.50	0.18	ug/L			06/16/20 16:14	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 16:14	1
Trichloroethene	ND		0.50	0.13	ug/L			06/16/20 16:14	1
Vinyl chloride	ND		0.50	0.16	ug/L			06/16/20 16:14	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	97		70 - 130					06/16/20 16:14	1
4-Bromofluorobenzene	96		70 - 130					06/16/20 16:14	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0024	ug/L		06/05/20 13:32	06/05/20 18:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	99		70 - 130				06/05/20 13:32	06/05/20 18:31	1

Client Sample ID: GWK015-2023

Lab Sample ID: 680-184595-2

Date Collected: 06/02/20 10:00

Matrix: Water

Date Received: 06/03/20 10:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/15/20 19:47	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/15/20 19:47	1
Toluene	ND		0.50	0.086	ug/L			06/15/20 19:47	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/15/20 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	100		70 - 130					06/15/20 19:47	1
4-Bromofluorobenzene	91		70 - 130					06/15/20 19:47	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	100		70 - 130				06/05/20 13:32	06/05/20 18:41	1

Client Sample ID: TB2023-1

Lab Sample ID: 680-184595-3

Date Collected: 06/02/20 08:00

Matrix: Water

Date Received: 06/03/20 10:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/16/20 15:25	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/16/20 15:25	1
Tetrachloroethene	ND		0.50	0.18	ug/L			06/16/20 15:25	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 15:25	1
Trichloroethene	ND		0.50	0.13	ug/L			06/16/20 15:25	1

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Client Sample ID: TB2023-1

Lab Sample ID: 680-184595-3

Date Collected: 06/02/20 08:00

Matrix: Water

Date Received: 06/03/20 10:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	0.16	ug/L			06/16/20 15:25	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	108		70 - 130					06/16/20 15:25	1
4-Bromofluorobenzene	94		70 - 130					06/16/20 15:25	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	99		70 - 130				06/05/20 13:32	06/05/20 18:50	1

Eurofins TestAmerica, Savannah

06/17/2020

September 2020

Default Detection Limits

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
Benzene	0.50	0.082	ug/L
Ethylbenzene	0.50	0.099	ug/L
Tetrachloroethene	0.50	0.18	ug/L
Toluene	0.50	0.086	ug/L
Trichloroethene	0.50	0.13	ug/L
Vinyl chloride	0.50	0.16	ug/L
Xylenes, Total	0.50	0.086	ug/L

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Prep: 504.1

Analyte	RL	MDL	Units
Ethylene Dibromide	0.018	0.0025	ug/L

Surrogate Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCZ (70-130)	BFB (70-130)
680-184595-1	GWVA2-2023	97	96
680-184595-2	GWK015-2023	100	91
680-184595-3	TB2023-1	108	94
LCS 680-622508/3	Lab Control Sample	101	101
LCS 680-622635/5	Lab Control Sample	91	105
LCSD 680-622508/4	Lab Control Sample Dup	98	98
LCSD 680-622635/6	Lab Control Sample Dup	103	102
MB 680-622508/10	Method Blank	98	92
MB 680-622635/11	Method Blank	104	95

Surrogate Legend
 DCZ = 1,2-Dichlorobenzene-d4 (Surr)
 BFB = 4-Bromofluorobenzene

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	PCA2 (70-130)
680-184595-1	GWVA2-2023	99
680-184595-2	GWK015-2023	100
680-184595-3	TB2023-1	99
LCS 680-621423/4-A	Lab Control Sample	102
LCSD 680-621423/5-A	Lab Control Sample Dup	98

Surrogate Legend
 PCA = Pentachloroethane

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	PCA1 (70-130)
MB 680-621423/3-A	Method Blank	101

Surrogate Legend
 PCA = Pentachloroethane

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-622508/10

Matrix: Water

Analysis Batch: 622508

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50	0.082	ug/L			06/15/20 17:05	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/15/20 17:05	1
Tetrachloroethene	ND		0.50	0.18	ug/L			06/15/20 17:05	1
Toluene	ND		0.50	0.086	ug/L			06/15/20 17:05	1
Trichloroethene	ND		0.50	0.13	ug/L			06/15/20 17:05	1
Vinyl chloride	ND		0.50	0.16	ug/L			06/15/20 17:05	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/15/20 17:05	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	98		70 - 130					06/15/20 17:05	1
4-Bromofluorobenzene	92		70 - 130					06/15/20 17:05	1

Lab Sample ID: LCS 680-622508/3

Matrix: Water

Analysis Batch: 622508

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	20.0	19.4		ug/L		97	70 - 130
Tetrachloroethene	20.0	19.1		ug/L		95	70 - 130
Toluene	20.0	19.2		ug/L		96	70 - 130
Trichloroethene	20.0	18.5		ug/L		93	70 - 130
Vinyl chloride	20.0	13.9		ug/L		70	70 - 130
Xylenes, Total	40.0	38.4		ug/L		96	70 - 130
Surrogate	LCS LCS		Limits				%Rec. Limits
	%Recovery	Qualifier					
1,2-Dichlorobenzene-d4 (Surr)	101		70 - 130				
4-Bromofluorobenzene	101		70 - 130				

Lab Sample ID: LCSD 680-622508/4

Matrix: Water

Analysis Batch: 622508

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Benzene	20.0	18.0		ug/L		90	70 - 130	0	20
Ethylbenzene	20.0	19.1		ug/L		95	70 - 130	2	20
Tetrachloroethene	20.0	19.0		ug/L		95	70 - 130	0	20
Toluene	20.0	19.4		ug/L		97	70 - 130	1	20
Trichloroethene	20.0	19.2		ug/L		96	70 - 130	4	20
Vinyl chloride	20.0	13.8 *		ug/L		69	70 - 130	1	20
Xylenes, Total	40.0	37.7		ug/L		94	70 - 130	2	20
Surrogate	LCSD LCSD		Limits				%Rec. Limits	RPD	Limit
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	98		70 - 130						
4-Bromofluorobenzene	98		70 - 130						

Eurofins TestAmerica, Savannah

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-622635/11

Matrix: Water

Analysis Batch: 622635

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	ND		0.50	0.082	ug/L			06/16/20 14:36	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/16/20 14:36	1
Tetrachloroethene	ND		0.50	0.18	ug/L			06/16/20 14:36	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 14:36	1
Trichloroethene	ND		0.50	0.13	ug/L			06/16/20 14:36	1
Vinyl chloride	ND		0.50	0.16	ug/L			06/16/20 14:36	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 14:36	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	104		70 - 130					06/16/20 14:36	1
4-Bromofluorobenzene	95		70 - 130					06/16/20 14:36	1

Lab Sample ID: LCS 680-622635/5

Matrix: Water

Analysis Batch: 622635

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene	50.0	48.7		ug/L		97	70 - 130		
Tetrachloroethene	50.0	49.6		ug/L		99	70 - 130		
Toluene	50.0	53.2		ug/L		106	70 - 130		
Trichloroethene	50.0	57.1		ug/L		114	70 - 130		
Vinyl chloride	50.0	51.9		ug/L		104	70 - 130		
Xylenes, Total	100	102		ug/L		102	70 - 130		
Surrogate	LCS LCS		Limits				%Rec. Limits		
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	91		70 - 130						
4-Bromofluorobenzene	105		70 - 130						

Lab Sample ID: LCSD 680-622635/6

Matrix: Water

Analysis Batch: 622635

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	50.0	52.8		ug/L		106	70 - 130	8	20
Tetrachloroethene	50.0	51.3		ug/L		103	70 - 130	3	20
Toluene	50.0	54.4		ug/L		109	70 - 130	2	20
Trichloroethene	50.0	50.5		ug/L		101	70 - 130	12	20
Vinyl chloride	50.0	46.6		ug/L		93	70 - 130	11	20
Xylenes, Total	100	108		ug/L		108	70 - 130	5	20
Surrogate	LCSD LCSD		Limits				%Rec. Limits	RPD	RPD Limit
	%Recovery	Qualifier							
1,2-Dichlorobenzene-d4 (Surr)	103		70 - 130						
4-Bromofluorobenzene	102		70 - 130						

Eurofins TestAmerica, Savannah

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Lab Sample ID: MB 680-621423/3-A
Matrix: Water
Analysis Batch: 621463

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 621423

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 15:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	101		70 - 130				06/05/20 13:32	06/05/20 15:54	1

Lab Sample ID: LCS 680-621423/4-A
Matrix: Water
Analysis Batch: 621463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 621423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ethylene Dibromide	0.100	0.102		ug/L		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Pentachloroethane	102		70 - 130				

Lab Sample ID: LCSD 680-621423/5-A
Matrix: Water
Analysis Batch: 621463

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 621423

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Ethylene Dibromide	0.100	0.0972		ug/L		97	70 - 130	4	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Pentachloroethane	98		70 - 130						

QC Association Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

GC/MS VOA

Analysis Batch: 622508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184595-2	GWK015-2023	Total/NA	Water	524.2	
MB 680-622508/10	Method Blank	Total/NA	Water	524.2	
LCS 680-622508/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-622508/4	Lab Control Sample Dup	Total/NA	Water	524.2	

Analysis Batch: 622635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184595-1	GWVA2-2023	Total/NA	Water	524.2	
680-184595-3	TB2023-1	Total/NA	Water	524.2	
MB 680-622635/11	Method Blank	Total/NA	Water	524.2	
LCS 680-622635/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-622635/6	Lab Control Sample Dup	Total/NA	Water	524.2	

GC Semi VOA

Prep Batch: 621423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184595-1	GWVA2-2023	Total/NA	Water	504.1	
680-184595-2	GWK015-2023	Total/NA	Water	504.1	
680-184595-3	TB2023-1	Total/NA	Water	504.1	
MB 680-621423/3-A	Method Blank	Total/NA	Water	504.1	
LCS 680-621423/4-A	Lab Control Sample	Total/NA	Water	504.1	
LCSD 680-621423/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	

Analysis Batch: 621463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184595-1	GWVA2-2023	Total/NA	Water	504.1	621423
680-184595-2	GWK015-2023	Total/NA	Water	504.1	621423
680-184595-3	TB2023-1	Total/NA	Water	504.1	621423
MB 680-621423/3-A	Method Blank	Total/NA	Water	504.1	621423
LCS 680-621423/4-A	Lab Control Sample	Total/NA	Water	504.1	621423
LCSD 680-621423/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	621423

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Client Sample ID: GWVA2-2023**Lab Sample ID: 680-184595-1****Date Collected: 06/02/20 11:30****Matrix: Water****Date Received: 06/03/20 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	622635	06/16/20 16:14	P1C	TAL SAV
Total/NA	Prep	504.1			621423	06/05/20 13:32	DC	TAL SAV
Total/NA	Analysis	504.1		1	621463	06/05/20 18:31	DC	TAL SAV

Client Sample ID: GWK015-2023**Lab Sample ID: 680-184595-2****Date Collected: 06/02/20 10:00****Matrix: Water****Date Received: 06/03/20 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	622508	06/15/20 19:47	UI	TAL SAV
Total/NA	Prep	504.1			621423	06/05/20 13:32	DC	TAL SAV
Total/NA	Analysis	504.1		1	621463	06/05/20 18:41	DC	TAL SAV

Client Sample ID: TB2023-1**Lab Sample ID: 680-184595-3****Date Collected: 06/02/20 08:00****Matrix: Water****Date Received: 06/03/20 10:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	622635	06/16/20 15:25	P1C	TAL SAV
Total/NA	Prep	504.1			621423	06/05/20 13:32	DC	TAL SAV
Total/NA	Analysis	504.1		1	621463	06/05/20 18:50	DC	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Laboratory: Eurofins TestAmerica, Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	GA00006	06-30-20

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-21
Arizona	State	AZ0713	12-20-20
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-21
Connecticut	State	PH-0686	09-30-20
Florida	NELAP	E87667-57	06-30-20
Georgia	State	4025-011	01-09-21
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-01-20
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-20
Maine	State	2019011 (231)	03-03-21
Minnesota	NELAP	1788752	12-31-20
Nevada	State	CO000262020-1	07-31-20
New Hampshire	NELAP	205319	04-29-21
New Jersey	NELAP	190002	06-30-20
New York	NELAP	59923	04-01-21
North Carolina (WW/SW)	State	358	12-31-20
North Dakota	State	R-034	01-08-21
Oklahoma	State	2018-006	08-31-20
Oregon	NELAP	4025-011	01-08-21
Pennsylvania	NELAP	013	08-01-20
South Carolina	State	72002001	01-08-21
Texas	NELAP	T104704183-19-17	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00099	03-26-21
Utah	NELAP	CO000262019-11	07-31-20
Washington	State	C583-19	08-05-20
West Virginia DEP	State	354	11-30-20
Wisconsin	State	999615430	08-31-20
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Savannah

Method Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL SAV
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW	TAL SAV
504.1	Microextraction	EPA-DW	TAL SAV

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184595-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
680-184595-1	GWVA2-2023	Water	06/02/20 11:30	06/03/20 10:30	
680-184595-2	GWK015-2023	Water	06/02/20 10:00	06/03/20 10:30	
680-184595-3	TB2023-1	Water	06/02/20 08:00	06/03/20 10:30	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184595-1

SDG No.:

Instrument ID: CMSAG Analysis Batch Number: 621037

Lab Sample ID: IC 680-621037/7 Client Sample ID:

Date Analyzed: 06/03/20 14:08 Lab File ID: AGF0307.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.30	Peak assignment corrected	intaracha u	06/04/20 10:58
Chloromethane	1.48	Split Peak	proctors	06/04/20 12:41
Bromomethane	1.75	Incomplete Integration	proctors	06/04/20 12:38
tert-Butyl alcohol	2.66	Incomplete Integration	proctors	06/04/20 12:38
trans-1,2-Dichloroethene	2.77	Incomplete Integration	proctors	06/04/20 12:38
Tert-butyl ethyl ether	3.26	Incomplete Integration	proctors	06/04/20 12:38
Chlorobromomethane	3.60	Incomplete Integration	intaracha u	06/04/20 10:59
Toluene	5.41	Incomplete Integration	proctors	06/03/20 14:48
1,1,1,2-Tetrachloroethane	6.69	Incomplete Integration	intaracha u	06/04/20 11:04
1,2-Dibromo-3-Chloropropane	9.95	Incomplete Integration	proctors	06/04/20 12:42
1,2,4-Trichlorobenzene	10.89	Incomplete Integration	proctors	06/04/20 12:39
Hexachlorobutadiene	11.05	Incomplete Integration	proctors	06/04/20 12:39

Lab Sample ID: IC 680-621037/8 Client Sample ID:

Date Analyzed: 06/03/20 14:33 Lab File ID: AGF0308.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.74	Assign Peak	proctors	06/04/20 12:44
Methylene Chloride	2.61	Incomplete Integration	proctors	06/04/20 12:46
cis-1,3-Dichloropropene	5.17	Assign Peak	proctors	06/04/20 12:44
1,2,3-Trichloropropane	7.84	Assign Peak	proctors	06/04/20 12:44
1,2-Dichlorobenzene	9.13	Assign Peak	proctors	06/04/20 12:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184595-1

SDG No.: _____

Instrument ID: CMSAG Analysis Batch Number: 621037

Lab Sample ID: IC 680-621037/9 Client Sample ID: _____

Date Analyzed: 06/03/20 14:58 Lab File ID: AGF0309.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichlorobenzene	9.13	Peak assignment corrected	intarachu	06/04/20 10:55
1,2-Dibromo-3-Chloropropane	9.95	Incomplete Integration	proctors	06/04/20 12:43

Lab Sample ID: ICIS 680-621037/12 Client Sample ID: _____

Date Analyzed: 06/03/20 16:12 Lab File ID: AGF0312.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromo-3-Chloropropane	9.96	Incomplete Integration	intarachu	06/04/20 10:41

Lab Sample ID: IC 680-621037/14 Client Sample ID: _____

Date Analyzed: 06/03/20 17:02 Lab File ID: AGF0314.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.48	Incomplete Integration	intarachu	06/04/20 10:51
4-Methyl-2-pentanone (MIBK)	5.26	Incomplete Integration	intarachu	06/04/20 10:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184595-1

SDG No.: _____

Instrument ID: CMSU Analysis Batch Number: 621036

Lab Sample ID: IC 680-621036/9 Client Sample ID: _____

Date Analyzed: 06/03/20 14:39 Lab File ID: UF0307.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	2.36	Peak assignment corrected	proctors	06/04/20 10:25
1,2-Dichlorobenzene	8.38	Peak assignment corrected	proctors	06/04/20 10:17

Lab Sample ID: IC 680-621036/10 Client Sample ID: _____

Date Analyzed: 06/03/20 14:59 Lab File ID: UF0308.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichlorobenzene	8.39	Peak assignment corrected	proctors	06/04/20 10:18

Lab Sample ID: IC 680-621036/16 Client Sample ID: _____

Date Analyzed: 06/03/20 17:01 Lab File ID: UF0314.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dichlorobenzene-d4	8.07	Peak assignment corrected	proctors	06/04/20 10:19

524.2

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184595-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 619731

Lab Sample ID: IC 680-619731/12 Client Sample ID: _____

Date Analyzed: 05/22/20 16:16 Lab File ID: XE22012.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	05/26/20 09:33

Lab Sample ID: IC 680-619731/12 Client Sample ID: _____

Date Analyzed: 05/22/20 16:16 Lab File ID: XE22012.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	05/26/20 09:33

Lab Sample ID: IC 680-619731/13 Client Sample ID: _____

Date Analyzed: 05/22/20 16:26 Lab File ID: XE22013.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	05/26/20 09:34
Pentachloroethane	2.28	Baseline Smoothing	canadyd	05/26/20 09:36

Lab Sample ID: IC 680-619731/13 Client Sample ID: _____

Date Analyzed: 05/22/20 16:26 Lab File ID: XE22013.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	05/26/20 09:34

Lab Sample ID: ICV 680-619731/14 CCV Client Sample ID: _____

Date Analyzed: 05/22/20 16:36 Lab File ID: XE22014.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pentachloroethane	2.28	Baseline Smoothing	canadyd	05/26/20 09:37

504.1

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184595-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 621463Lab Sample ID: LCSD 680-621423/5-A Client Sample ID: _____Date Analyzed: 06/05/20 16:13 Lab File ID: XF05010.D GC Column: CLP I 0.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pentachloroethane	2.28	Baseline Smoothing	canadyd	06/08/20 10:50

504.1

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
504 Spike_00156	06/13/20	05/13/20	Methanol, Lot 00006479519	25 mL	SG123TCP-2_00006	10 uL	1,2,3-Trichloropropane	0.5 ug/mL					
					SG504ICV_00065	12.5 uL	1,2,3-Trichloropropane-(Surr)	0.4 ug/mL					
							1,2,3-Trichloropropane	0.5 ug/mL					
							1,2-Dibromo-3-Chloropropane	0.1 ug/mL					
.SG123TCP-2_00006	11/13/20	Ultra Scientific, Lot CM-2372		(Purchased Reagent)		Ethylene Dibromide	0.1 ug/mL						
						1,2,3-Trichloropropane	1000 ug/mL						
						1,2,3-Trichloropropane-(Surr)	1000 ug/mL						
.SG504ICV_00065	07/31/20	UltraScientific, Lot CR-2830		(Purchased Reagent)		1,2,3-Trichloropropane	200 ug/mL						
						1,2-Dibromo-3-Chloropropane	200 ug/mL						
						Ethylene Dibromide	200 ug/mL						
504 WS #1_00168	06/13/20	05/13/20	Methanol, Lot 00006479519	25 mL	504 INT A_00156	125 uL	1,2,3-Trichloropropane	0.3125 ug/mL					
							1,2-Dibromo-3-Chloropropane	0.0625 ug/mL					
					.504 INT A_00156	06/13/20	05/13/20	Methanol, Lot 00006479519	2 mL	504 Penta_00082	1250 uL	Ethylene Dibromide	0.0625 ug/mL
										SG123TCP_00088	125 uL	1,2,3-Trichloropropane	62.5 ug/mL
					SG504CAL_00054	125 uL	1,2-Dibromo-3-Chloropropane	12.5 ug/mL					
							Ethylene Dibromide	12.5 ug/mL					
..SG123TCP_00088	11/13/20	Ultra Scientific, Lot CR-4822		(Purchased Reagent)		1,2,3-Trichloropropane	1000 ug/mL						
..SG504CAL_00054	10/13/20	AccuStandard, Lot 218111119		(Purchased Reagent)		1,2-Dibromo-3-Chloropropane	200 ug/mL						
						Ethylene Dibromide	200 ug/mL						
.504 Penta_00082	06/13/20	05/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL					
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL						
504-DBCM_00132	06/13/20	05/13/20	Methanol, Lot 00006479519	2 mL	DBCM (504)_00053	5.6 uL	Chlorodibromomethane	0.28 ug/mL					
.DBCM (504)_00053	09/12/20	Ultra Scientific, Lot CR-0227		(Purchased Reagent)		Chlorodibromomethane	100 ug/mL						
504_NewSurr_00126	06/13/20	05/13/20	Methanol, Lot 00006479519	25 mL	504 Penta_00082	1250 uL	Pentachloroethane	0.025 ug/mL					
.504 Penta_00082	06/13/20	05/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL					
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL						
524 ISSU/2016_00092	06/29/20	05/29/20	Methanol, Lot _00136	50 mL	30241_00521	200 uL	1,4-Dichlorobenzene-d4	10 ug/mL					
					31070_00032	250 uL	Chlorobenzene-d5	10 ug/mL					
							Fluorobenzene	10 ug/mL					
											1,2-Dichlorobenzene-d4 (Surr)	10 ug/mL	
						4-Bromofluorobenzene	10 ug/mL						
.30241_00521	06/29/20	Restek, Lot A0156714		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL						
						Chlorobenzene-d5	2500 ug/mL						
						Fluorobenzene	2500 ug/mL						
.31070_00032	06/29/20	Absolute Standards, inc., Lot 123118		(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL						
						4-Bromofluorobenzene	2000 ug/mL						
524mix_00170	06/05/20	06/03/20	Methanol, Lot MeOH_124454	25 mL	524_ETBE_00009	500 uL	Tert-butyl ethyl ether	40 ug/mL					
					524_TAME_00007	500 uL	Tert-amyl methyl ether	40 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					569721_00262	500 uL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					569722_00242	500 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
					571992_00133	500 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
Chlorodibromomethane	50 ug/mL							
Chloroform	50 ug/mL							
cis-1,2-Dichloroethene	50 ug/mL							
cis-1,3-Dichloropropene	50 ug/mL							
Dibromomethane	50 ug/mL							
Dichlorobromomethane	50 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
.524 ETBE 00009	06/10/20		Restek, Lot A0160808			(Purchased Reagent)	Tert-butyl ethyl ether	2000 ug/mL
.524 TAME 00007	06/10/20		Restek, Lot A0143927			(Purchased Reagent)	Tert-amyl methyl ether	2000 ug/mL
.569721_00262	06/10/20		Restek, Lot A0156095			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.569722_00242	06/10/20		Restek, Lot A0154679			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.571992_00133	06/10/20		Restek, Lot A0143774			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
524MMix_00170	06/05/20	06/03/20	Methanol, Lot MeOH 124454	25 mL	571992_00133	500 uL	Xylenes, Total	100 ug/mL
.571992_00133	06/10/20		Restek, Lot A0143774		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
524MMix_00172	06/17/20	06/12/20	Methanol, Lot MeOH_124454	25 mL	569722_00242	500 uL	Vinyl chloride	50 ug/mL
					571992_00133	500 uL	Benzene	50 ug/mL
							Ethylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.569722_00242	06/10/20		Restek, Lot A0154679			(Purchased Reagent)	Vinyl chloride	2500 ug/mL
.571992_00133	06/10/20		Restek, Lot A0143774			(Purchased Reagent)	Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
524MMix_00173	06/23/20	06/16/20	Methanol, Lot MeOH_124454	10 mL	569722.sec_00222	500 uL	Vinyl chloride	125 ug/mL
					571992.sec_00102	500 uL	Benzene	125 ug/mL
							Ethylbenzene	125 ug/mL
							Tetrachloroethene	125 ug/mL
							Toluene	125 ug/mL
							Trichloroethene	125 ug/mL
							Xylenes, Total	250 ug/mL
.569722.sec_00222	06/30/20		Restek, Lot A0148330			(Purchased Reagent)	Vinyl chloride	2500 ug/mL
.571992.sec_00102	06/30/20		Restek, Lot A0144202			(Purchased Reagent)	Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VM_bfb_00218							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
					VMVG_BFB_00375	125 uL	4-Bromofluorobenzene	25 ug/mL
							BFB	25 ug/mL
.VMVG_BFB_00375	06/07/20		RESTEK, Lot A0156625			(Purchased Reagent)	4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL
VM_bfb_00219							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
					VMVG_BFB_00361	125 uL	4-Bromofluorobenzene	25 ug/mL
							BFB	25 ug/mL
.VMVG_BFB_00361	06/20/20		RESTEK, Lot A0150404			(Purchased Reagent)	4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VM_MMIX SEC_00126	06/05/20	05/22/20	Methanol, Lot 5080923	25 mL	569722.sec_00228	500 uL	Vinyl chloride	50 ug/mL
					571992.sec_00105	500 uL	Benzene	50 ug/mL
							Ethylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.569722.sec_00228	06/05/20		Restek, Lot A0148330			(Purchased Reagent)	Vinyl chloride	2500 ug/mL
.571992.sec_00105	06/05/20		Restek, Lot A0144202			(Purchased Reagent)	Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL

Reagent

30241_00521

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0156714
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot BCBZ5549)	2,500.2 µg/mL	+/- 14.5364 µg/mL	+/- 140.1837 µg/mL	+/- 143.4639 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-29571)	2,500.0 µg/mL	+/- 14.5352 µg/mL	+/- 140.1725 µg/mL	+/- 143.4524 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	2,500.6 µg/mL	+/- 14.5387 µg/mL	+/- 140.2062 µg/mL	+/- 143.4868 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

6568907
ID: 30241_00520
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568915
ID: 30241_00524
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568998
ID: 30241_00528
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568909
ID: 30241_00521
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568917
ID: 30241_00525
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6569000
ID: 30241_00529
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568911
ID: 30241_00522
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568994
ID: 30241_00526
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

DAS
4/25/20

6568913
ID: 30241_00523
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

6568996
ID: 30241_00527
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

Page 2 of 3
30241_00527

06/17/2020

Reagent

31070_00032

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://absolutestandards.com

06/17/2020

September 2020

CERTIFIED WEIGHT REPORT

Part Number: 31070
Lot Number: 123118
Description: EPA Method 524 Surrogate Standard
1,2-Dichlorobenzene-d4 & 4-Bromofluorobenzene
123123
Expiration Date: 123123
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 2694196
Weight(s) shown below were combined and diluted to (mL): 100.0

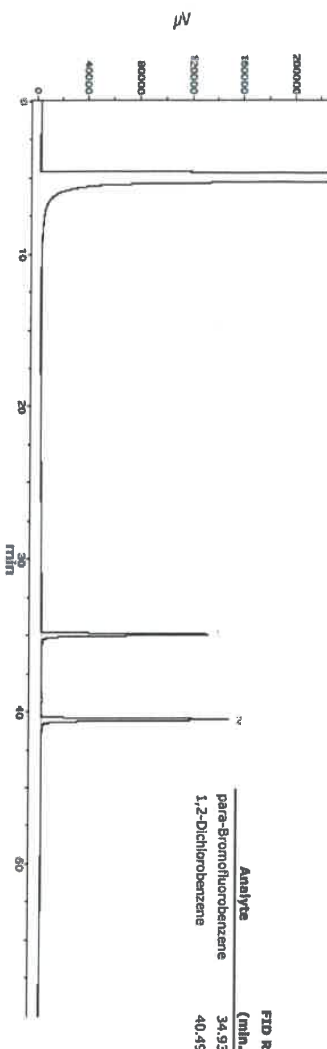
Solvent: MeOH
Lot# DT140
SE-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By: *Elu Arago* 123118
Eli Allaga
Reviewed By: *Pedro L. Ramias* 123118
Pedro L. Ramias
DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (±) (µg/mL)	CAS#	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. 1,2-Dichlorobenzene-d4	126	PR-669570527SD81	2000	99	0.2	0.20204	0.20222	2001.8	8.1	2199-69-1	50 ppm (300mg/m3) (CL) off-ret 500mg/kg	
2. p-Bromofluorobenzene	48	01127COV	2000	99	0.2	0.20204	0.20215	2001.1	8.1	460-00-4	N/A	off-ret 2700mg/kg

Run 10, "P31070 L123118 12000µg/mL In MeOH"

Run Length: 60.00 min, 35998 points at 10 points/second
Created: 06/17/2020 12:12:18 PM
Sampled: Sequence "123118 GC5.M1", Method "GC5.M1"
Analyzed using Method "GC5.M1"



Comments: GC5-M1 Analyte by Candice Warren
Column ID: SPB-VOCOL 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=280µL/min, Helium (carrier)=10mL/min, Air(=make-up)=240mL/min,
Heath(make-up)=0mL/min, Hydrogen(make-up)=40mL/min, Oxygen(make-up)=10mL/min,
Oven: 40°C (10 min), 200°C (5 min), 250°C (10 min), 280°C (10 min), 300°C (10 min),
Rate = 4°C/min, Total run time=80 min, Injector temp.=200°C, FID Temp.=200°C,
Standard Injection = 0.5µL, Range=3

6553383
ID: 31070_00031
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553387
ID: 31070_00033
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553386
ID: 31070_00032
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553389
ID: 31070_00034
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553391
ID: 31070_00035
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553393
ID: 31070_00036
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553397
ID: 31070_00037
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553398
ID: 31070_00038
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

6553399
ID: 31070_00039
Exp: 12/31/23 Ppvt.EMA
Custom 524 Istd.usr std.

49 2020

Part # 31070 Lot # 123118

1 of 1

Printed: 9/23/2020, 10:53:57 AM

Reagent

569722.sec_00222



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

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Certificate of Analysis



ISO 17034 Accredited
 Reference Material Producer
 Certificate #3222.01



ISO/IEC 17025 Accredited
 Testing Laboratory
 Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0148330
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder



6554208
 ID: 569722.sec_00227
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554210
 ID: 569722.sec_00228
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554212
 ID: 569722.sec_00229
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554214
 ID: 569722.sec_00230
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,513.2 µg/mL	+/-	19.3767	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 25587)		+/-	141.4861	µg/mL	Unstressed
	Purity 99%		+/-	144.7702	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,505.2 µg/mL	+/-	20.4180	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	141.1888	µg/mL	Unstressed
	Purity 99%		+/-	144.4589	µg/mL	Stressed
3	Vinyl chloride	2,524.8 µg/mL	+/-	17.9317	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	141.9344	µg/mL	Unstressed
	Purity 99%		+/-	145.2382	µg/mL	Stressed
4	1,3-Butadiene	2,521.5 µg/mL	+/-	17.6825	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	141.7249	µg/mL	Unstressed
	Purity 99%		+/-	145.0252	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,505.9 µg/mL	+/-	24.7917	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	141.9274	µg/mL	Unstressed
	Purity 99%		+/-	145.1827	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,507.1 µg/mL	+/-	24.1112	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	141.8739	µg/mL	Unstressed
	Purity 99%		+/-	145.1334	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7978700)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed



6554193
 ID: 569722.sec_00220
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554196
 ID: 569722.sec_00222
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554199
 ID: 569722.sec_00223
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554201
 ID: 569722.sec_00224
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554204
 ID: 569722.sec_00225
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases



6554206
 ID: 569722.sec_00226
 Exp: 04/30/22 Prpd: DS
 8260 List 1/Std #3 Gases

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC Lot No.: A0148330
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : April 30, 2022 Storage: 0°C or colder



6554208
ID: 569722.sec_00227
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554210
ID: 569722.sec_00228
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554212
ID: 569722.sec_00229
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554214
ID: 569722.sec_00230
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,513.2 µg/mL	+/-	19.3767	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 25587)		+/-	141.4861	µg/mL	Unstressed
	Purity 99%		+/-	144.7702	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,505.2 µg/mL	+/-	20.4180	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	141.1888	µg/mL	Unstressed
	Purity 99%		+/-	144.4589	µg/mL	Stressed
3	Vinyl chloride	2,524.8 µg/mL	+/-	17.9317	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	141.9344	µg/mL	Unstressed
	Purity 99%		+/-	145.2382	µg/mL	Stressed
4	1,3-Butadiene	2,521.5 µg/mL	+/-	17.6825	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	141.7249	µg/mL	Unstressed
	Purity 99%		+/-	145.0252	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,505.9 µg/mL	+/-	24.7917	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	141.9274	µg/mL	Unstressed
	Purity 99%		+/-	145.1827	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,507.1 µg/mL	+/-	24.1112	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	141.8739	µg/mL	Unstressed
	Purity 99%		+/-	145.1334	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7978700)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

2nd Level
4/14/2020
EA



6554193
ID: 569722.sec_00220
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554196
ID: 569722.sec_00222
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554199
ID: 569722.sec_00223
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554201
ID: 569722.sec_00224
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554204
ID: 569722.sec_00225
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases



6554206
ID: 569722.sec_00226
Exp: 04/30/22 Ppnd: DS
8260 List 1/Std #3 Gases

Reagent

569722.sec_00228



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0148330
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder



6554208
ID: 569722.sec_00227
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554210
ID: 569722.sec_00228
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554212
ID: 569722.sec_00229
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554214
ID: 569722.sec_00230
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,513.2 µg/mL	+/-	19.3767	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 25587)		+/-	141.4861	µg/mL	Unstressed
	Purity 99%		+/-	144.7702	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,505.2 µg/mL	+/-	20.4180	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/-	141.1888	µg/mL	Unstressed
	Purity 99%		+/-	144.4589	µg/mL	Stressed
3	Vinyl chloride	2,524.8 µg/mL	+/-	17.9317	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/-	141.9344	µg/mL	Unstressed
	Purity 99%		+/-	145.2382	µg/mL	Stressed
4	1,3-Butadiene	2,521.5 µg/mL	+/-	17.6825	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	141.7249	µg/mL	Unstressed
	Purity 99%		+/-	145.0252	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,505.9 µg/mL	+/-	24.7917	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/-	141.9274	µg/mL	Unstressed
	Purity 99%		+/-	145.1827	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,507.1 µg/mL	+/-	24.1112	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/-	141.8739	µg/mL	Unstressed
	Purity 99%		+/-	145.1334	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7978700)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed



6554193
ID: 569722.sec_00220
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554196
ID: 569722.sec_00222
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554199
ID: 569722.sec_00223
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554201
ID: 569722.sec_00224
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554204
ID: 569722.sec_00225
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases



6554206
ID: 569722.sec_00226
Exp: 04/30/22 Prpd: DS
8260 List 1/Std #3 Gases

Reagent

569722_00242

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2nd level Review 5/1/2020 - Incorrect ID label on

Corrections made, new labels created. BA 5/1/2020 Status changed. For am rules already opened.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

DFP 3/18/20
Philip G. Paulose

Catalog No. : 569722 Lot No. : A0154679

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL
 Expiration Date : November 30, 2022

Pkg Amt: > 1 mL
 Storage: 0°C or colder

6524245
 ID: 567645_00209
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

~~6524238
 ID: 567645_00208
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

~~6524236
 ID: 567645_00207
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

6524234
 ID: 567645_00206
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

~~6524118
 ID: 567645_00205
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

Elution Order	
1	Dichlorodifluo CAS # 75-7 Purity 99%

~~6574712
 ID: 569722_00238
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574710
 ID: 569722_00237
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

CERTIFIED VALUE		Expanded Uncertainty (95% C.L.; K=2)		
Grav. Conc. weight/volume)				
2,502.7 µg/mL	+/-	18.2705 µg/mL	Gravimetric	
	+/-	140.7566 µg/mL	Unstressed	
	+/-	144.0300 µg/mL	Stressed	

2	Chloromethane (methyl chloride) CAS # 74-87-3 Purity 99%	(Lot SHBK6571)	2,500.3 µg/mL	+/-	18.7547 µg/mL	Gravimetric
				+/-	140.6865 µg/mL	Unstressed
				+/-	143.9553 µg/mL	Stressed
3	Vinyl chloride CAS # 75-01-4 Purity 99%	(Lot 00015559)	2,501.1 µg/mL	+/-	18.5858 µg/mL	Gravimetric
				+/-	140.7083 µg/mL	Unstressed
				+/-	143.9787 µg/mL	Stressed
4	1,3-Butadiene CAS # 106-99-0 Purity 99%	(Lot SHBK2299)	2,497.1 µg/mL	+/-	17.5808 µg/mL	Gravimetric
				+/-	140.3628 µg/mL	Unstressed
				+/-	143.6309 µg/mL	Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9 Purity 99%	(Lot 101604)	2,500.8 µg/mL	+/-	23.3138 µg/mL	Gravimetric
				+/-	141.3956 µg/mL	Unstressed
				+/-	144.6498 µg/mL	Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3 Purity 99%	(Lot 107-401039114-1)	2,499.0 µg/mL	+/-	21.4252 µg/mL	Gravimetric
				+/-	140.9973 µg/mL	Unstressed
				+/-	144.2558 µg/mL	Stressed

~~6574714
 ID: 569722_00239
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574716
 ID: 569722_00240
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574718
 ID: 569722_00241
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574719
 ID: 569722_00242
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574722
 ID: 569722_00243
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6524258
 ID: 567645_00210
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

~~6524276
 ID: 567645_00211
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

~~6524278
 ID: 567645_00212
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

~~6524280
 ID: 567645_00213
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

~~6524283
 ID: 567645_00214
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

8	Trichlorofluoromethane (CFC-11)	2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%		+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 2 min.) to 240°C
 @ 8°C/min. (hold 5 min.)

Inj. Temp:

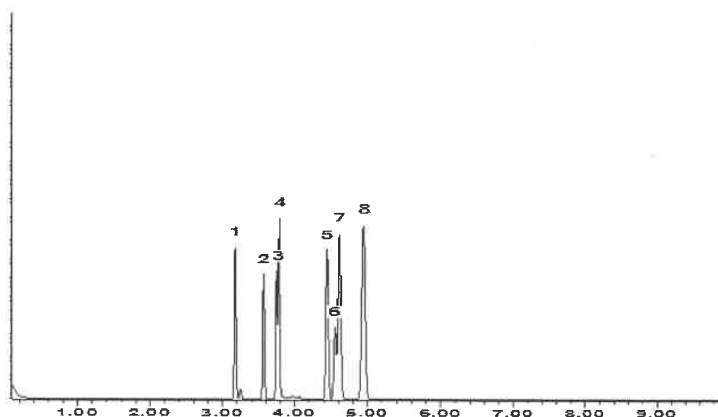
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[Signature]
 Tom Suckal - Mix Technician

Date Mixed: 04-Nov-2019 Balance: B707717271

[Signature]
 Feng-Yan Li - QC Analyst

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0154679
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,502.7 µg/mL	+/-	18.2705	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	140.7566	µg/mL	Unstressed
	Purity 99%		+/-	144.0300	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.3 µg/mL	+/-	18.7547	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	140.6865	µg/mL	Unstressed
	Purity 99%		+/-	143.9553	µg/mL	Stressed
3	Vinyl chloride	2,501.1 µg/mL	+/-	18.5858	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	140.7083	µg/mL	Unstressed
	Purity 99%		+/-	143.9787	µg/mL	Stressed
4	1,3-Butadiene	2,497.1 µg/mL	+/-	17.5808	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/-	140.3628	µg/mL	Unstressed
	Purity 99%		+/-	143.6309	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.8 µg/mL	+/-	23.3138	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	141.3956	µg/mL	Unstressed
	Purity 99%		+/-	144.6498	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,499.0 µg/mL	+/-	21.4252	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	140.9973	µg/mL	Unstressed
	Purity 99%		+/-	144.2558	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

Reagent

571992.sec_00102

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,517.0 µg/mL	+/-	14.6339	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	151.8598	µg/mL	Unstressed
	Purity 98%		+/-	152.2203	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,506.7 µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	151.2383	µg/mL	Unstressed
	Purity 99%		+/-	151.5974	µg/mL	Stressed
3	1,1-Dichloroethene	2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 7692300)		+/-	151.0372	µg/mL	Unstressed
	Purity 99%		+/-	151.3958	µg/mL	Stressed
4	tert-Butanol (TBA)	25,000.8 µg/mL	+/-	145.3491	µg/mL	Gravimetric
	CAS # 75-83-0.SEC (Lot XYXDO)		+/-	1,508.4071	µg/mL	Unstressed
	Purity 98%		+/-	1,511.9883	µg/mL	Stressed
5	Methyl acetate	5,002.3 µg/mL	+/-	29.0840	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/-	301.8129	µg/mL	Unstressed
	Purity 99%		+/-	302.5295	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,503.5 µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	151.0472	µg/mL	Unstressed
	Purity 99%		+/-	151.4059	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,511.7 µg/mL	+/-	14.6030	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot H3HGC)		+/-	151.5400	µg/mL	Unstressed
	Purity 99%		+/-	151.8998	µg/mL	Stressed

96899
571992.sec_00102
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

DAS
5/20
06/17/2020

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Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 98%	2,517.0 µg/mL	+/- 14.6339	µg/mL	Gravimetric	
			+/- 151.8598	µg/mL	Unstressed	
			+/- 152.2203	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,506.7 µg/mL	+/- 14.5740	µg/mL	Gravimetric	
			+/- 151.2383	µg/mL	Unstressed	
			+/- 151.5974	µg/mL	Stressed	
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 7692300) Purity 99%	2,503.3 µg/mL	+/- 14.5546	µg/mL	Gravimetric	
			+/- 151.0372	µg/mL	Unstressed	
			+/- 151.3958	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.8 µg/mL	+/- 145.3491	µg/mL	Gravimetric	
			+/- 1,508.4071	µg/mL	Unstressed	
			+/- 1,511.9883	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9.SEC (Lot UCNEL) Purity 99%	5,002.3 µg/mL	+/- 29.0840	µg/mL	Gravimetric	
			+/- 301.8129	µg/mL	Unstressed	
			+/- 302.5295	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric	
			+/- 151.0472	µg/mL	Unstressed	
			+/- 151.4059	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot H3HGC) Purity 99%	2,511.7 µg/mL	+/- 14.6030	µg/mL	Gravimetric	
			+/- 151.5400	µg/mL	Unstressed	
			+/- 151.8998	µg/mL	Stressed	

96899
571992.sec_00102
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Prpdt: DS
60 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

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DAS
5/20 And label 5/22/20
06/17/2020

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/-	14.5953 µg/mL 151.4595 µg/mL 151.8191 µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/-	14.6040 µg/mL 151.5500 µg/mL 151.9098 µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/-	14.5430 µg/mL 150.9165 µg/mL 151.2748 µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/-	14.5856 µg/mL 151.3590 µg/mL 151.7183 µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/-	14.5614 µg/mL 151.1076 µg/mL 151.4663 µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/-	14.5585 µg/mL 151.0774 µg/mL 151.4361 µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/-	290.7356 µg/mL 3,017.2028 µg/mL 3,024.3661 µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/-	14.5904 µg/mL 151.4093 µg/mL 151.7687 µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/-	14.5439 µg/mL 150.9266 µg/mL 151.2849 µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/-	14.5866 µg/mL 151.3690 µg/mL 151.7284 µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/-	14.5520 µg/mL 151.0098 µg/mL 151.3684 µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/-	14.5507 µg/mL 150.9970 µg/mL 151.3555 µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/-	14.5643 µg/mL 151.1378 µg/mL 151.4966 µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4 µg/mL	+/-	14.5494 µg/mL 150.9832 µg/mL 151.3417 µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3 µg/mL	+/-	14.5546 µg/mL 151.0372 µg/mL 151.3958 µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/-	7.2941 µg/mL 75.5202 µg/mL 75.6995 µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7 µg/mL	+/-	7.3058 µg/mL 75.6409 µg/mL 75.8205 µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5 µg/mL	+/-	14.5556 µg/mL 151.0472 µg/mL 151.4059 µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7 µg/mL	+/-	14.5740 µg/mL 151.2383 µg/mL 151.5974 µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2 µg/mL	+/-	14.5594 µg/mL 151.0875 µg/mL 151.4462 µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/-	14.5769 µg/mL 151.2685 µg/mL 151.6276 µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2 µg/mL	+/-	14.5653 µg/mL 151.1478 µg/mL 151.5067 µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5 µg/mL	+/-	14.5381 µg/mL 150.8661 µg/mL 151.2243 µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3 µg/mL	+/-	14.5427 µg/mL 150.9137 µg/mL 151.2720 µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7 µg/mL	+/-	14.5682 µg/mL 151.1780 µg/mL 151.5369 µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2 µg/mL	+/-	14.6177 µg/mL 151.6922 µg/mL 152.0524 µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0573 µg/mL 151.4159 µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,506.2 µg/mL	+/- 14.5711 +/- 151.2081 +/- 151.5671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,510.0 µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,509.2 µg/mL	+/- 14.5885 +/- 151.3891 +/- 151.7486	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	2,505.8 µg/mL	+/- 14.5691 +/- 151.1880 +/- 151.5470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot JMIYD)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 6628200)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8562 +/- 151.2143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,506.3 µg/mL	+/- 14.5720 +/- 151.2182 +/- 151.5772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,509.8 µg/mL	+/- 14.5924 +/- 151.4294 +/- 151.7889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	2,513.7 µg/mL	+/- 14.6147 +/- 151.6607 +/- 152.0207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot R6QDM)	2,501.8 µg/mL	+/- 14.5459 +/- 150.9467 +/- 151.3051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	2,508.5 µg/mL	+/- 14.5845 +/- 151.3473 +/- 151.7066	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	2,504.4 µg/mL	+/- 14.5607 +/- 151.1002 +/- 151.4590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/- 14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/- 151.5740	µg/mL	Unstressed
	Purity 98%			+/- 151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:

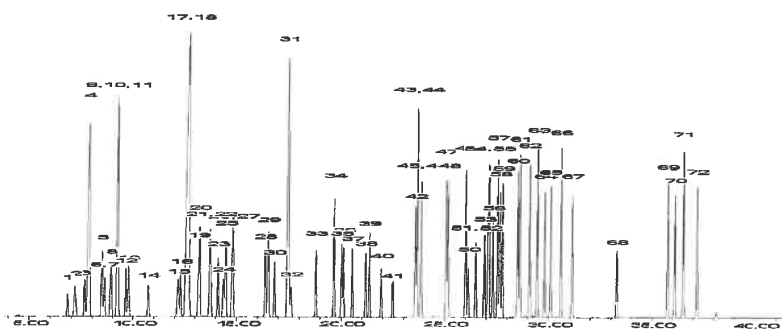
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018

Balance: 1127510105

Diane Shaffer

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

571992.sec_00105

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,517.0 µg/mL	+/-	14.6339	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	151.8598	µg/mL	Unstressed
	Purity 98%		+/-	152.2203	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,506.7 µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	151.2383	µg/mL	Unstressed
	Purity 99%		+/-	151.5974	µg/mL	Stressed
3	1,1-Dichloroethene	2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 7692300)		+/-	151.0372	µg/mL	Unstressed
	Purity 99%		+/-	151.3958	µg/mL	Stressed
4	tert-Butanol (TBA)	25,000.8 µg/mL	+/-	145.3491	µg/mL	Gravimetric
	CAS # 75-83-0.SEC (Lot XYXDO)		+/-	1,508.4071	µg/mL	Unstressed
	Purity 98%		+/-	1,511.9883	µg/mL	Stressed
5	Methyl acetate	5,002.3 µg/mL	+/-	29.0840	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/-	301.8129	µg/mL	Unstressed
	Purity 99%		+/-	302.5295	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,503.5 µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	151.0472	µg/mL	Unstressed
	Purity 99%		+/-	151.4059	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,511.7 µg/mL	+/-	14.6030	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot H3HGC)		+/-	151.5400	µg/mL	Unstressed
	Purity 99%		+/-	151.8998	µg/mL	Stressed

96899
571992.sec_00102
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

DAS
5/20
06/17/2020

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 98%	2,517.0 µg/mL	+/- 14.6339	µg/mL	Gravimetric	
			+/- 151.8598	µg/mL	Unstressed	
			+/- 152.2203	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,506.7 µg/mL	+/- 14.5740	µg/mL	Gravimetric	
			+/- 151.2383	µg/mL	Unstressed	
			+/- 151.5974	µg/mL	Stressed	
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 7692300) Purity 99%	2,503.3 µg/mL	+/- 14.5546	µg/mL	Gravimetric	
			+/- 151.0372	µg/mL	Unstressed	
			+/- 151.3958	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.8 µg/mL	+/- 145.3491	µg/mL	Gravimetric	
			+/- 1,508.4071	µg/mL	Unstressed	
			+/- 1,511.9883	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9.SEC (Lot UCNEL) Purity 99%	5,002.3 µg/mL	+/- 29.0840	µg/mL	Gravimetric	
			+/- 301.8129	µg/mL	Unstressed	
			+/- 302.5295	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric	
			+/- 151.0472	µg/mL	Unstressed	
			+/- 151.4059	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot H3HGC) Purity 99%	2,511.7 µg/mL	+/- 14.6030	µg/mL	Gravimetric	
			+/- 151.5400	µg/mL	Unstressed	
			+/- 151.8998	µg/mL	Stressed	

96899
571992.sec_00102
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Ppfd: DS
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DAS
5/20 And label 5/22/20
06/17/2020

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/-	14.5953 µg/mL 151.4595 µg/mL 151.8191 µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/-	14.6040 µg/mL 151.5500 µg/mL 151.9098 µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/-	14.5430 µg/mL 150.9165 µg/mL 151.2748 µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/-	14.5856 µg/mL 151.3590 µg/mL 151.7183 µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/-	14.5614 µg/mL 151.1076 µg/mL 151.4663 µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/-	14.5585 µg/mL 151.0774 µg/mL 151.4361 µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/-	290.7356 µg/mL 3,017.2028 µg/mL 3,024.3661 µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/-	14.5904 µg/mL 151.4093 µg/mL 151.7687 µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/-	14.5439 µg/mL 150.9266 µg/mL 151.2849 µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/-	14.5866 µg/mL 151.3690 µg/mL 151.7284 µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/-	14.5520 µg/mL 151.0098 µg/mL 151.3684 µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/-	14.5507 µg/mL 150.9970 µg/mL 151.3555 µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/-	14.5643 µg/mL 151.1378 µg/mL 151.4966 µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4 µg/mL	+/-	14.5494 µg/mL 150.9832 µg/mL 151.3417 µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3 µg/mL	+/-	14.5546 µg/mL 151.0372 µg/mL 151.3958 µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/-	7.2941 µg/mL 75.5202 µg/mL 75.6995 µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7 µg/mL	+/-	7.3058 µg/mL 75.6409 µg/mL 75.8205 µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5 µg/mL	+/-	14.5556 µg/mL 151.0472 µg/mL 151.4059 µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7 µg/mL	+/-	14.5740 µg/mL 151.2383 µg/mL 151.5974 µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2 µg/mL	+/-	14.5594 µg/mL 151.0875 µg/mL 151.4462 µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/-	14.5769 µg/mL 151.2685 µg/mL 151.6276 µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2 µg/mL	+/-	14.5653 µg/mL 151.1478 µg/mL 151.5067 µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5 µg/mL	+/-	14.5381 µg/mL 150.8661 µg/mL 151.2243 µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3 µg/mL	+/-	14.5427 µg/mL 150.9137 µg/mL 151.2720 µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7 µg/mL	+/-	14.5682 µg/mL 151.1780 µg/mL 151.5369 µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2 µg/mL	+/-	14.6177 µg/mL 151.6922 µg/mL 152.0524 µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0573 µg/mL 151.4159 µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS #	108-86-1.SEC	(Lot 2FUHG-EM)		+/-	151.2081	µg/mL	Unstressed
	Purity	99%			+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS #	108-67-8.SEC	(Lot FGH02-CMLN)		+/-	151.4394	µg/mL	Unstressed
	Purity	99%			+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS #	95-49-8.SEC	(Lot SW8QG-AO)		+/-	151.1176	µg/mL	Unstressed
	Purity	99%			+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS #	106-43-4.SEC	(Lot P4XHJ-AO)		+/-	151.3891	µg/mL	Unstressed
	Purity	99%			+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS #	98-06-6.SEC	(Lot D6OHC)		+/-	151.1880	µg/mL	Unstressed
	Purity	99%			+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS #	95-63-6.SEC	(Lot JMIYD)		+/-	151.3590	µg/mL	Unstressed
	Purity	99%			+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS #	135-98-8.SEC	(Lot OGN01-IMA)		+/-	151.1176	µg/mL	Unstressed
	Purity	99%			+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS #	99-87-6.SEC	(Lot 6628200)		+/-	150.8562	µg/mL	Unstressed
	Purity	99%			+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS #	541-73-1.SEC	(Lot FMDFD)		+/-	151.2182	µg/mL	Unstressed
	Purity	99%			+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS #	106-46-7.SEC	(Lot 4Y5DC)		+/-	151.4294	µg/mL	Unstressed
	Purity	99%			+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS #	104-51-8.SEC	(Lot MMPGA)		+/-	151.6607	µg/mL	Unstressed
	Purity	99%			+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS #	95-50-1.SEC	(Lot R6QDM)		+/-	150.9467	µg/mL	Unstressed
	Purity	99%			+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS #	96-12-8.SEC	(Lot LC00408V)		+/-	151.3473	µg/mL	Unstressed
	Purity	98%			+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS #	120-82-1.SEC	(Lot 3LYYC)		+/-	151.0372	µg/mL	Unstressed
	Purity	99%			+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS #	87-68-3.SEC	(Lot 5526800)		+/-	151.1002	µg/mL	Unstressed
	Purity	97%			+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS #	91-20-3.SEC	(Lot 4KW3H-OO)		+/-	151.0372	µg/mL	Unstressed
	Purity	99%			+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/- 14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/- 151.5740	µg/mL	Unstressed
	Purity 98%			+/- 151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:

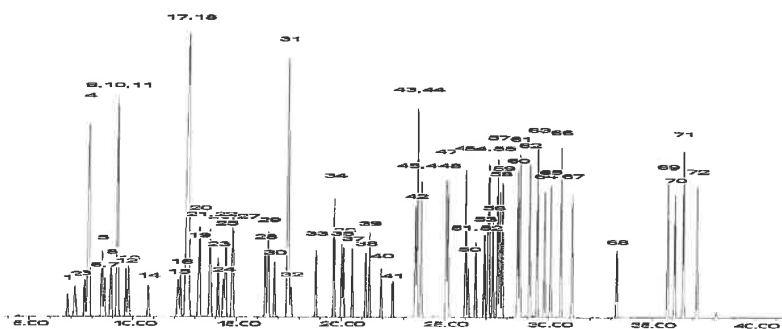
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018

Balance: 1127510105

Diane Shaffer

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

571992_00133

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110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PPD ✓ 312512020
Patrick P. Paulsen



6533888
 ID: 571992_00131
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533886
 ID: 571992_00130
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533884
 ID: 571992_00129
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533882
 ID: 571992_00128
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 Purity 99% (Lot SHBJ5713)	2,500.6 µg/mL	+/- 14.5388	+/- 150.8738	+/- 151.2320	µg/mL Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 99% (Lot 00009482)	2,501.6 µg/mL	+/- 14.5447	+/- 150.9341	+/- 151.2925	µg/mL Gravimetric Unstressed Stressed
3	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBG8609V)	2,501.9 µg/mL	+/- 14.5461	+/- 150.9492	+/- 151.3076	µg/mL Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBJ9404)	25,008.1 µg/mL	+/- 145.3918	+/- 1,508.8503	+/- 1,512.4325	µg/mL Gravimetric Unstressed Stressed
5	Methyl acetate CAS # 79-20-9 Purity 99% (Lot SHBG4345V)	5,000.8 µg/mL	+/- 29.0748	+/- 301.7174	+/- 302.4337	µg/mL Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99% (Lot SHBH4362V)	2,500.6 µg/mL	+/- 14.5388	+/- 150.8738	+/- 151.2320	µg/mL Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 99% (Lot WXBB7852V)	2,502.0 µg/mL	+/- 14.5468	+/- 150.9567	+/- 151.3151	µg/mL Gravimetric Unstressed Stressed



6533903
 ID: 571992_00137
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533901
 ID: 571992_00136
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533899
 ID: 571992_00135
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533897
 ID: 571992_00134
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533892
 ID: 571992_00133
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533890
 ID: 571992_00132
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

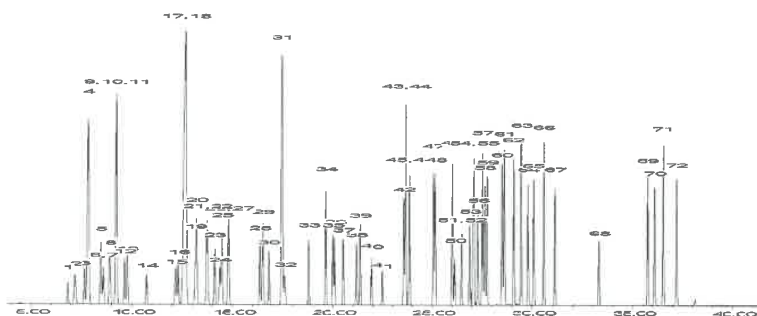
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PTP ✓ 3/25/2020
Patrick P. Paul

2nd level EA 4/12/20

6533888
 ID: 571992_00131
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533886
 ID: 571992_00130
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533884
 ID: 571992_00129
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533882
 ID: 571992_00128
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution-Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBJ5713) Purity 99%	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00009482) Purity 99%	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 (Lot SHBG8609V) Purity 99%	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBJ9404) Purity 99%	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 (Lot SHBG4345V) Purity 99%	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBH4362V) Purity 99%	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot WXBB7852V) Purity 99%	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	

6533903
 ID: 571992_00137
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533901
 ID: 571992_00136
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533899
 ID: 571992_00135
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533897
 ID: 571992_00134
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533892
 ID: 571992_00133
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533890
 ID: 571992_00132
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

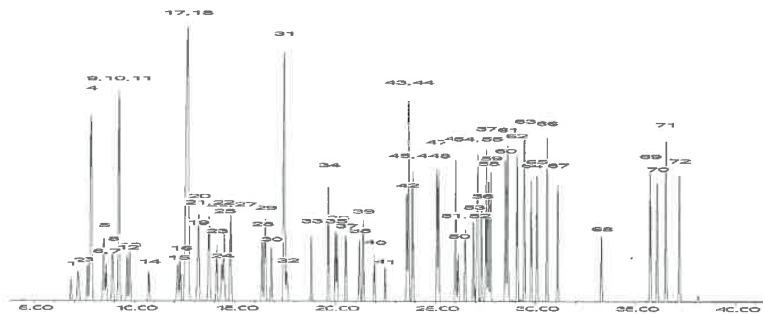
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

DBCM (504)_00053

Certificate of Analysis



Dibromochloromethane Solution

Product Number: HC-100

Page: 1 of 1

Lot Number: CR-0227

Lot Issue Date: 24-Jan-2017

Expiration Date: 28-Feb-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
dibromochloromethane	000124-48-1	RM11370	100.2 ± 0.5 µg/mL

Matrix: methanol (methyl alcohol)

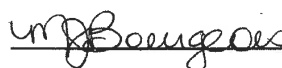
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP-2_00006



Certificate of Analysis



1,2,3-Trichloropropane Solution

Product Number: PPS-250 **Page:** 1 of 1
Lot Number: CR-2372 **Lot Issue Date:** 23-May-2017 **Expiration Date:** 30-Jun-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1004 ± 5 µg/mL

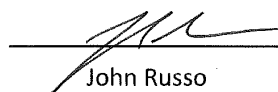
Matrix: methanol (methyl alcohol)

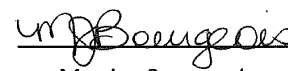
Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
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TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP_00088



Certificate of Analysis

1,2,3-Trichloropropane Solution

Product Number: PPS-251 **Page:** 1 of 1
Lot Number: CR-4822 **Lot Issue Date:** 25-Oct-2017 **Expiration Date:** 30-Nov-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1003 ± 5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



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John Russo
President

Monica Bourgeois
Director of QA/RA

Reagent

SG504ICV_00065



Certificate of Analysis



EPA Method 504.1 Mixture

Product Number: DWM-514 **Page:** 1 of 1
Lot Number: CR-2830 **Lot Issue Date:** 22-Jun-2017 **Expiration Date:** 31-Jul-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2-dibromo-3-chloropropane	000096-12-8	RM11663	200.7 ± 1.0 µg/mL
1,2-dibromoethane	000106-93-4	RM00018	200.8 ± 1.0 µg/mL
1,2,3-trichloropropane	000096-18-4	RM09131	200.8 ± 1.0 µg/mL

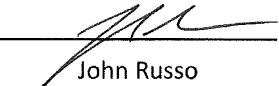
Matrix: methanol (methyl alcohol)

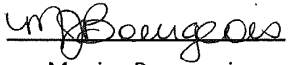
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



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John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SGPCE504_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30404 **Lot No.:** A0123209
Description : Pentachloroethane Standard
Pentachloroethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 160830B-BL2)	2,002.0 µg/mL	+/- 11.8913	µg/mL	Gravimetric
			+/- 112.2765	µg/mL	Unstressed
			+/- 114.9024	µg/mL	Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%				

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

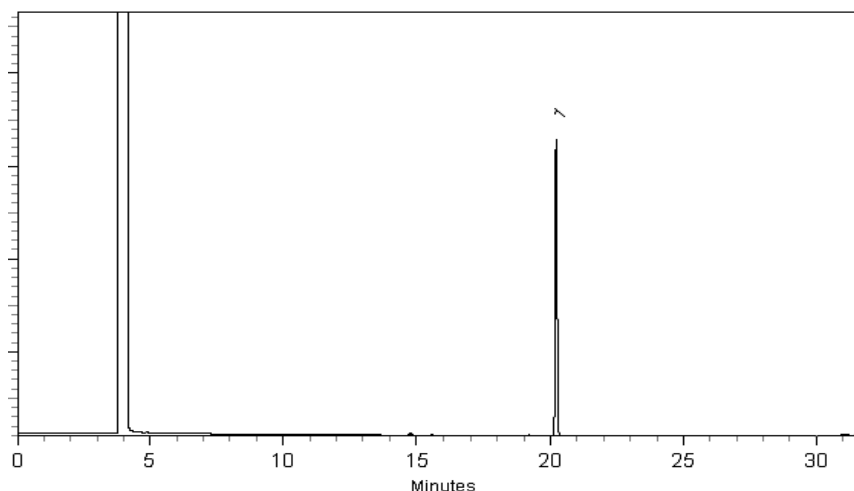
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis
Cathleen Soltis - Mix Technician

Date Mixed: 02-Dec-2016 Balance: 1125113331

Diane Shaffer
Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Dec-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00361

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0150404
Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)			
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,018.0 µg/mL	+/- 11.8428 µg/mL	Gravimetric		
			+/- 113.1587 µg/mL	Unstressed		
			+/- 115.8060 µg/mL	Stressed		

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

6439449
 ID: VMVG_BFB_00367
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439447
 ID: VMVG_BFB_00366
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439445
 ID: VMVG_BFB_00365
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439443
 ID: VMVG_BFB_00364
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439441
 ID: VMVG_BFB_00363
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439439
 ID: VMVG_BFB_00362
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439437
 ID: VMVG_BFB_00361
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439435
 ID: VMVG_BFB_00360
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439433
 ID: VMVG_BFB_00359
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

6439431
 ID: VMVG_BFB_00358
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

Philip J. Pankoske PJP
 11/7/2020

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

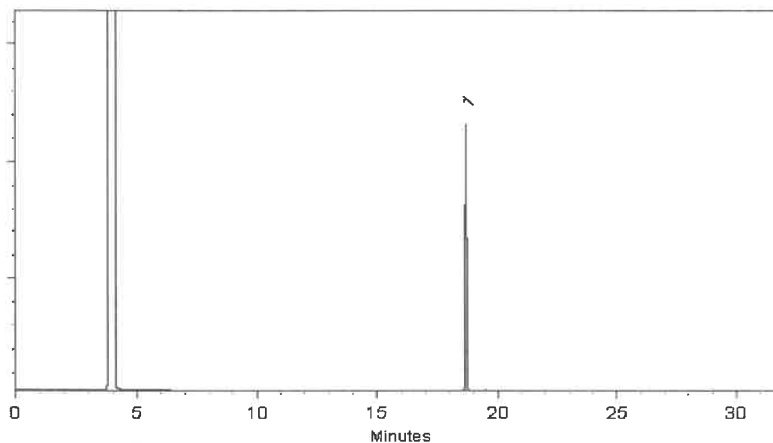
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 26-Jun-2019 Balance: 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jul-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00375

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 Lot No.: A0156625
Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : January 31, 2025 Storage: 0°C or colder

PEP ✓ 3/16/20
[Signature]

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL	+/- 112.5980 µg/mL	+/- 115.2321 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%



6521575
ID: VMVG_BFB_00371
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521577
ID: VMVG_BFB_00372
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521579
ID: VMVG_BFB_00373
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521581
ID: VMVG_BFB_00374
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521583
ID: VMVG_BFB_00375
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

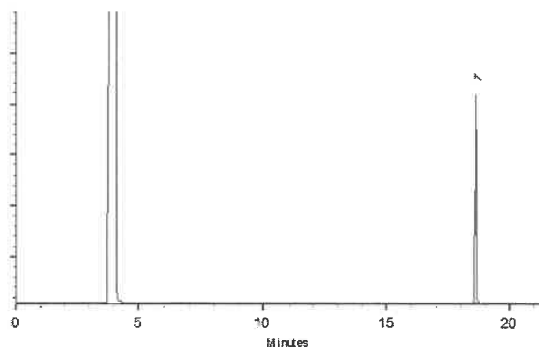
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J. Lidgett

Dustin Lidgett - Mix Technician

Date Mixed: 12-Jan-2020

Balance: 1128342314

Justine Albertson
Justine Albertson - Operations Tech-ARM GC

Date Passed: 14-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 524.2

Volatile Organic Compounds (GC/MS) by Method 524.2

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	BFB #	DCZ #
GWVA2-2023	680-184595-1	96	97
GWK015-2023	680-184595-2	91	100
TB2023-1	680-184595-3	94	108
	MB 680-622508/10	92	98
	MB 680-622635/11	95	104
	LCS 680-622508/3	101	101
	LCS 680-622635/5	105	91
	LCSD 680-622508/4	98	98
	LCSD 680-622635/6	102	103

BFB = 4-Bromofluorobenzene
DCZ = 1,2-Dichlorobenzene-d4 (Surr)

QC LIMITS
70-130
70-130

Column to be used to flag recovery values

FORM II 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UF1503.D
 Lab ID: LCS 680-622508/3 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	20.0	17.9	90	70-130	
Ethylbenzene	20.0	19.4	97	70-130	
Tetrachloroethene	20.0	19.1	95	70-130	
Toluene	20.0	19.2	96	70-130	
Trichloroethene	20.0	18.5	93	70-130	
Vinyl chloride	20.0	13.9	70	70-130	
Xylenes, Total	40.0	38.4	96	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: AGF1605.D
 Lab ID: LCS 680-622635/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	50.0	52.4	105	70-130	
Ethylbenzene	50.0	48.7	97	70-130	
Tetrachloroethene	50.0	49.6	99	70-130	
Toluene	50.0	53.2	106	70-130	
Trichloroethene	50.0	57.1	114	70-130	
Vinyl chloride	50.0	51.9	104	70-130	
Xylenes, Total	100	102	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: UF1504.D

Lab ID: LCSD 680-622508/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	20.0	18.0	90	0	20	70-130	
Ethylbenzene	20.0	19.1	95	2	20	70-130	
Tetrachloroethene	20.0	19.0	95	0	20	70-130	
Toluene	20.0	19.4	97	1	20	70-130	
Trichloroethene	20.0	19.2	96	4	20	70-130	
Vinyl chloride	20.0	13.8	69	1	20	70-130	*
Xylenes, Total	40.0	37.7	94	2	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III

GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: AGF1606.DLab ID: LCSD 680-622635/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	50.0	52.0	104	1	20	70-130	
Ethylbenzene	50.0	52.8	106	8	20	70-130	
Tetrachloroethene	50.0	51.3	103	3	20	70-130	
Toluene	50.0	54.4	109	2	20	70-130	
Trichloroethene	50.0	50.5	101	12	20	70-130	
Vinyl chloride	50.0	46.6	93	11	20	70-130	
Xylenes, Total	100	108	108	5	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab File ID: AGF1611.D Lab Sample ID: MB 680-622635/11
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CMSAG Date Analyzed: 06/16/2020 14:36
 GC Column: Rtx-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-622635/5	AGF1605.D	06/16/2020 12:09
	LCS 680-622635/6	AGF1606.D	06/16/2020 12:33
TB2023-1	680-184595-3	AGF1613.D	06/16/2020 15:25
GWVA2-2023	680-184595-1	AGF1615.D	06/16/2020 16:14

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab File ID: UF1510.D Lab Sample ID: MB 680-622508/10
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CMSU Date Analyzed: 06/15/2020 17:05
 GC Column: Rtx-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-622508/3	UF1503.D	06/15/2020 14:43
	LCSD 680-622508/4	UF1504.D	06/15/2020 15:04
GWK015-2023	680-184595-2	UF1518.D	06/15/2020 19:47

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab File ID: AGF0304.D BFB Injection Date: 06/03/2020
 Instrument ID: CMSAG BFB Injection Time: 12:40
 Analysis Batch No.: 621037

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.0	
75	30.0 - 80.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.9	(1.8) 1
174	>50.0 % of mass 95	50.5	
175	5.0 - 9.0 % of mass 174	4.5	(8.9) 1
176	>95.0 but <101.0 % of mass 174	51.0	(100.9) 1
177	5.0 - 9.0 % of mass 176	3.0	(6.0) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-621037/7	AGF0307.D	06/03/2020	14:08
	IC 680-621037/8	AGF0308.D	06/03/2020	14:33
	IC 680-621037/9	AGF0309.D	06/03/2020	14:58
	IC 680-621037/10	AGF0310.D	06/03/2020	15:23
	IC 680-621037/11	AGF0311.D	06/03/2020	15:48
	ICIS 680-621037/12	AGF0312.D	06/03/2020	16:12
	IC 680-621037/13	AGF0313.D	06/03/2020	16:37
	IC 680-621037/14	AGF0314.D	06/03/2020	17:02
	ICV 680-621037/16	AGF0316.D	06/03/2020	17:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab File ID: AGF1601.D BFB Injection Date: 06/16/2020
 Instrument ID: CMSAG BFB Injection Time: 10:10
 Analysis Batch No.: 622635

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.9	
75	30.0 - 80.0 % of mass 95	54.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.7	
173	Less than 2.0 % of mass 174	1.1	(2.0) 1
174	>50.0 % of mass 95	53.3	
175	5.0 - 9.0 % of mass 174	4.5	(8.5) 1
176	>95.0 but <101.0 % of mass 174	51.1	(95.8) 1
177	5.0 - 9.0 % of mass 176	4.5	(8.7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-622635/4	AGF1604.D	06/16/2020	11:45
	LCS 680-622635/5	AGF1605.D	06/16/2020	12:09
	LCSD 680-622635/6	AGF1606.D	06/16/2020	12:33
	MB 680-622635/11	AGF1611.D	06/16/2020	14:36
TB2023-1	680-184595-3	AGF1613.D	06/16/2020	15:25
GWVA2-2023	680-184595-1	AGF1615.D	06/16/2020	16:14

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab File ID: UF0304A.D BFB Injection Date: 06/03/2020
 Instrument ID: CMSU BFB Injection Time: 13:04
 Analysis Batch No.: 621036

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.5	
75	30.0 - 80.0 % of mass 95	44.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	>50.0 % of mass 95	93.0	
175	5.0 - 9.0 % of mass 174	7.6	(8.1) 1
176	>95.0 but <101.0 % of mass 174	90.3	(97.2) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-621036/9	UF0307.D	06/03/2020	14:39
	IC 680-621036/10	UF0308.D	06/03/2020	14:59
	IC 680-621036/11	UF0309.D	06/03/2020	15:19
	IC 680-621036/12	UF0310.D	06/03/2020	15:40
	IC 680-621036/13	UF0311.D	06/03/2020	16:00
	ICIS 680-621036/14	UF0312.D	06/03/2020	16:20
	IC 680-621036/15	UF0313.D	06/03/2020	16:41
	IC 680-621036/16	UF0314.D	06/03/2020	17:01
	ICV 680-621036/18	UF0316.D	06/03/2020	17:42

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab File ID: UF1501D.D BFB Injection Date: 06/15/2020
 Instrument ID: CMSU BFB Injection Time: 13:01
 Analysis Batch No.: 622508

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.0	
75	30.0 - 80.0 % of mass 95	45.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	>50.0 % of mass 95	89.4	
175	5.0 - 9.0 % of mass 174	6.1	(6.8) 1
176	>95.0 but <101.0 % of mass 174	88.4	(98.9) 1
177	5.0 - 9.0 % of mass 176	6.7	(7.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-622508/2	UF1502.D	06/15/2020	14:23
	LCS 680-622508/3	UF1503.D	06/15/2020	14:43
	LCSD 680-622508/4	UF1504.D	06/15/2020	15:04
	MB 680-622508/10	UF1510.D	06/15/2020	17:05
GWK015-2023	680-184595-2	UF1518.D	06/15/2020	19:47

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Sample No.: ICIS 680-621037/12 Date Analyzed: 06/03/2020 16:12
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): AGF0312.D Heated Purge: (Y/N) N
 Calibration ID: 76069

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	472626	4.18	316943	6.59	166276	8.74
UPPER LIMIT	614414	4.68	412026	7.09	216159	9.24
LOWER LIMIT	330838	3.68	221860	6.09	116393	8.24
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-621037/16	472885	4.19	339428	6.59	154432	8.74

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Sample No.: CCVIS 680-622635/4 Date Analyzed: 06/16/2020 11:45
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): AGF1604.D Heated Purge: (Y/N) N
 Calibration ID: 76069

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	456920	4.18	285719	6.59	157773	8.74	
UPPER LIMIT	593996	4.68	371435	7.09	205105	9.24	
LOWER LIMIT	319844	3.68	200003	6.09	110441	8.24	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-622635/5	445960	4.19	286911	6.58	153975	8.74	
LCSD 680-622635/6	505226	4.19	311748	6.59	155998	8.74	
MB 680-622635/11	426437	4.18	284662	6.59	120400	8.74	
680-184595-3	TB2023-1	418089	4.19	276931	6.58	116099	8.74
680-184595-1	GWVA2-2023	383959	4.19	260335	6.59	113947	8.74

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Sample No.: ICIS 680-621036/14 Date Analyzed: 06/03/2020 16:20
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): UF0312.D Heated Purge: (Y/N) N
 Calibration ID: 76068

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	576926	3.87	466148	6.17	254993	8.07	
UPPER LIMIT	750004	4.37	605992	6.67	331491	8.57	
LOWER LIMIT	403848	3.37	326304	5.67	178495	7.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-621036/18	550011	3.87	448190	6.17	240455	8.07	
LCS 680-622508/3	491204	3.87	400698	6.17	214697	8.07	
MB 680-622508/10	584676	3.87	449598	6.17	229616	8.07	
680-184595-2	GWK015-2023	388967	3.87	297735	6.17	153914	8.07

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Sample No.: CCVIS 680-622508/2 Date Analyzed: 06/15/2020 14:23
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): UF1502.D Heated Purge: (Y/N) N
 Calibration ID: 76068

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	495090	3.87	412514	6.17	216125	8.07	
UPPER LIMIT	643617	4.37	536268	6.67	280963	8.57	
LOWER LIMIT	346563	3.37	288760	5.67	151288	7.57	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-622508/3	491204	3.87	400698	6.17	214697	8.07	
LCSD 680-622508/4	520341	3.87	422769	6.17	233362	8.07	
MB 680-622508/10	584676	3.87	449598	6.17	229616	8.07	
680-184595-2	GWK015-2023	388967	3.87	297735	6.17	153914	8.07

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: GWVA2-2023 Lab Sample ID: 680-184595-1
 Matrix: Water Lab File ID: AGF1615.D
 Analysis Method: 524.2 Date Collected: 06/02/2020 11:30
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 16:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	97		70-130
460-00-4	4-Bromofluorobenzene	96		70-130

Report Date: 17-Jun-2020 09:41:13

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1615.D
 Lims ID: 680-184595-D-1
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 16-Jun-2020 16:14:30 ALS Bottle#: 16 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-015
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp Date: 17-Jun-2020 09:41:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.188	4.181	0.007	97	383959	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.590	-0.005	94	260335	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.737	0.001	94	113947	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.634	0.009	83	147846	9.60	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.108	0.001	92	109980	9.74	

Reagents:

524 ISSU/2016_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 17-Jun-2020 09:41:14

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1615.D

Injection Date: 16-Jun-2020 16:14:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: 680-184595-D-1

Lab Sample ID: 680-184595-1

Worklist Smp#: 15

Client ID: GWVA2-2023

Purge Vol: 5.000 mL

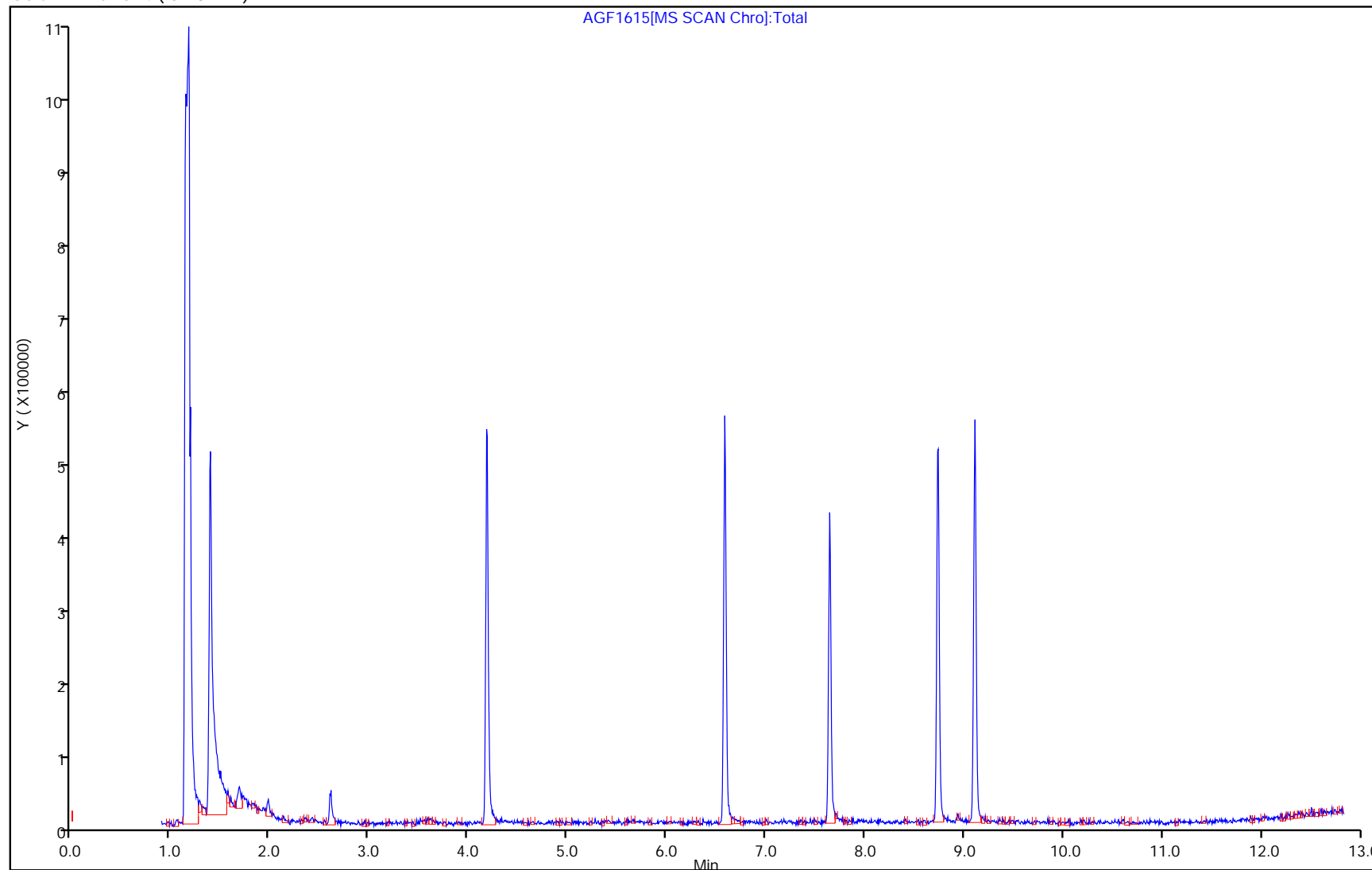
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:41:13

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1615.D
 Lims ID: 680-184595-D-1
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 16-Jun-2020 16:14:30 ALS Bottle#: 16 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-015
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:41:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.60	95.99
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.74	97.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 Lab Sample ID: 680-184595-2
 Matrix: Water Lab File ID: UF1518.D
 Analysis Method: 524.2 Date Collected: 06/02/2020 10:00
 Sample wt/vol: 5(mL) Date Analyzed: 06/15/2020 19:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	100		70-130
460-00-4	4-Bromofluorobenzene	91		70-130

Report Date: 16-Jun-2020 10:17:51

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1518.D
 Lims ID: 680-184595-E-2
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 15-Jun-2020 19:47:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-018
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:11:06 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau Date: 16-Jun-2020 10:17:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	388967	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	297735	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	153914	10.0	
\$ 4 4-Bromofluorobenzene	95	7.126	7.121	0.005	93	134083	9.08	
\$ 5 1,2-Dichlorobenzene-d4	152	8.371	8.366	0.005	83	150324	10.0	

Reagents:

524 ISSU/2016_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 16-Jun-2020 10:17:51

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1518.D

Injection Date: 15-Jun-2020 19:47:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: 680-184595-E-2

Lab Sample ID: 680-184595-2

Worklist Smp#: 18

Client ID: GWK015-2023

Purge Vol: 5.000 mL

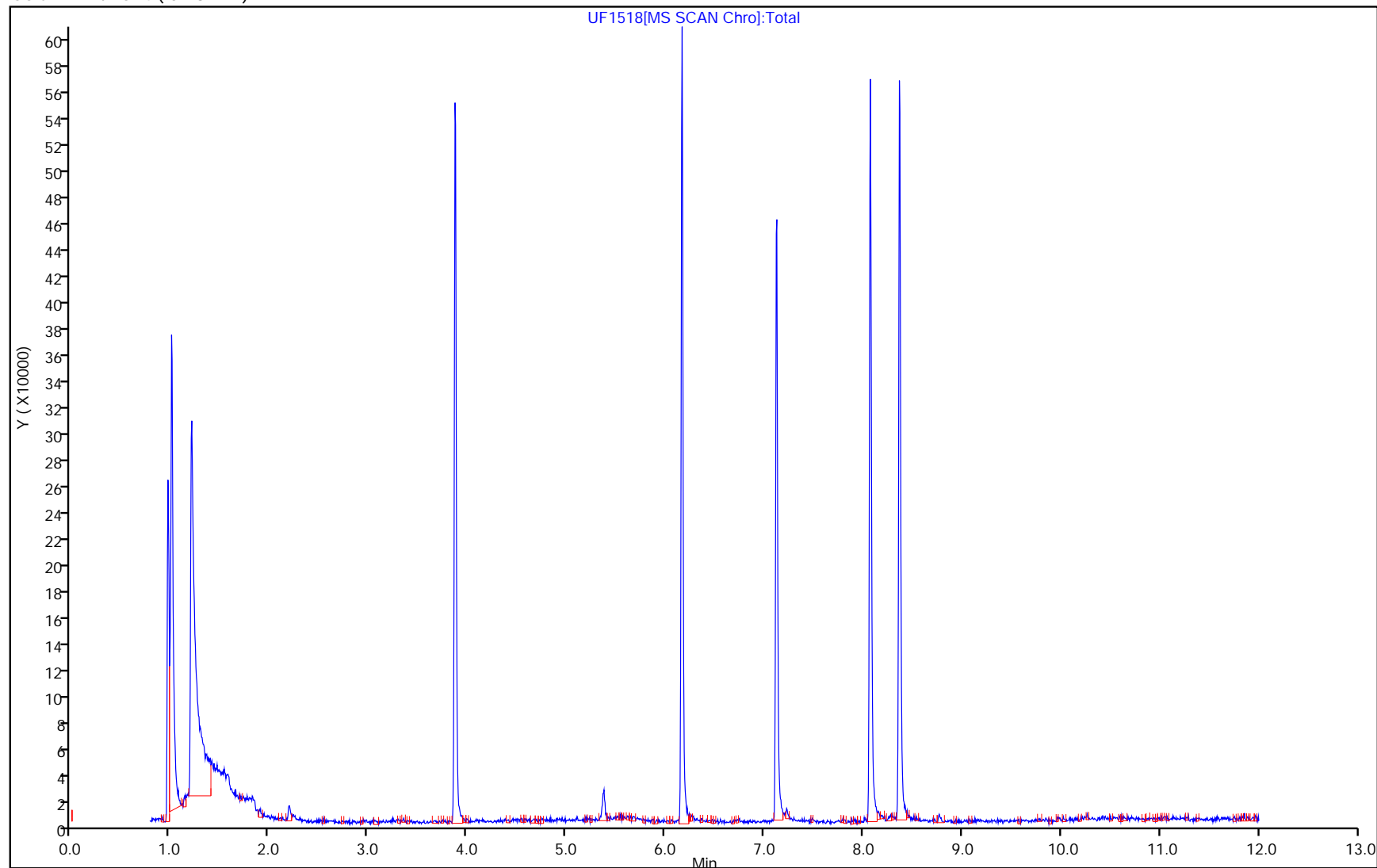
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 16-Jun-2020 10:17:51

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1518.D
 Lims ID: 680-184595-E-2
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 15-Jun-2020 19:47:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-018
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:11:06 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:17:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.08	90.85
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.0	100.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: TB2023-1 Lab Sample ID: 680-184595-3
 Matrix: Water Lab File ID: AGF1613.D
 Analysis Method: 524.2 Date Collected: 06/02/2020 08:00
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 15:25
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	108		70-130
460-00-4	4-Bromofluorobenzene	94		70-130

Report Date: 17-Jun-2020 09:40:38

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1613.D
 Lims ID: 680-184595-C-3
 Client ID: TB2023-1
 Sample Type: Client
 Inject. Date: 16-Jun-2020 15:25:30 ALS Bottle#: 14 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-013
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:39:03 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimstdp Date: 17-Jun-2020 09:40:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	98	418089	10.0	
* 2 Chlorobenzene-d5	117	6.582	6.590	-0.008	93	276931	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.735	8.737	-0.002	95	116099	10.0	
\$ 4 4-Bromofluorobenzene	95	7.646	7.634	0.012	85	157773	9.41	
\$ 5 1,2-Dichlorobenzene-d4	152	9.113	9.108	0.005	91	124449	10.8	

Reagents:

524 ISSU/2016_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 17-Jun-2020 09:40:38

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1613.D

Injection Date: 16-Jun-2020 15:25:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: 680-184595-C-3

Lab Sample ID: 680-184595-3

Worklist Smp#: 13

Client ID: TB2023-1

Purge Vol: 5.000 mL

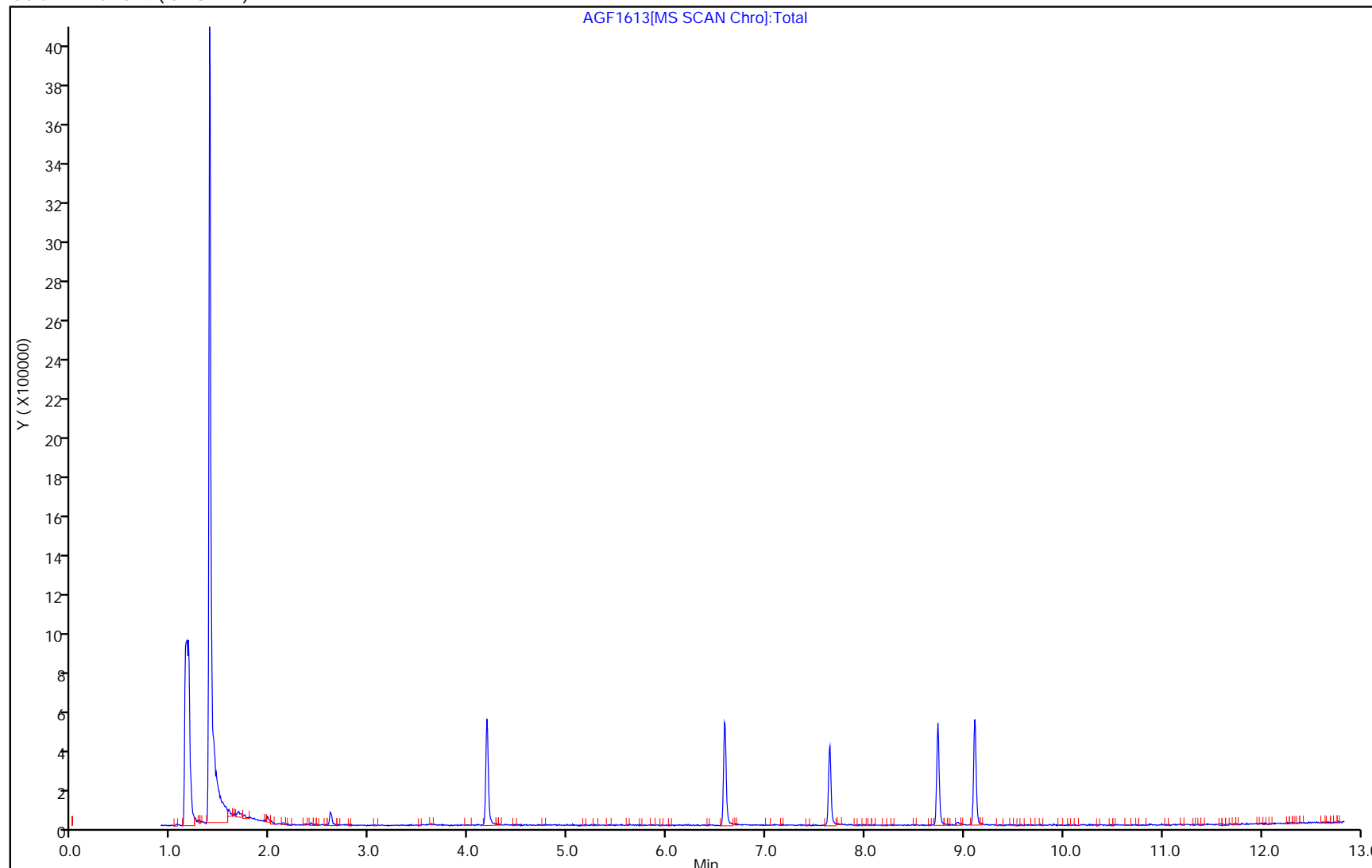
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:40:38

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1613.D
 Lims ID: 680-184595-C-3
 Client ID: TB2023-1
 Sample Type: Client
 Inject. Date: 16-Jun-2020 15:25:30 ALS Bottle#: 14 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-013
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:39:03 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:40:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.41	94.08
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.8	108.20

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621037/7	AGF0307.D
Level 2	IC 680-621037/8	AGF0308.D
Level 3	IC 680-621037/9	AGF0309.D
Level 4	IC 680-621037/10	AGF0310.D
Level 5	IC 680-621037/11	AGF0311.D
Level 6	ICIS 680-621037/12	AGF0312.D
Level 7	IC 680-621037/13	AGF0313.D
Level 8	IC 680-621037/14	AGF0314.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 5													
Dichlorodifluoromethane	0.3439 0.3724	0.3728 0.3343	0.3893 0.3201	0.3922	0.3545	Ave	0.3599				7.2		20.0				
Chloromethane	0.5521 0.4613	0.4310 0.3985	0.4228 0.4266	0.4944	0.4450	Ave	0.4540				10.8		20.0				
Vinyl chloride	0.3935 0.3696	0.3953 0.3675	0.4525 0.3798	0.4306	0.3544	Ave	0.3929				8.5		20.0				
Bromomethane	0.0791 0.0777	0.0948 0.0796	0.0752 0.0839	0.0691	0.0650	Ave	0.0781				11.6		20.0				
Chloroethane	0.1513 0.2261	0.1523 0.1859	0.2401 0.2040	0.2168	0.1797	Ave	0.1945				16.9		20.0				
Trichlorofluoromethane	0.2873 0.3499	0.4029 0.3269	0.3378 0.3848	0.4094	0.3708	Ave	0.3587				11.5		20.0				
Freon 113	0.1600 0.1601	0.1446 0.1376	0.1573 0.1445	0.1832	0.1495	Ave	0.1546				9.1		20.0				
1,1-Dichloroethene	0.2202 0.2181	0.2294 0.2016	0.2364 0.2087	0.2397	0.2155	Ave	0.2212				6.0		20.0				
Acetone	++++ 0.0352	++++ 0.0284	0.0339 ++++	0.0376	0.0269	Ave	0.0324				14.1		20.0				
Methylene Chloride	2.0007 0.3458	1.0407 0.2650	0.7322 0.2810	0.4239	0.3591	Lin1	0.8499	0.2689						0.9950		0.9900	
tert-Butyl alcohol	0.0256 0.0358	0.0335 0.0325	0.0246 0.0371	0.0364	0.0309	Ave	0.0320				14.9		20.0				
Methyl tert-butyl ether	0.8945 0.9976	1.0021 0.8348	0.8972 0.9718	1.0165	0.7973	Ave	0.9265				8.9		20.0				
trans-1,2-Dichloroethene	0.1938 0.2600	0.2195 0.2157	0.2437 0.2166	0.2604	0.2405	Ave	0.2313				10.2		20.0				
1,1-Dichloroethane	0.4541 0.5800	0.5603 0.5229	0.5543 0.5388	0.5738	0.4962	Ave	0.5350				8.0		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037
 SDG No.: _____
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	0.7405 1.0200	0.9657 0.8757	0.9933 1.0106	0.9825	0.9250	Ave		0.9392			9.9		20.0				
2,2-Dichloropropane	0.4358 0.4131	0.4006 0.3681	0.4276 0.3509	0.4269	0.3775	Ave		0.4000			7.8		20.0				
cis-1,2-Dichloroethene	0.5120 0.5325	0.4861 0.4623	0.5122 0.4462	0.5084	0.4215	Ave		0.4851			7.9		20.0				
2-Butanone (MEK)	++++ 0.0341	++++ 0.0387	0.0387 ++++	0.0424	0.0340	Ave		0.0376			9.5		20.0				
Chlorobromomethane	0.1548 0.1446	0.1824 0.1309	0.1654 0.1216	0.1529	0.1410	Ave		0.1492			12.9		20.0				
Chloroform	0.5105 0.4924	0.4735 0.4313	0.5614 0.4865	0.5184	0.4596	Ave		0.4917			8.1		20.0				
1,1,1-Trichloroethane	0.5733 0.6441	0.6108 0.5686	0.5834 0.6761	0.6374	0.5576	Ave		0.6064			7.0		20.0				
1,1-Dichloropropene	0.6402 0.6223	0.5935 0.5780	0.5560 0.6045	0.6193	0.5545	Ave		0.5960			5.3		20.0				
Carbon tetrachloride	0.4338 0.5115	0.4511 0.4530	0.4904 0.5504	0.4320	0.4248	Ave		0.4684			9.6		20.0				
Benzene	1.8342 1.9322	1.6823 1.7043	1.8469 1.9690	1.7654	1.6912	Ave		1.8032			6.1		20.0				
Tert-amyl methyl ether	0.7936 0.9194	0.7618 0.7836	0.9045 0.8911	0.9236	0.8556	Ave		0.8542			7.7		20.0				
1,2-Dichloroethane	0.7659 0.7060	0.6379 0.6218	0.5122 0.7220	0.6757	0.5929	Ave		0.6543			12.3		20.0				
Trichloroethene	0.3510 0.3639	0.2760 0.3086	0.3243 0.3513	0.3157	0.2874	Ave		0.3223			9.8		20.0				
1,2-Dichloropropane	0.5485 0.4910	0.2907 0.4686	0.4546 0.5089	0.4557	0.4474	Ave		0.4582			16.5		20.0				
Dibromomethane	0.2135 0.2654	0.2410 0.2316	0.2861 0.2652	0.2208	0.2282	Ave		0.2440			10.5		20.0				
Dichlorobromomethane	0.5794 0.5963	0.4580 0.5318	0.5675 0.6003	0.5234	0.4802	Ave		0.5421			9.8		20.0				
cis-1,3-Dichloropropene	0.6875 0.7058	0.5487 0.6340	0.6548 0.7462	0.6973	0.6414	Ave		0.6645			9.0		20.0				
4-Methyl-2-pentanone (MIBK)	0.5210 0.6372	0.4801 0.5577	0.5168 ++++	0.5508	0.4755	Ave		0.5342			10.3		20.0				
Toluene	1.1568 1.0989	0.9913 0.9542	0.9358 1.1130	1.0293	0.9806	Ave		1.0325			7.9		20.0				
trans-1,3-Dichloropropene	0.7515 0.7176	0.5813 0.6357	0.5695 0.7503	0.6410	0.6054	Ave		0.6565			11.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037
SDG No.: _____
Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloroethane	0.3715 0.3538	0.3080 0.3249	0.3169 0.3383	0.3378	0.2996	Ave		0.3314			7.2		20.0				
Tetrachloroethene	0.3578 0.5305	0.5032 0.5626	0.5365 0.5021	0.5549	0.5367	Ave		0.5105			12.8		20.0				
1,3-Dichloropropane	0.7861 0.8103	0.6750 0.7226	0.7399 0.7372	0.7506	0.6556	Ave		0.7347			7.0		20.0				
2-Hexanone	0.6051 0.8644	0.8010 0.9032	0.7444 +++++	0.8779	0.8097	Ave		0.8008			12.7		20.0				
Chlorodibromomethane	0.7236 0.6858	0.6858 0.7761	0.7058 0.7952	0.7050	0.6862	Ave		0.7204			5.9		20.0				
Ethylene Dibromide	0.3211 0.4183	0.3030 0.3611	0.3189 0.3854	0.3524	0.3353	Ave		0.3494			11.0		20.0				
Chlorobenzene	1.0587 1.0927	0.9473 1.0118	0.9392 1.0702	1.0575	0.9701	Ave		1.0184			5.9		20.0				
Ethylbenzene	3.6126 4.2375	4.1745 4.3283	4.0836 4.0329	4.2419	4.1125	Ave		4.1030			5.4		20.0				
1,1,1,2-Tetrachloroethane	0.8246 0.6985	0.7318 0.6961	0.6672 0.6814	0.7143	0.6673	Ave		0.7102			7.2		20.0				
m-Xylene & p-Xylene	2.5621 3.3798	3.0683 3.5146	3.2165 3.3601	3.3322	3.1299	Ave		3.1954			9.2		20.0				
o-Xylene	2.9046 3.3009	3.2687 3.5123	3.2735 3.3689	3.3295	3.2578	Ave		3.2770			5.2		20.0				
Styrene	1.9286 2.4983	2.2692 2.5431	2.0235 2.5699	2.1275	2.2463	Ave		2.2758			10.7		20.0				
Bromoform	0.3341 0.4115	0.4193 0.4464	0.3225 0.4854	0.4219	0.3822	Ave		0.4029			13.6		20.0				
Isopropylbenzene	2.9909 4.1183	3.6036 4.2061	3.9246 4.2332	3.7193	3.6921	Ave		3.8110			10.8		20.0				
Bromobenzene	0.8113 0.7880	0.7977 0.7440	0.8412 0.7630	0.7772	0.7328	Ave		0.7819			4.6		20.0				
1,1,2,2-Tetrachloroethane	1.1562 1.2118	1.1884 1.1455	1.2156 1.0608	1.3211	1.1350	Ave		1.1793			6.4		20.0				
1,2,3-Trichloropropane	0.2525 0.3509	0.3743 0.3095	0.3047 0.3269	0.3483	0.3436	Ave		0.3263			11.5		20.0				
N-Propylbenzene	4.7702 5.5090	4.9269 5.1809	5.1237 4.8472	5.0807	5.2772	Ave		5.0895			4.7		20.0				
2-Chlorotoluene	2.7478 3.0045	2.8767 2.8731	3.1170 3.1882	3.0479	2.8676	Ave		2.9654			5.0		20.0				
1,3,5-Trimethylbenzene	3.2144 3.5817	3.0376 3.3188	3.1251 3.3372	3.1579	3.4179	Ave		3.2738			5.4		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	3.2636 3.3709	2.9790 3.1675	3.2203 3.3502	3.1368	3.1578	Ave		3.2058			3.9		20.0				
tert-Butylbenzene	2.4396 2.8336	2.7896 2.5809	2.6110 2.8133	2.8474	2.6882	Ave		2.7004			5.4		20.0				
1,2,4-Trimethylbenzene	2.5732 3.5355	3.1658 3.2263	3.1000 3.6219	3.4658	3.3764	Ave		3.2581			10.2		20.0				
sec-Butylbenzene	4.0401 4.3816	4.5102 4.4872	4.2065 4.3490	4.1674	4.5428	Ave		4.3356			4.2		20.0				
4-Isopropyltoluene	3.1164 3.5727	2.9414 3.6841	3.6296 3.6556	3.4097	3.5585	Ave		3.4460			8.0		20.0				
1,3-Dichlorobenzene	1.7186 1.6530	1.6427 1.4607	1.4443 1.5751	1.5495	1.4712	Ave		1.5644			6.5		20.0				
1,4-Dichlorobenzene	1.7381 1.5933	1.7040 1.6286	1.6486 1.6832	1.7391	1.5870	Ave		1.6652			3.6		20.0				
n-Butylbenzene	3.3071 4.0453	3.6402 3.7336	3.6871 3.7831	3.4979	3.8034	Ave		3.6872			5.9		20.0				
1,2-Dichlorobenzene	1.6720 1.6354	1.7468 1.5421	1.7382 1.5021	1.5298	1.5577	Ave		1.6155			6.0		20.0				
1,2-Dibromo-3-Chloropropane	0.1849 0.1985	0.2401 0.2096	0.1996 0.2196	0.1976	0.1779	Ave		0.2035			9.7		20.0				
1,2,4-Trichlorobenzene	0.7421 0.8556	0.8340 0.8227	0.7956 0.8107	0.8897	0.8051	Ave		0.8194			5.3		20.0				
Hexachlorobutadiene	0.3534 0.3716	0.3529 0.3704	0.4171 0.3663	0.3678	0.3658	Ave		0.3707			5.4		20.0				
Naphthalene	2.3619 3.0729	2.6980 2.8988	2.5006 2.8656	3.0083	2.7620	Ave		2.7710			8.8		20.0				
1,2,3-Trichlorobenzene	0.6863 0.8031	0.7476 0.7853	0.7559 0.7463	0.8246	0.7870	Ave		0.7670			5.6		20.0				
4-Bromofluorobenzene	0.3814 0.4118	0.3815 0.3690	0.4094 0.4126	0.4518	0.3915	Ave		0.4011			6.5		20.0				
1,2-Dichlorobenzene-d4 (Surr)	1.0631 0.9486	1.0189 0.9880	1.0251 0.8669	0.9948	1.0202	Ave		0.9907			6.1		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037
SDG No.:
Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

Calibration Files:

Table with 3 columns: LEVEL, LAB SAMPLE ID, LAB FILE ID. Rows include Level 1 through Level 8 with corresponding sample IDs and file names.

Main data table with columns: ANALYTE, IS REF, CURVE TYPE, RESPONSE (LVL 1-5), and CONCENTRATION (UG/L) (LVL 1-5). Rows list various analytes like Dichlorodifluoromethane, Chloromethane, Vinyl chloride, etc.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,2-Dichloropropane	FB	Ave	9971 390442	19260 976200	39473 1748455	92078	182278	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	11715 503328	23373 1225890	47281 2223608	109653	203540	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	++++ 161021	++++ 513582	17871 ++++	45696	82148	++++ 100	++++ 250	10.0 ++++	25.0	50.0
Chlorobromomethane	FB	Ave	3541 136646	8768 347047	15270 605930	32988	68078	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroform	FB	Ave	11679 465448	22767 1143764	51825 2424470	111826	221920	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	CBNZ d5	Ave	8024 408313	20497 1001196	38117 2082391	101789	189874	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	CBNZ d5	Ave	8961 394479	19918 1017911	36328 1861968	98894	188807	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	CBNZ d5	Ave	6072 324235	15138 797677	32042 1695215	68978	144650	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	CBNZ d5	Ave	25673 1224804	56456 3001242	120674 6064818	281909	575865	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tert-amyl methyl ether	FB	Ave	14526 695267	29302 1662386	66795 3552483	159380	330554	0.400 16.0	0.800 40.0	1.60 80.0	4.00	8.00
1,2-Dichloroethane	CBNZ d5	Ave	10720 447533	21409 1094924	33464 2223720	107898	201886	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	CBNZ d5	Ave	4913 230675	9264 543381	21192 1082039	50414	97871	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	CBNZ d5	Ave	7677 311262	9757 825123	29704 1567381	72770	152346	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	CBNZ d5	Ave	2988 168220	8089 407842	18695 816710	35254	77721	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorobromomethane	CBNZ d5	Ave	8109 377985	15369 936532	37079 1849012	83576	163510	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	9623 447400	18413 1116380	42786 2298310	111344	218419	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	36459 2019695	80559 4910626	168833 ++++	439805	809547	2.50 100	5.00 250	10.0 ++++	25.0	50.0
Toluene	CBNZ d5	Ave	16191 696598	33267 1680285	61146 3428078	164373	333922	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	10518 454865	19508 1119443	37211 2310975	102368	206138	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	5200 224268	10335 572088	20709 1042149	53943	102025	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	DCBd 4	Ave	2477 176421	7677 454482	16610 830615	42353	82716	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3-Dichloropropane	CBNZ d5	Ave	11003 513642	22654 1272392	48342 2270684	119868	223258	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	DCBd 4	Ave	20947 1437372	61105 3648222	115233 +++++	335023	623918	2.50 100	5.00 250	10.0 +++++	25.0	50.0
Chlorodibromomethane	DCBd 4	Ave	5010 228055	10464 626968	21851 1315418	53806	105755	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	4495 265180	10169 635890	20835 1186992	56280	114162	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	14819 692672	31790 1781694	61363 3296238	168877	330333	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	DCBd 4	Ave	25012 1409184	63692 3496448	126427 6670865	323748	633778	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	DCBd 4	Ave	5709 232293	11166 562343	20656 1127095	54515	102843	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
m-Xylene & p-Xylene	DCBd 4	Ave	17739 1123946	46814 2839183	99583 5557977	254317	482350	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	DCBd 4	Ave	20110 1097720	49871 2837299	101349 5572620	254115	502054	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	DCBd 4	Ave	13353 830830	34622 2054387	62647 4250922	162372	346171	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	DCBd 4	Ave	2313 136840	6397 360573	9985 802910	32200	58894	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	20708 1369565	54981 3397792	121507 7002214	283862	568987	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5617 262049	12171 601003	26045 1262152	59319	112926	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8005 402982	18132 925384	37636 1754719	100827	174909	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1748 116679	5711 250022	9435 540663	26582	52951	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	33027 1832025	75171 4185275	158630 8017904	387772	813263	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	19025 999160	43891 2320936	96502 5273676	232622	441923	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	22255 1191108	46346 2680953	96752 5520222	241018	526729	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	22596 1121006	45451 2558774	99700 5541673	239404	486655	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	16891 942312	42562 2084901	80836 4653631	217316	414272	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	17816 1175727	48302 2606269	95975 5991087	264513	520331	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

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Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
sec-Butylbenzene	DCBd 4	Ave	27972 1457121	68813 3624819	130234 7193845	318068	700098	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	21577 1188093	44878 2976122	112371 6046892	260233	548398	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	11899 549723	25063 1180009	44717 2605351	118258	226726	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	12034 529847	25998 1315639	51040 2784218	132735	244567	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	22897 1345281	55539 3016038	114152 6257659	266969	586148	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	11576 543850	26652 1245744	53814 2484606	116759	240060	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1280 66001	3663 169332	6179 363301	15084	27412	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	5138 284531	12724 664556	24633 1341054	67907	124068	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	2447 123563	5385 299195	12912 605958	28072	56374	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	16353 1021900	41164 2341679	77418 4740107	229598	425654	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	4752 267075	11406 634364	23404 1234515	62932	121277	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Bromofluorobenzene	FB	Ave	174521 194623	183430 195715	188950 205615	194915	189050	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0
1,2-Dichlorobenzene-d4 (Surr)	DCBd 4	Ave	147210 157727	155463 159620	158684 143402	151857	157227	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621037
 SDG No.: _____
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621037/7	AGF0307.D
Level 2	IC 680-621037/8	AGF0308.D
Level 3	IC 680-621037/9	AGF0309.D
Level 4	IC 680-621037/10	AGF0310.D
Level 5	IC 680-621037/11	AGF0311.D
Level 6	ICIS 680-621037/12	AGF0312.D
Level 7	IC 680-621037/13	AGF0313.D
Level 8	IC 680-621037/14	AGF0314.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #					LVL 7	LVL 8				
Methylene Chloride	11.9						30					

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 03-Jun-2020 14:08:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-007
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:23 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: proctors

Date: 03-Jun-2020 14:48:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.184	0.000	97	457586	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.586	6.586	0.000	93	279934	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	95	138472	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.644	7.645	-0.001	85	174521	10.0	9.51	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	91	147210	10.0	10.7	
7 Dichlorodifluoromethane	85	1.301	1.302	-0.001	36	7869	0.5000	0.4778	a
8 Chloromethane	50	1.483	1.478	0.005	42	12632	0.5000	0.6081	M
9 Vinyl chloride	62	1.514	1.515	-0.001	95	9003	0.5000	0.5008	
10 Bromomethane	94	1.751	1.746	0.005	11	1809	0.5000	0.5065	M
11 Chloroethane	64	1.800	1.800	0.000	56	3461	0.5000	0.3888	
12 Trichlorofluoromethane	101	1.958	1.959	-0.001	94	6573	0.5000	0.4004	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.268	2.269	-0.001	56	3661	0.5000	0.5175	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	92	5038	0.5000	0.4977	
15 Acetone	58	2.353	2.342	0.011	89	9122	2.50	6.16	
16 Methylene Chloride	84	2.609	2.609	-0.001	99	45775	0.5000	0.5597	
17 2-Methyl-2-propanol	59	2.657	2.664	-0.007	59	5848	5.00	3.99	M
18 Methyl tert-butyl ether	73	2.736	2.743	-0.007	99	20466	0.5000	0.4828	
19 trans-1,2-Dichloroethene	96	2.773	2.767	0.006	85	4433	0.5000	0.4189	M
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	97	10389	0.5000	0.4243	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	87	13553	0.4000	0.3154	M
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	93	9971	0.5000	0.5447	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	81	11715	0.5000	0.5277	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	95	3410	2.50	1.98	
26 Chlorobromomethane	130	3.600	3.594	0.006	81	3541	0.5000	0.5187	M
27 Chloroform	83	3.630	3.619	0.011	97	11679	0.5000	0.5191	
28 1,1,1-Trichloroethane	97	3.740	3.734	0.006	94	8024	0.5000	0.4727	
30 1,1-Dichloropropene	75	3.843	3.844	-0.001	90	8961	0.5000	0.5371	
29 Carbon tetrachloride	117	3.843	3.850	-0.007	82	6072	0.5000	0.4631	
31 Benzene	78	4.001	4.002	-0.001	94	25673	0.5000	0.5086	
33 Tert-amyl methyl ether	73	4.032	4.026	0.006	95	14526	0.4000	0.3717	
32 1,2-Dichloroethane	62	4.032	4.032	0.000	77	10720	0.5000	0.5853	

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	90	4913	0.5000	0.5446	
35 1,2-Dichloropropane	63	4.634	4.628	0.006	92	7677	0.5000	0.5986	
36 Dibromomethane	93	4.737	4.738	-0.001	69	2988	0.5000	0.4375	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	94	8109	0.5000	0.5344	
38 cis-1,3-Dichloropropene	75	5.169	5.170	-0.001	90	9623	0.5000	0.5174	
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	97	36459	2.50	2.44	
40 Toluene	92	5.406	5.419	-0.013	94	16191	0.5000	0.5602	Ma
41 trans-1,3-Dichloropropene	75	5.613	5.613	0.000	94	10518	0.5000	0.5723	
42 1,1,2-Trichloroethane	83	5.771	5.778	-0.007	84	5200	0.5000	0.5606	
43 Tetrachloroethene	164	5.862	5.863	-0.001	63	2477	0.5000	0.3504	
44 1,3-Dichloropropane	76	5.917	5.911	0.006	82	11003	0.5000	0.5350	
45 2-Hexanone	43	5.953	5.948	0.005	96	20947	2.50	1.89	
46 Chlorodibromomethane	129	6.111	6.112	-0.001	70	5010	0.5000	0.5022	
47 Ethylene Dibromide	107	6.215	6.216	-0.001	79	4495	0.5000	0.4595	
48 Chlorobenzene	112	6.616	6.611	0.005	93	14819	0.5000	0.5198	
50 Ethylbenzene	91	6.683	6.678	0.005	97	25012	0.5000	0.4402	
49 1,1,1,2-Tetrachloroethane	131	6.689	6.684	0.005	42	5709	0.5000	0.5806	a
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	93	17739	0.5000	0.4009	
52 o-Xylene	91	7.139	7.140	-0.001	85	20110	0.5000	0.4432	
53 Styrene	104	7.163	7.164	-0.001	87	13353	0.5000	0.4237	
54 Bromoform	173	7.388	7.377	0.011	37	2313	0.5000	0.4146	
55 Isopropylbenzene	105	7.467	7.468	-0.001	96	20708	0.5000	0.3924	
56 Bromobenzene	156	7.802	7.797	0.005	92	5617	0.5000	0.5188	
57 1,1,2,2-Tetrachloroethane	83	7.808	7.803	0.005	79	8005	0.5000	0.4902	
58 1,2,3-Trichloropropane	110	7.845	7.845	0.000	37	1748	0.5000	0.3868	
59 n-Propylbenzene	91	7.851	7.851	0.000	96	33027	0.5000	0.4686	
60 2-Chlorotoluene	91	7.960	7.955	0.005	94	19025	0.5000	0.4633	
61 1,3,5-Trimethylbenzene	105	8.009	8.010	0.000	90	22255	0.5000	0.4909	
62 4-Chlorotoluene	91	8.063	8.058	0.005	95	22596	0.5000	0.5090	
63 tert-Butylbenzene	119	8.319	8.320	-0.001	87	16891	0.5000	0.4517	
64 1,2,4-Trimethylbenzene	105	8.374	8.374	0.000	95	17816	0.5000	0.3949	
65 sec-Butylbenzene	105	8.532	8.526	0.006	98	27972	0.5000	0.4659	
67 4-Isopropyltoluene	119	8.672	8.666	0.006	96	21577	0.5000	0.4522	
66 1,3-Dichlorobenzene	146	8.678	8.678	0.000	86	11899	0.5000	0.5493	
68 1,4-Dichlorobenzene	146	8.757	8.764	-0.007	89	12034	0.5000	0.5219	
70 n-Butylbenzene	91	9.067	9.068	-0.001	91	22897	0.5000	0.4485	
69 1,2-Dichlorobenzene	146	9.128	9.135	-0.007	41	11576	0.5000	0.5175	
71 1,2-Dibromo-3-Chloropropane	157	9.949	9.962	-0.013	8	1280	0.5000	0.4543	M
72 1,2,4-Trichlorobenzene	180	10.885	10.898	-0.013	82	5138	0.5000	0.4528	M
73 Hexachlorobutadiene	225	11.049	11.050	-0.001	70	2447	0.5000	0.4768	M
74 Naphthalene	128	11.177	11.178	-0.001	97	16353	0.5000	0.4262	
75 1,2,3-Trichlorobenzene	180	11.439	11.427	0.012	88	4752	0.5000	0.4474	
S 76 Xylenes, Total	1				0		1.00	0.8441	
S 77 Trihalomethanes, Total	1				0			1.97	
S 78 1,3-Dichloropropene, Total	1				0		1.00	1.09	

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.05

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D

Injection Date: 03-Jun-2020 14:08:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

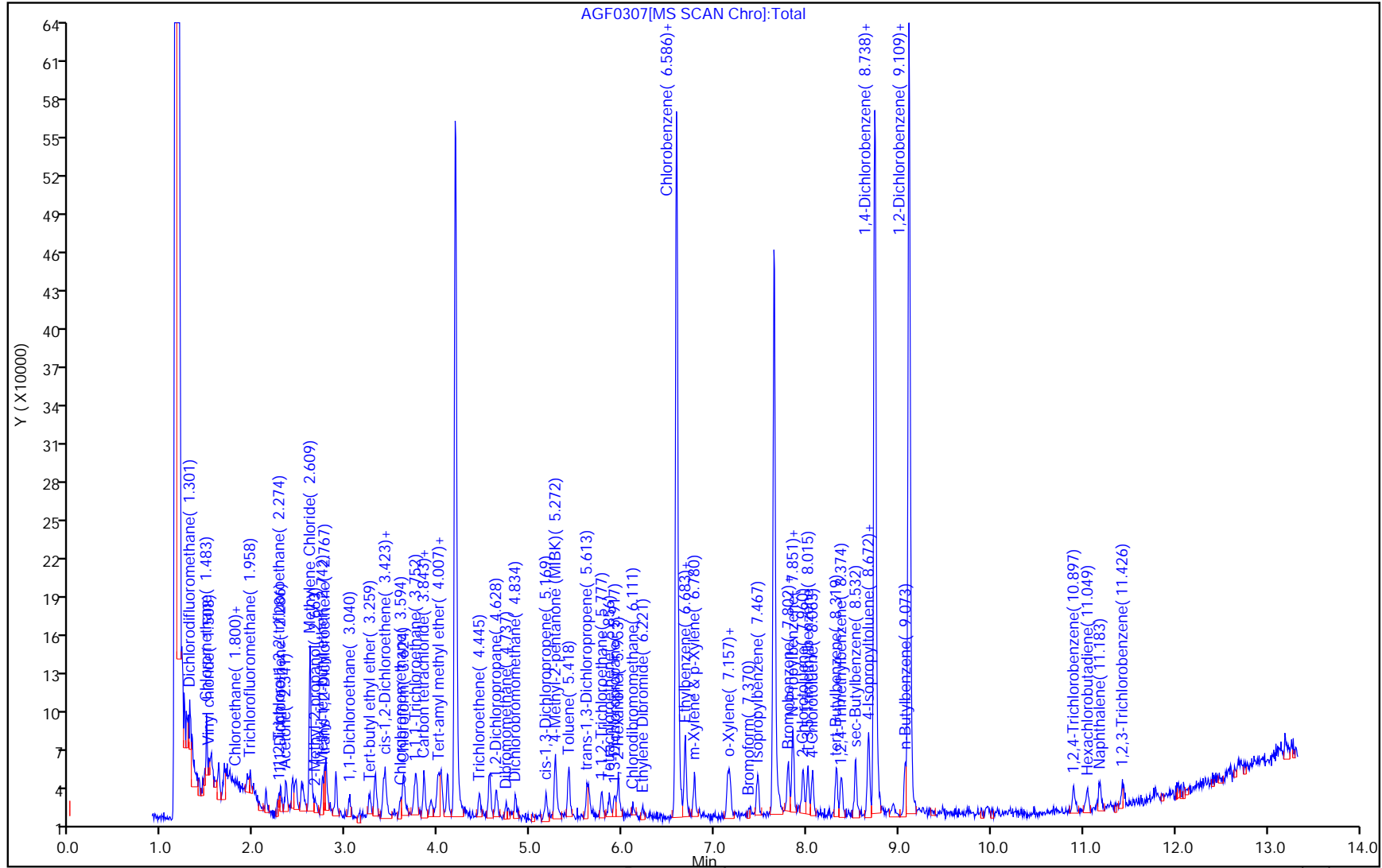
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

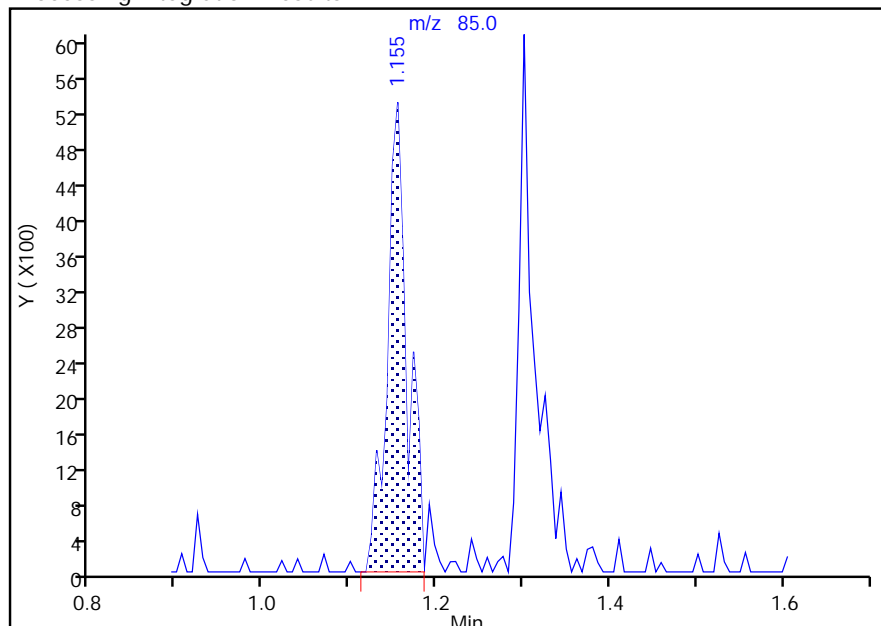
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

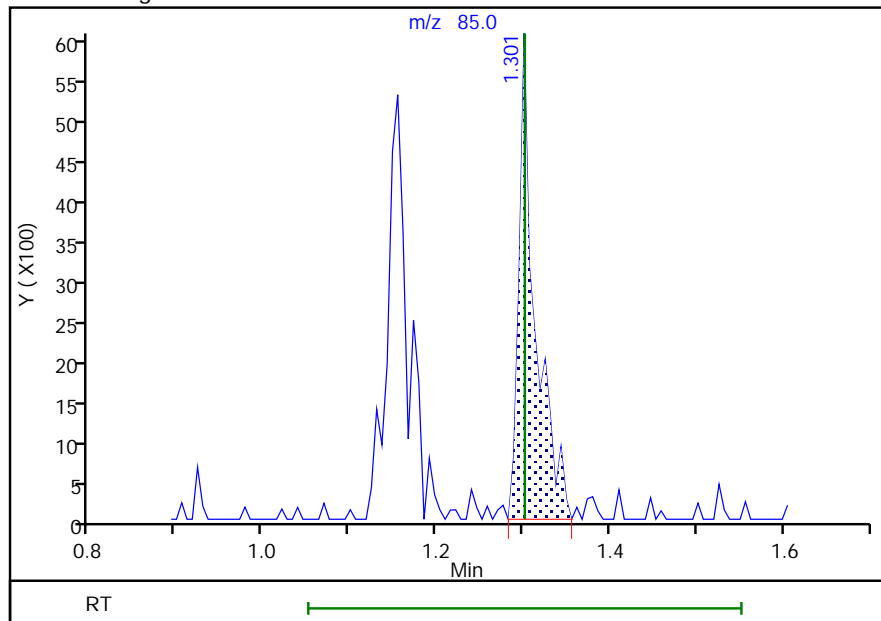
RT: 1.16
Area: 8471
Amount: 0.508254
Amount Units: ug/l

Processing Integration Results



RT: 1.30
Area: 7869
Amount: 0.477756
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:58:15

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

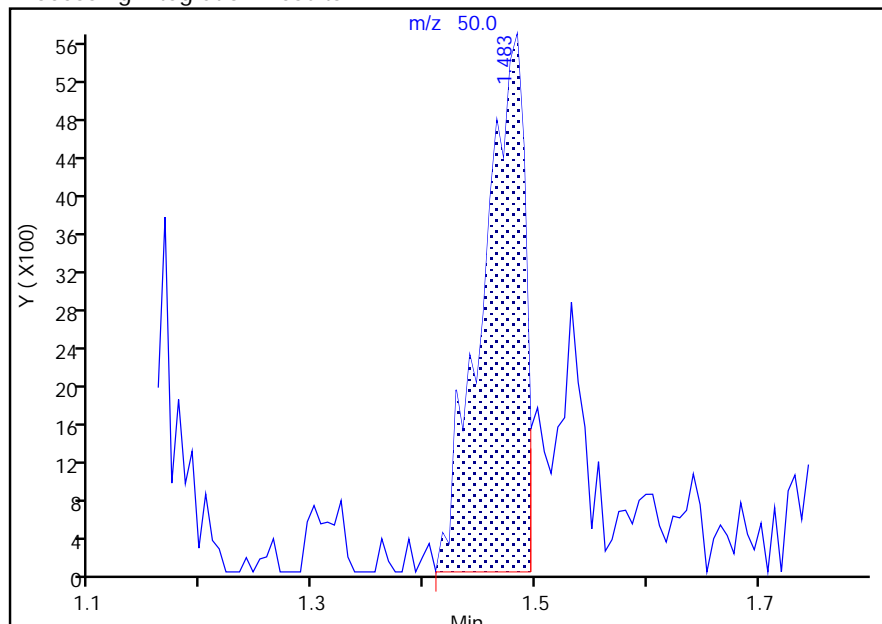
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

8 Chloromethane, CAS: 74-87-3

Signal: 1

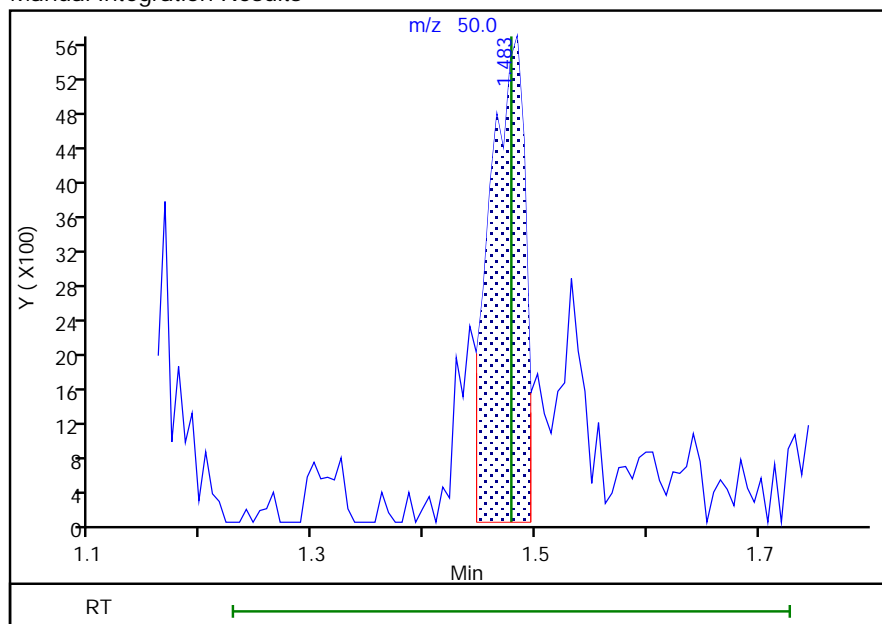
RT: 1.48
 Area: 14949
 Amount: 0.698384
 Amount Units: ug/l

Processing Integration Results



RT: 1.48
 Area: 12632
 Amount: 0.608092
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:41:46
 Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

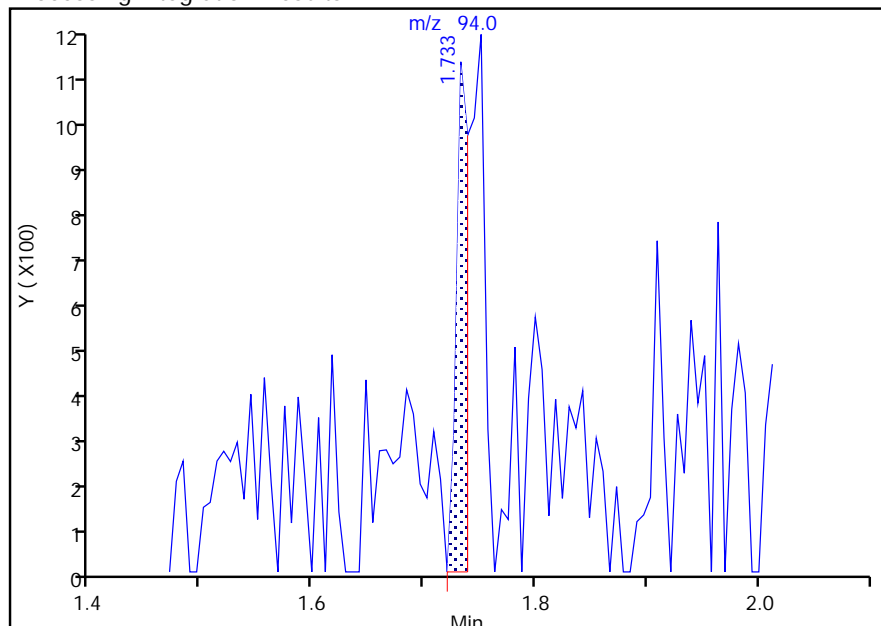
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

10 Bromomethane, CAS: 74-83-9

Signal: 1

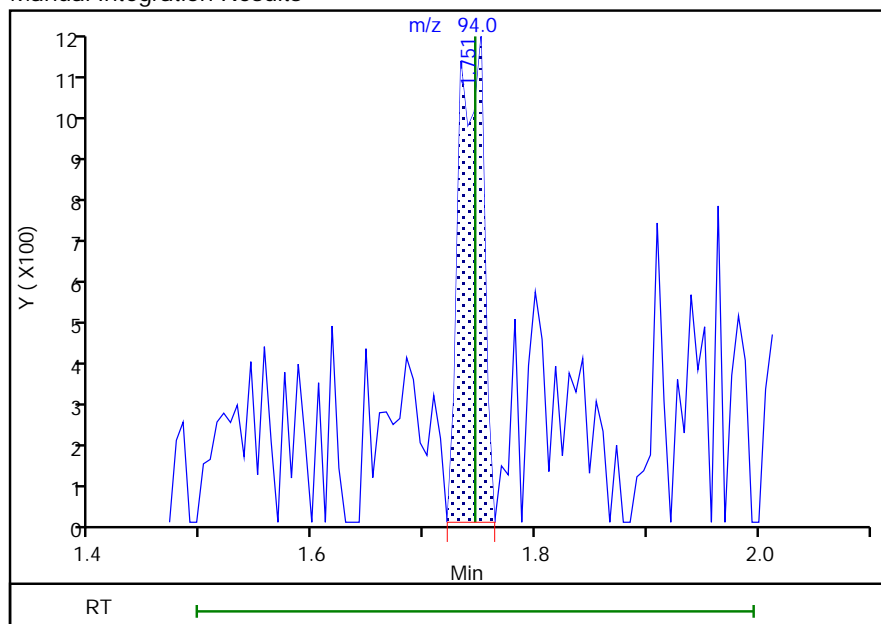
RT: 1.73
Area: 886
Amount: 0.417443
Amount Units: ug/l

Processing Integration Results



RT: 1.75
Area: 1809
Amount: 0.506455
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:17

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

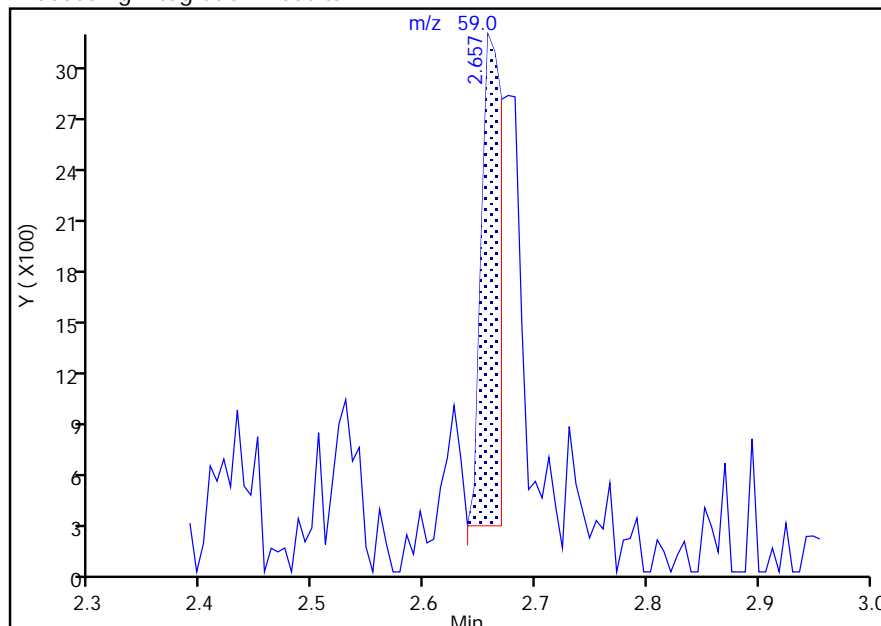
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

17 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

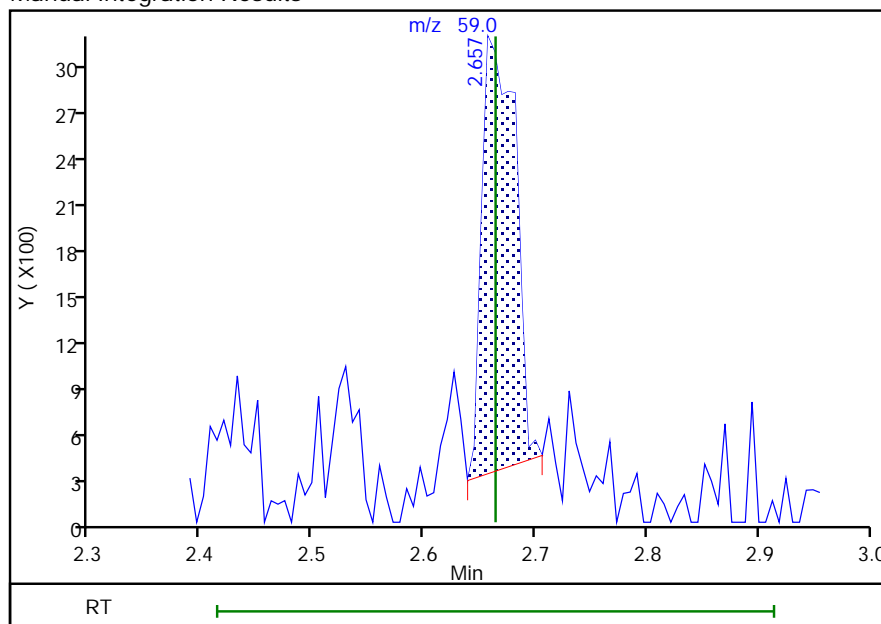
RT: 2.66
Area: 3688
Amount: 4.948195
Amount Units: ug/l

Processing Integration Results



RT: 2.66
Area: 5848
Amount: 3.990141
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:29

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

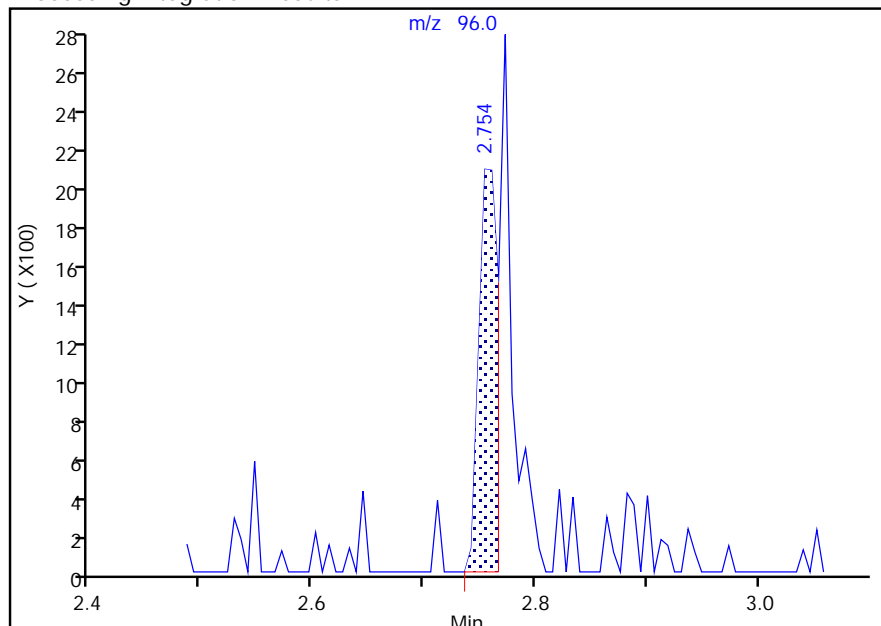
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

19 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

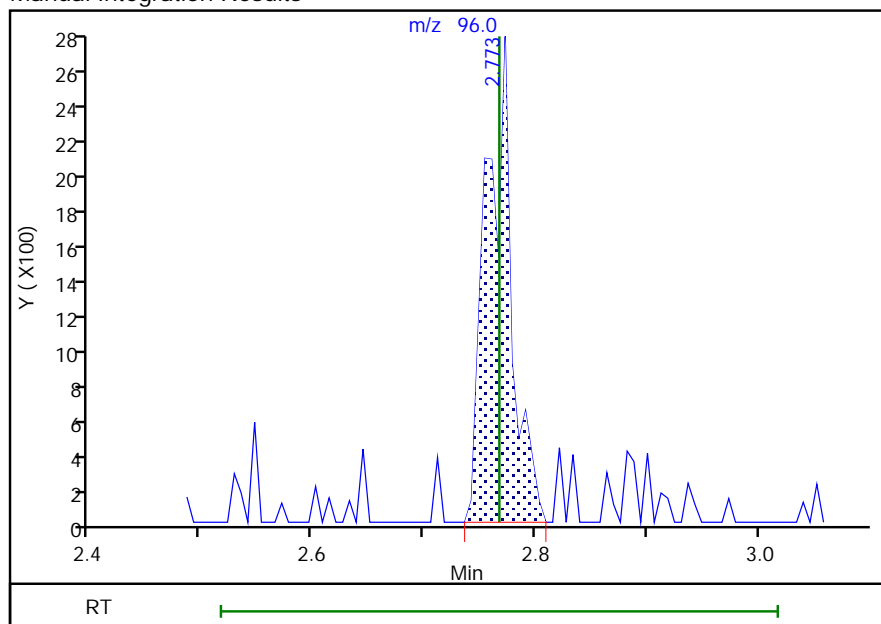
RT: 2.75
Area: 2504
Amount: 0.266132
Amount Units: ug/l

Processing Integration Results



RT: 2.77
Area: 4433
Amount: 0.418888
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:39

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

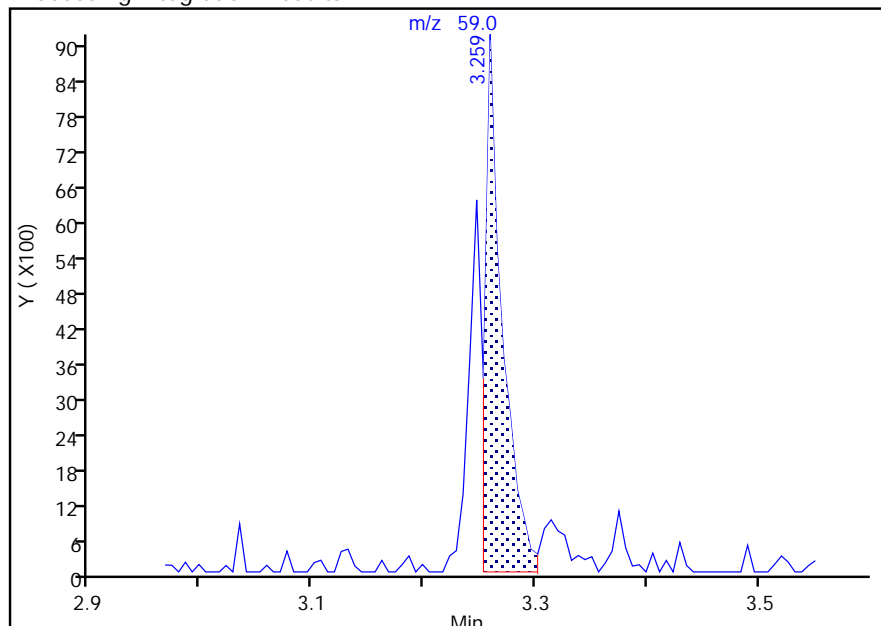
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

22 Tert-butyl ethyl ether, CAS: 637-92-3

Signal: 1

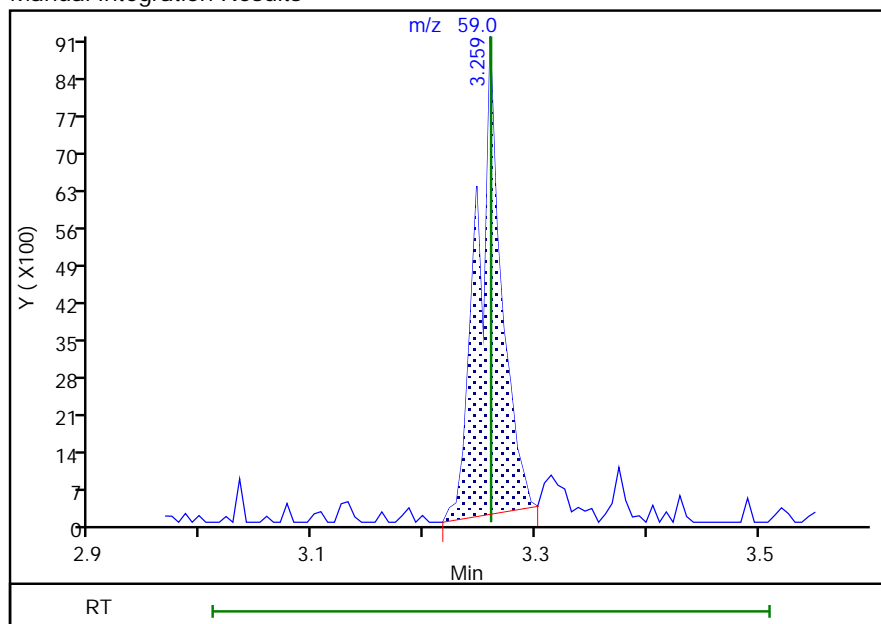
RT: 3.26
Area: 9993
Amount: 0.238043
Amount Units: ug/l

Processing Integration Results



RT: 3.26
Area: 13553
Amount: 0.315375
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:51

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

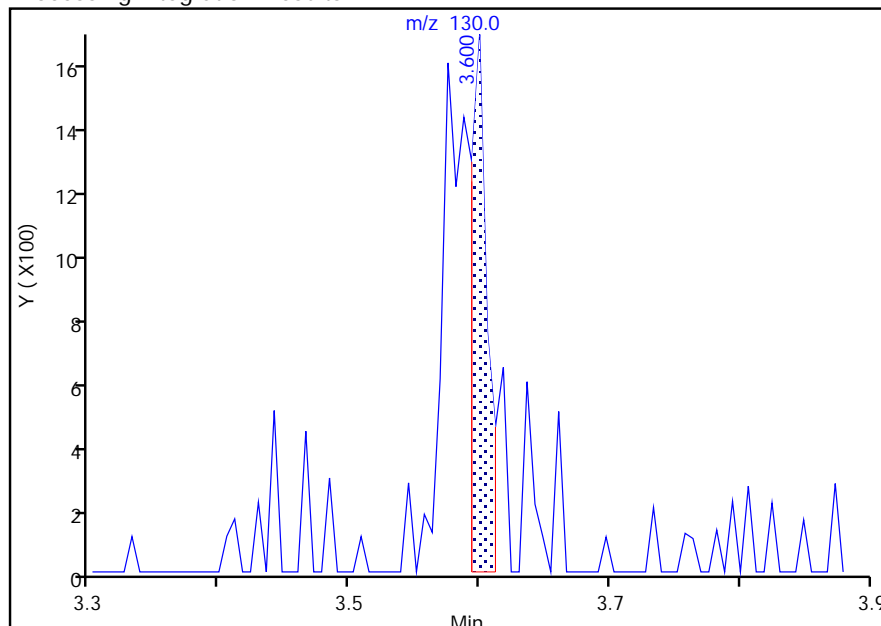
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

26 Chlorobromomethane, CAS: 74-97-5

Signal: 1

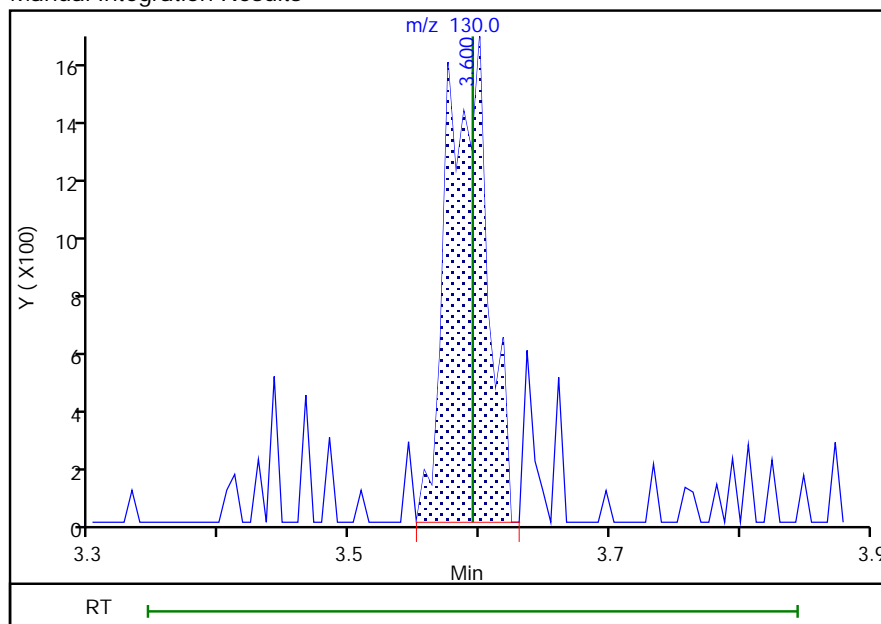
RT: 3.60
Area: 1484
Amount: 0.086888
Amount Units: ug/l

Processing Integration Results



RT: 3.60
Area: 3541
Amount: 0.518717
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:59:02

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

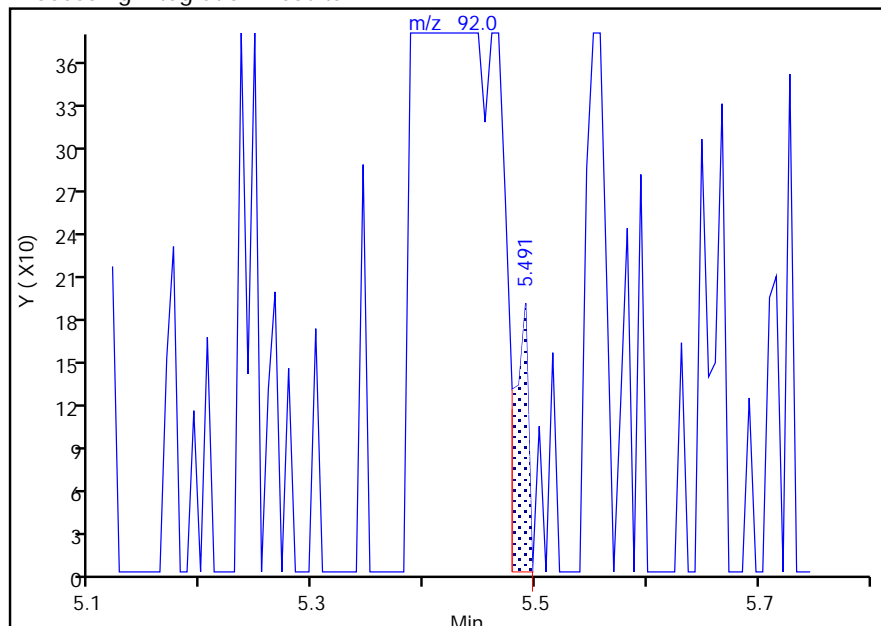
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

40 Toluene, CAS: 108-88-3

Signal: 1

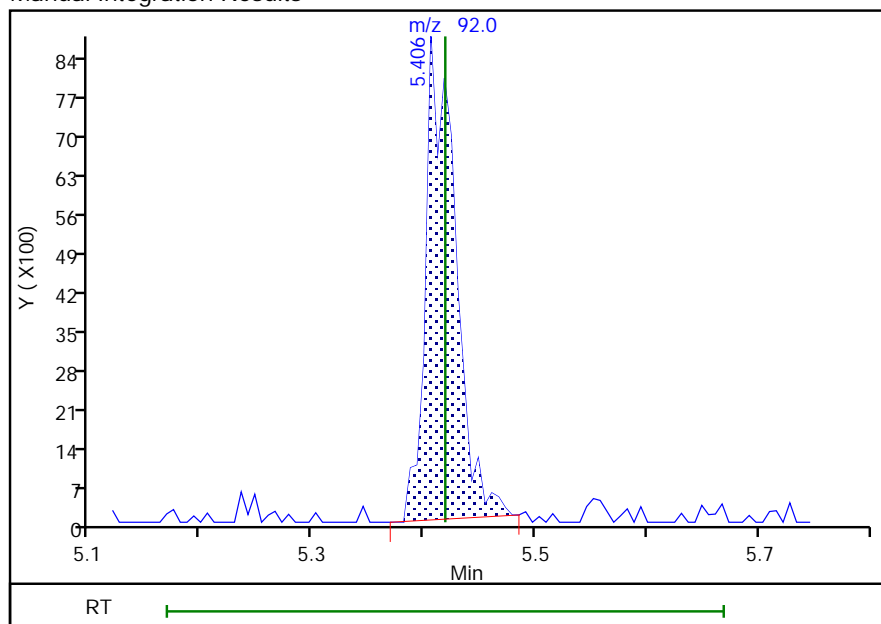
RT: 5.49
Area: 165
Amount: 0.277632
Amount Units: ug/l

Processing Integration Results



RT: 5.41
Area: 16191
Amount: 0.560184
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 03-Jun-2020 14:48:14

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

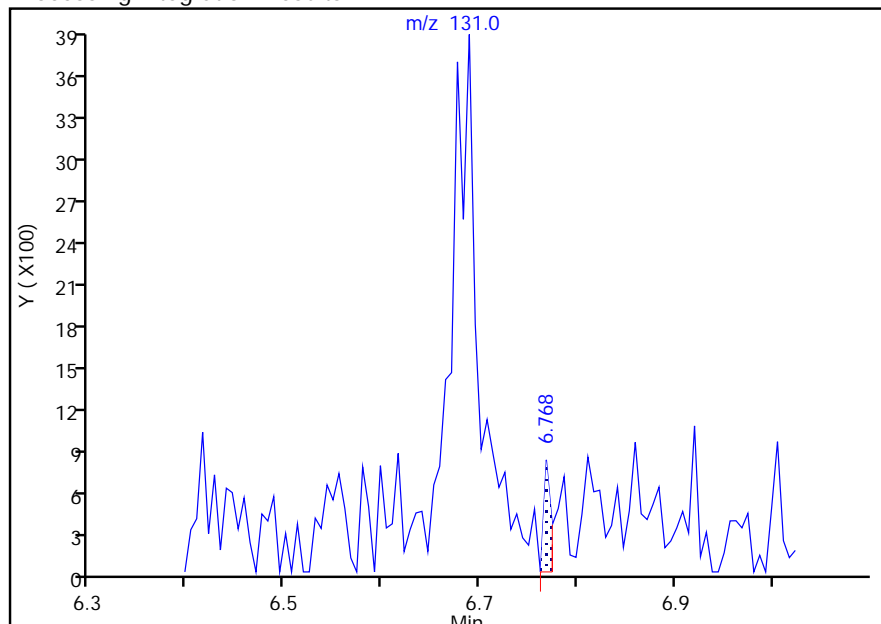
Eurofins TestAmerica, Savannah

Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

49 1,1,1,2-Tetrachloroethane, CAS: 630-20-6
Signal: 1

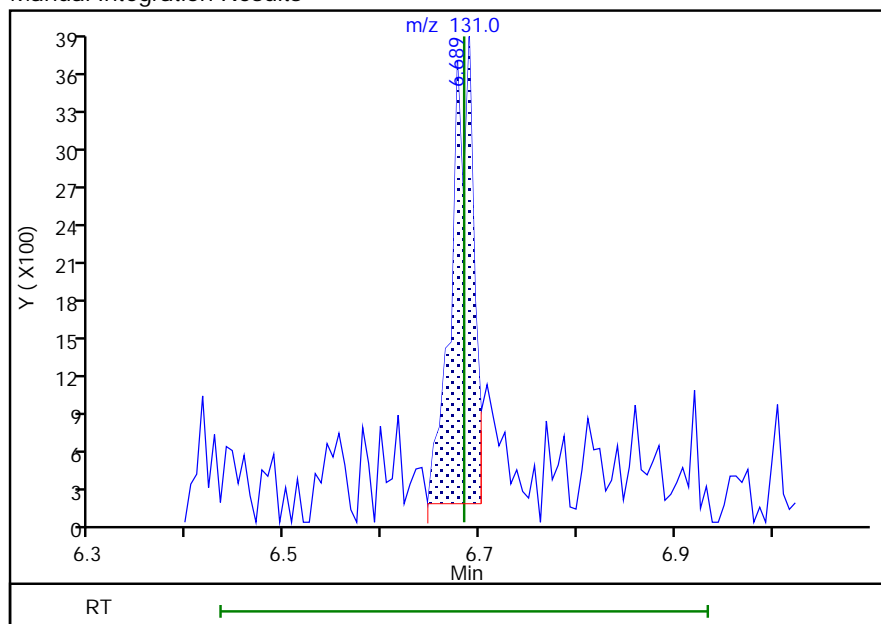
RT: 6.77
Area: 419
Amount: 0.279748
Amount Units: ug/l

Processing Integration Results



RT: 6.69
Area: 5709
Amount: 0.580558
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 11:04:54

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

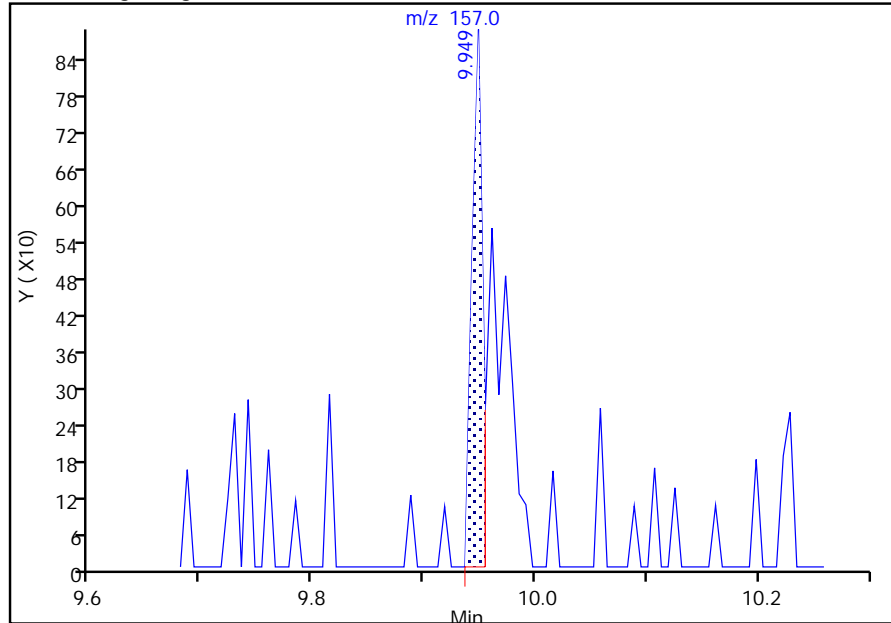
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D
Injection Date: 03-Jun-2020 14:08:30 Instrument ID: CMSAG
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: CMSAG_524New Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

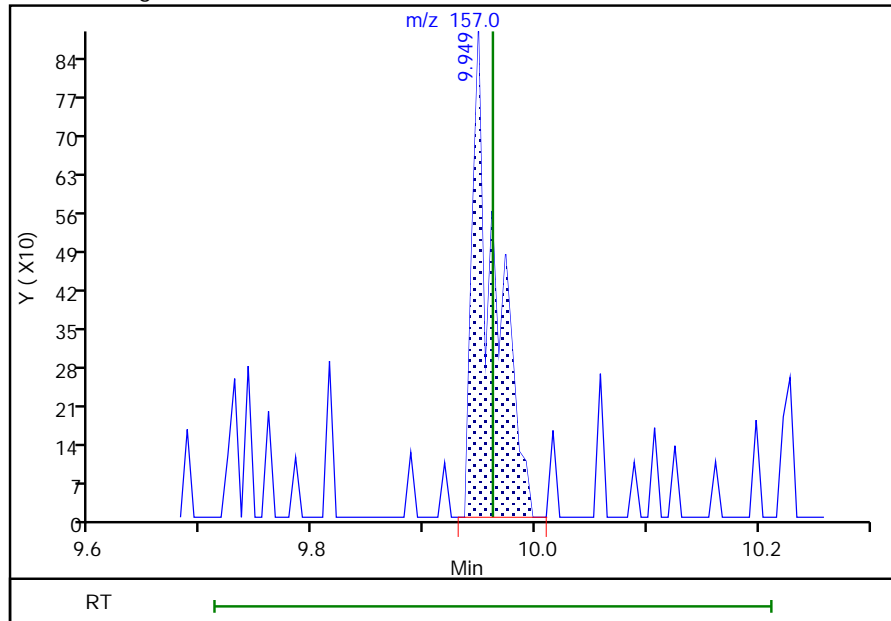
RT: 9.95
Area: 602
Amount: 0.485533
Amount Units: ug/l

Processing Integration Results



RT: 9.95
Area: 1280
Amount: 0.454304
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:42:56
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

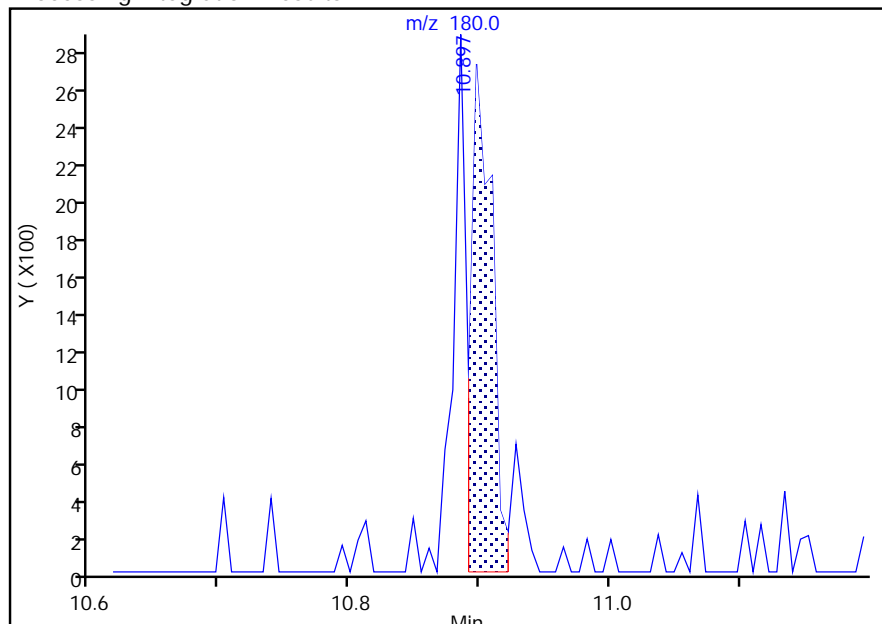
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

72 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

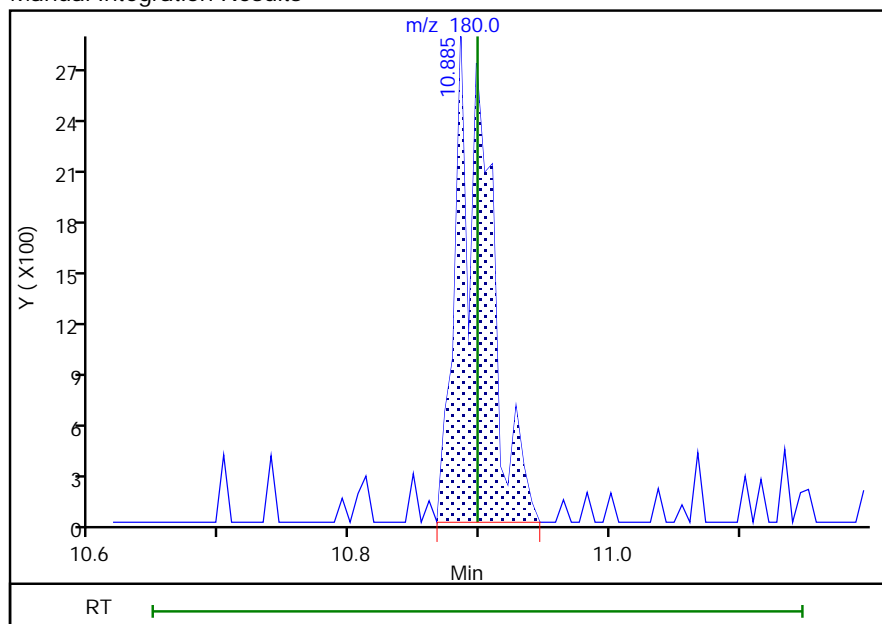
RT: 10.90
 Area: 3087
 Amount: 0.284933
 Amount Units: ug/l

Processing Integration Results



RT: 10.89
 Area: 5138
 Amount: 0.452811
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:39:52
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

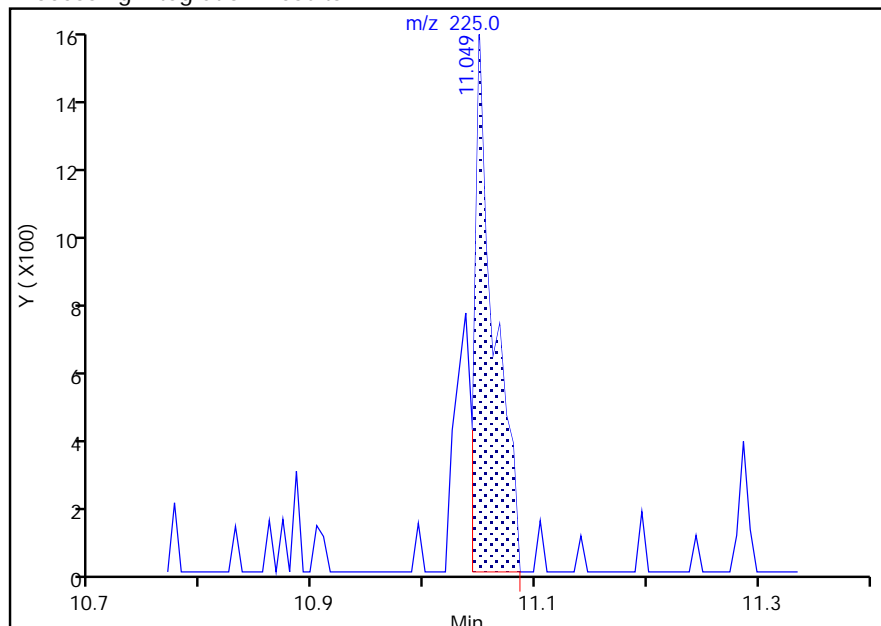
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

73 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

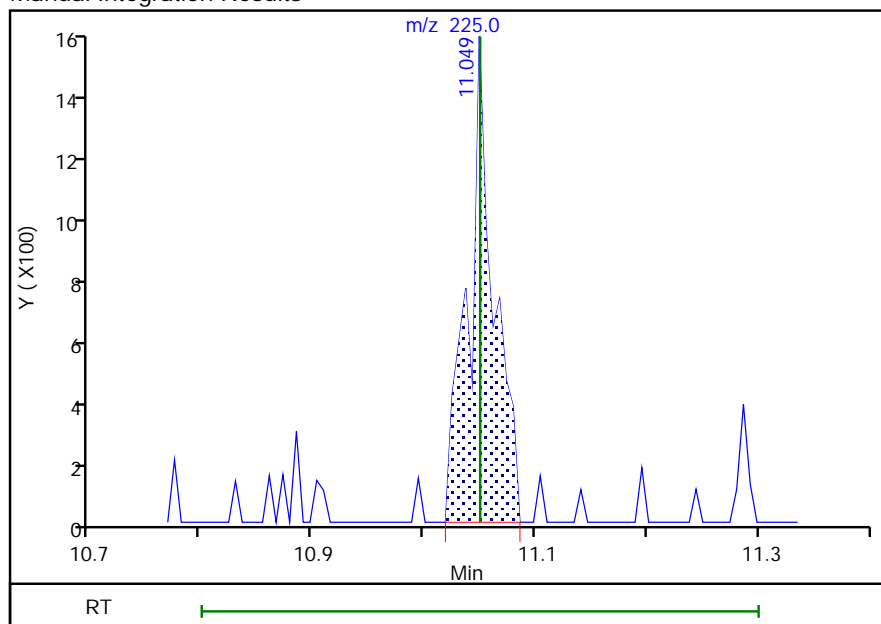
RT: 11.05
Area: 1822
Amount: 0.366128
Amount Units: ug/l

Processing Integration Results



RT: 11.05
Area: 2447
Amount: 0.476752
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:39:58

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 03-Jun-2020 14:33:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-008
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:29 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:57:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.189	4.184	0.005	98	480827	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	89	335598	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	96	152573	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.645	-0.002	84	183430	10.0	9.51	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	93	155463	10.0	10.3	
7 Dichlorodifluoromethane	85	1.300	1.302	-0.002	95	17926	1.00	1.04	
8 Chloromethane	50	1.471	1.478	-0.007	96	20725	1.00	0.9495	
9 Vinyl chloride	62	1.513	1.515	-0.002	96	19006	1.00	1.01	
10 Bromomethane	94	1.738	1.746	-0.008	72	4557	1.00	1.21	Ma
11 Chloroethane	64	1.805	1.800	0.005	89	7324	1.00	0.7830	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	93	19372	1.00	1.12	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.273	2.269	0.004	78	6953	1.00	0.9353	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	91	11032	1.00	1.04	
15 Acetone	58	2.353	2.342	0.011	84	11429	5.00	7.34	
16 Methylene Chloride	84	2.614	2.609	0.005	98	50039	1.00	0.7097	M
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	95	16095	10.0	10.5	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	97	48186	1.00	1.08	
19 trans-1,2-Dichloroethene	96	2.760	2.767	-0.007	79	10554	1.00	0.9491	
20 1,1-Dichloroethane	63	3.046	3.041	0.005	99	26940	1.00	1.05	
22 Tert-butyl ethyl ether	59	3.253	3.260	-0.007	85	37145	0.8000	0.8226	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	91	19260	1.00	1.00	
24 cis-1,2-Dichloroethene	61	3.423	3.418	0.005	78	23373	1.00	1.00	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	90	4333	5.00	2.40	
26 Chlorobromomethane	130	3.593	3.594	-0.001	92	8768	1.00	1.22	
27 Chloroform	83	3.617	3.619	-0.002	96	22767	1.00	0.9630	
28 1,1,1-Trichloroethane	97	3.745	3.734	0.011	95	20497	1.00	1.01	
30 1,1-Dichloropropene	75	3.842	3.844	-0.002	86	19918	1.00	1.00	
29 Carbon tetrachloride	117	3.849	3.850	-0.001	85	15138	1.00	0.9631	
31 Benzene	78	4.001	4.002	-0.001	99	56456	1.00	0.9329	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	95	29302	0.8000	0.7135	
32 1,2-Dichloroethane	62	4.031	4.032	-0.001	80	21409	1.00	0.9750	

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.445	4.446	-0.002	85	9264	1.00	0.8565	
35 1,2-Dichloropropane	63	4.627	4.628	-0.001	79	9757	1.00	0.6345	
36 Dibromomethane	93	4.736	4.738	-0.002	81	8089	1.00	0.9879	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	96	15369	1.00	0.8448	
38 cis-1,3-Dichloropropene	75	5.174	5.170	0.004	94	18413	1.00	0.8257	Ma
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	98	80559	5.00	4.49	
40 Toluene	92	5.411	5.419	-0.008	97	33267	1.00	0.9601	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	90	19508	1.00	0.8854	
42 1,1,2-Trichloroethane	83	5.776	5.778	-0.002	87	10335	1.00	0.9294	
43 Tetrachloroethene	164	5.855	5.863	-0.008	88	7677	1.00	0.9856	
44 1,3-Dichloropropane	76	5.910	5.911	-0.001	97	22654	1.00	0.9188	
45 2-Hexanone	43	5.953	5.948	0.005	98	61105	5.00	5.00	
46 Chlorodibromomethane	129	6.111	6.112	-0.001	92	10464	1.00	0.9520	
47 Ethylene Dibromide	107	6.220	6.216	0.004	93	10169	1.00	0.8671	
48 Chlorobenzene	112	6.609	6.611	-0.002	88	31790	1.00	0.9301	
50 Ethylbenzene	91	6.682	6.678	0.004	99	63692	1.00	1.02	
49 1,1,1,2-Tetrachloroethane	131	6.682	6.684	-0.002	42	11166	1.00	1.03	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	98	46814	1.00	0.9602	
52 o-Xylene	91	7.139	7.140	-0.001	89	49871	1.00	1.00	
53 Styrene	104	7.169	7.164	0.005	95	34622	1.00	1.00	
54 Bromoform	173	7.388	7.377	0.011	84	6397	1.00	1.04	
55 Isopropylbenzene	105	7.467	7.468	-0.001	98	54981	1.00	0.9456	
56 Bromobenzene	156	7.795	7.797	-0.002	87	12171	1.00	1.02	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	94	18132	1.00	1.01	
58 1,2,3-Trichloropropane	110	7.838	7.845	-0.007	58	5711	1.00	1.15	Ma
59 n-Propylbenzene	91	7.850	7.851	-0.001	96	75171	1.00	0.9681	
60 2-Chlorotoluene	91	7.960	7.955	0.005	94	43891	1.00	0.9701	
61 1,3,5-Trimethylbenzene	105	8.008	8.010	-0.001	91	46346	1.00	0.9279	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	97	45451	1.00	0.9293	
63 tert-Butylbenzene	119	8.324	8.320	0.004	89	42562	1.00	1.03	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	96	48302	1.00	0.9717	
65 sec-Butylbenzene	105	8.525	8.526	-0.001	98	68813	1.00	1.04	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	94	44878	1.00	0.8536	
66 1,3-Dichlorobenzene	146	8.677	8.678	-0.001	89	25063	1.00	1.05	
68 1,4-Dichlorobenzene	146	8.762	8.764	-0.002	89	25998	1.00	1.02	
70 n-Butylbenzene	91	9.066	9.068	-0.002	97	55539	1.00	0.9872	
69 1,2-Dichlorobenzene	146	9.133	9.135	-0.002	88	26652	1.00	1.08	a
71 1,2-Dibromo-3-Chloropropane	157	9.960	9.962	-0.002	61	3663	1.00	1.18	
72 1,2,4-Trichlorobenzene	180	10.909	10.898	0.011	87	12724	1.00	1.02	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	87	5385	1.00	0.9522	
74 Naphthalene	128	11.183	11.178	0.005	96	41164	1.00	0.9736	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	89	11406	1.00	0.9747	
S 76 Xylenes, Total	1				0		2.00	1.96	
S 77 Trihalomethanes, Total	1				0			3.80	
S 78 1,3-Dichloropropene, Total	1				0		2.00	1.71	

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.10

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D

Injection Date: 03-Jun-2020 14:33:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

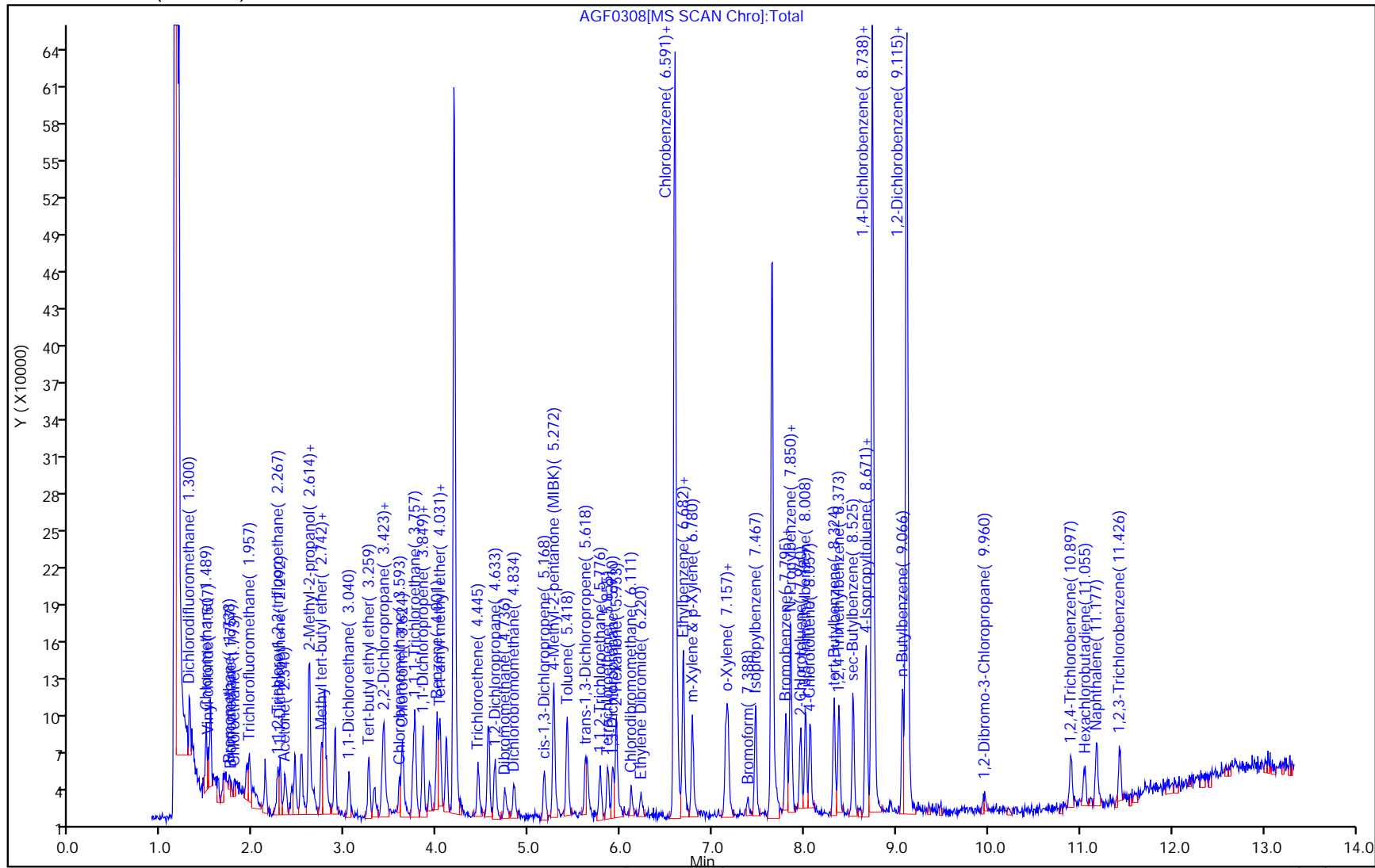
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

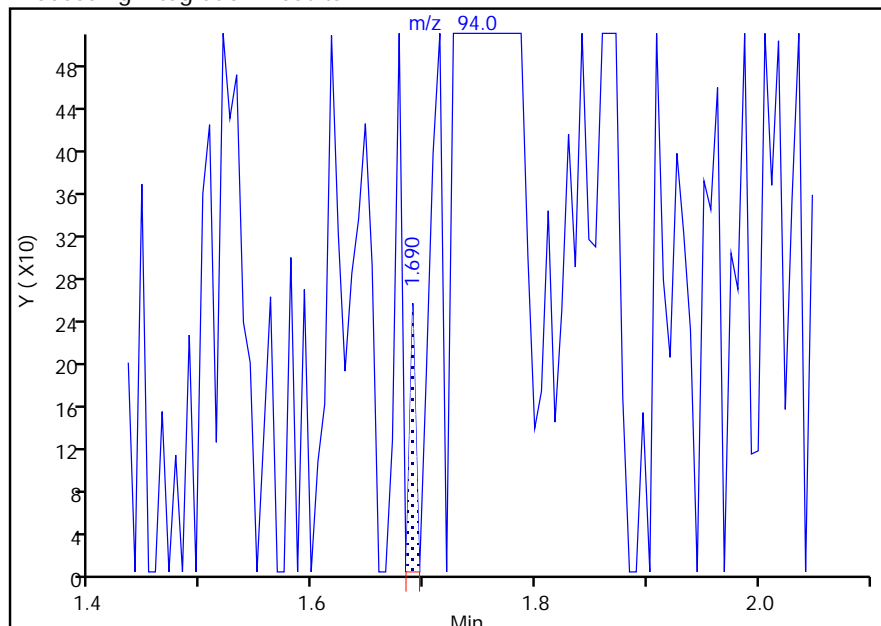
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D		
Injection Date:	03-Jun-2020 14:33:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

10 Bromomethane, CAS: 74-83-9

Signal: 1

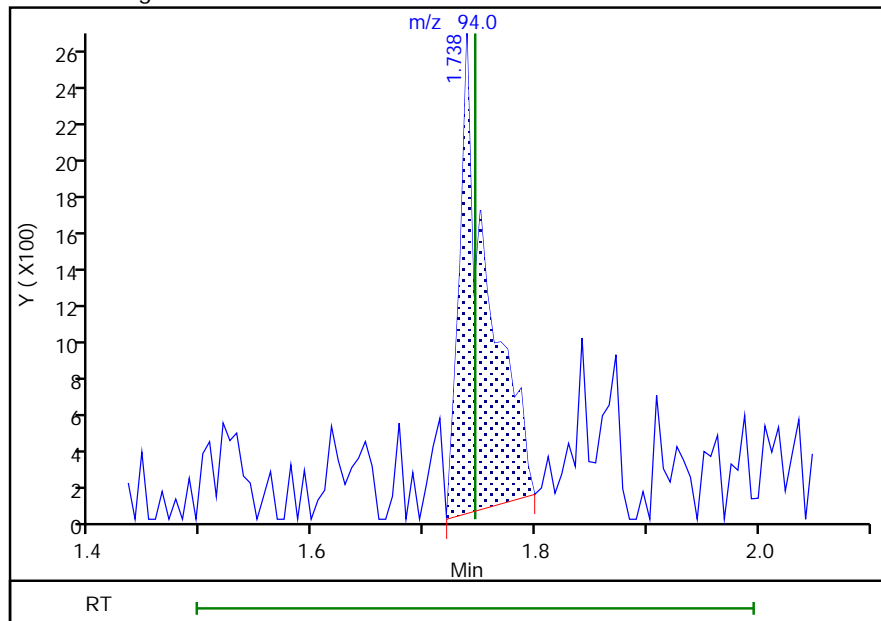
RT: 1.69
Area: 92
Amount: 0.028793
Amount Units: ug/l

Processing Integration Results



RT: 1.74
Area: 4557
Amount: 1.214130
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:44:25

Audit Action: Manually Integrated

Audit Reason: Assign Peak

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Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

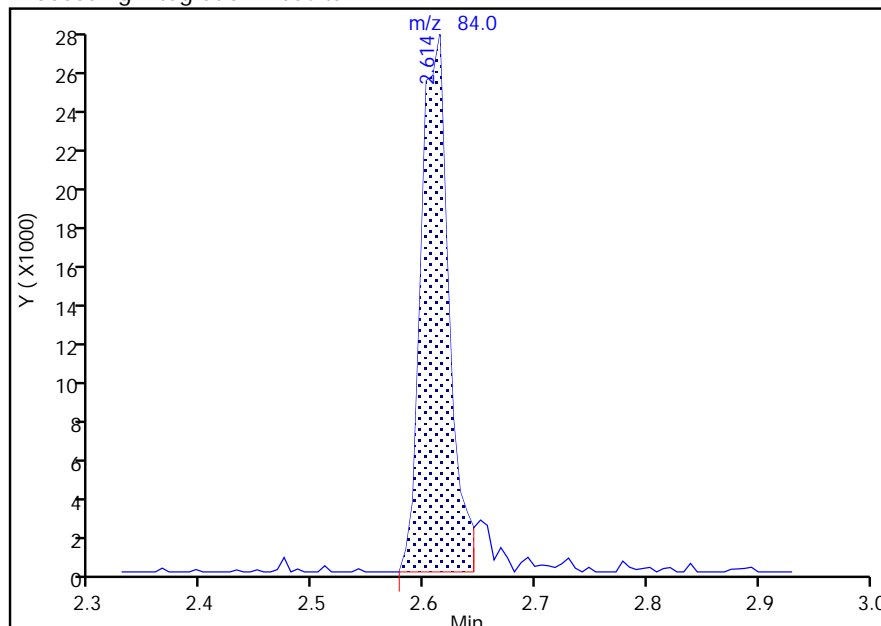
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D		
Injection Date:	03-Jun-2020 14:33:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

16 Methylene Chloride, CAS: 75-09-2

Signal: 1

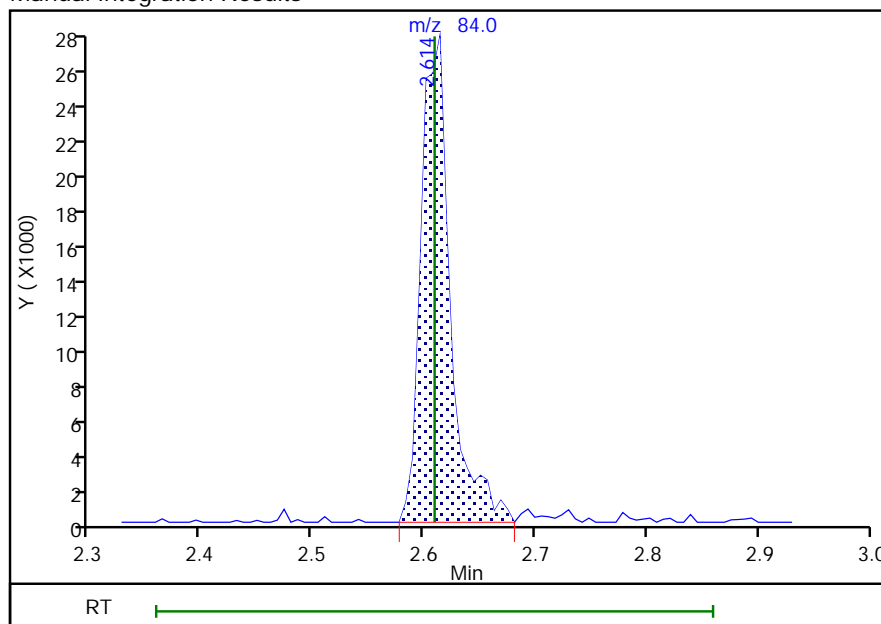
RT: 2.61
Area: 47282
Amount: 1.459217
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 50039
Amount: 0.709711
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:46:19

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

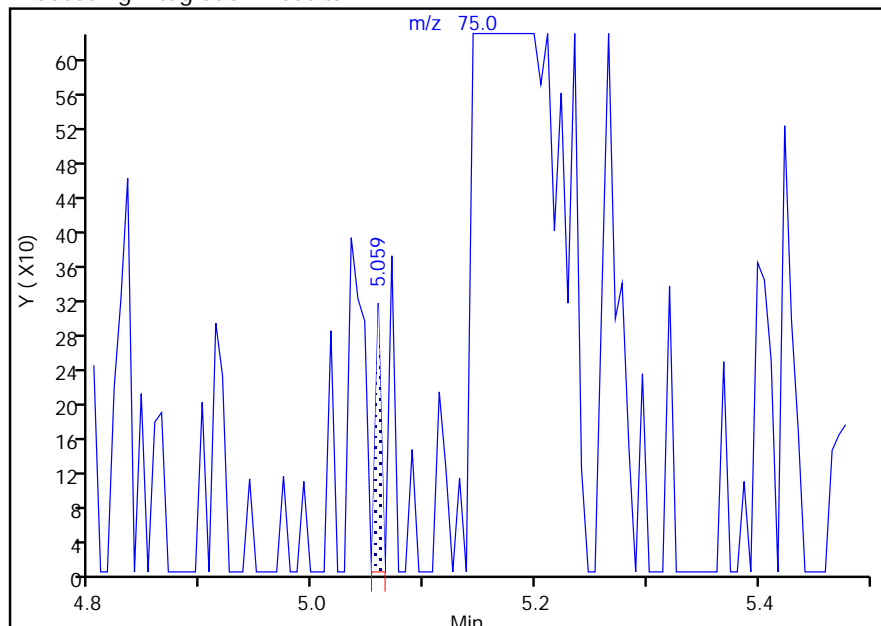
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D		
Injection Date:	03-Jun-2020 14:33:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

38 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

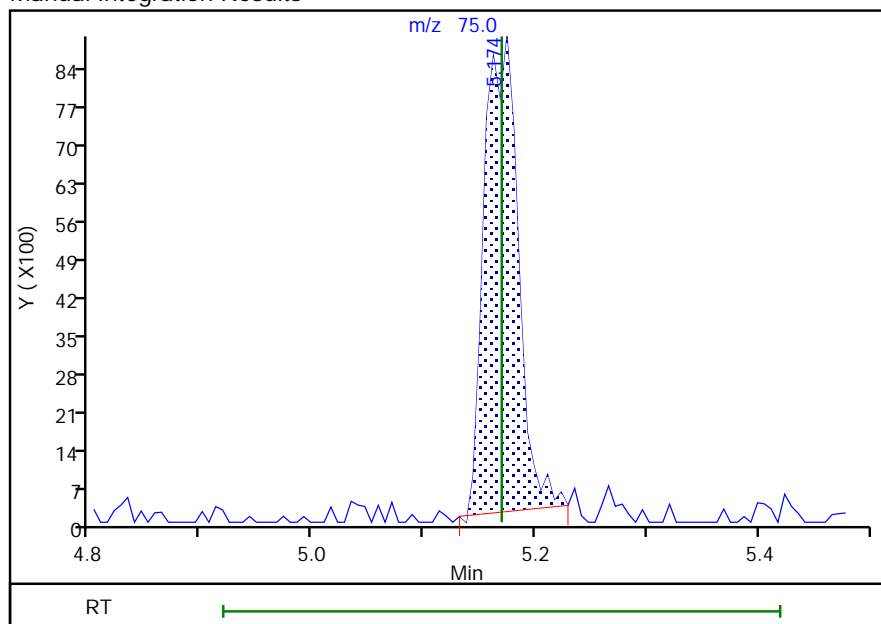
RT: 5.06
Area: 114
Amount: 0.005697
Amount Units: ug/l

Processing Integration Results



RT: 5.17
Area: 18413
Amount: 0.825731
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:44:40

Audit Action: Manually Integrated

Audit Reason: Assign Peak

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September 2020

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

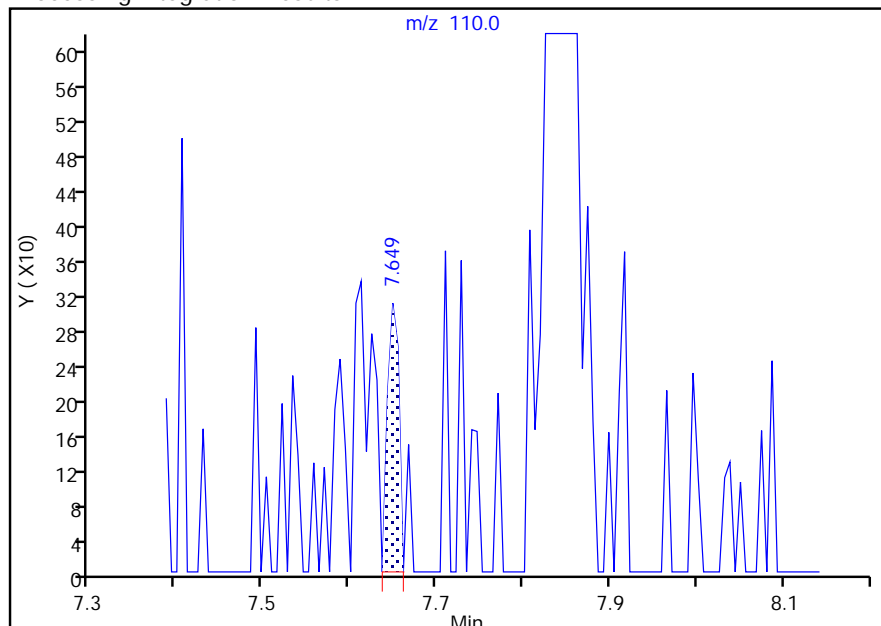
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D
 Injection Date: 03-Jun-2020 14:33:30 Instrument ID: CMSAG
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

58 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

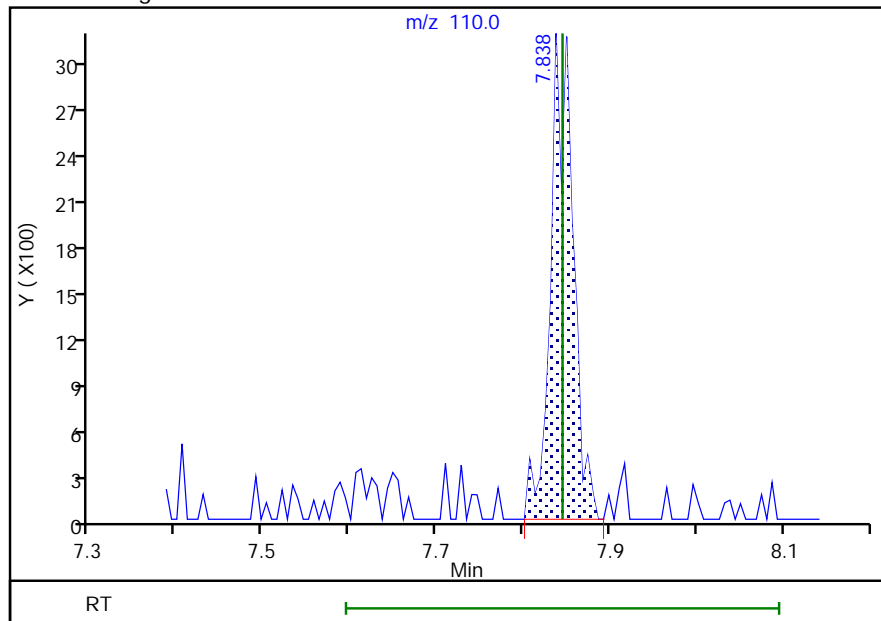
RT: 7.65
 Area: 281
 Amount: 0.065347
 Amount Units: ug/l

Processing Integration Results



RT: 7.84
 Area: 5711
 Amount: 1.147042
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:44:52

Audit Action: Manually Integrated

Audit Reason: Assign Peak

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Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

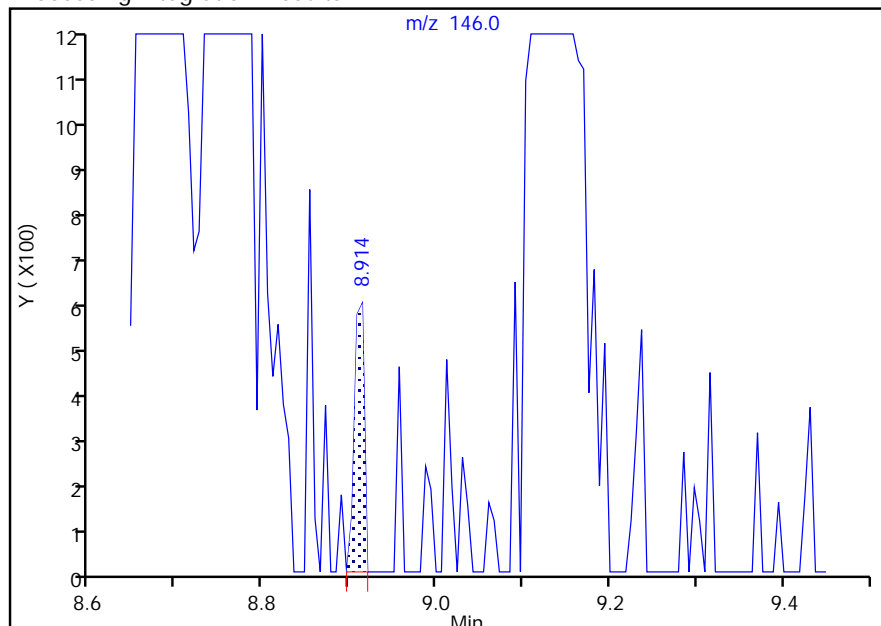
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D	Instrument ID:	CMSAG
Injection Date:	03-Jun-2020 14:33:30	ALS Bottle#:	8
Lims ID:	ic	Dil. Factor:	1.0000
Client ID:		Worklist Smp#:	8
Operator ID:	rd	Limit Group:	524.2
Purge Vol:	5.000 mL	Detector:	MS SCAN
Method:	CMSAG_524New		
Column:	Rtx-624 (0.18 mm)		

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

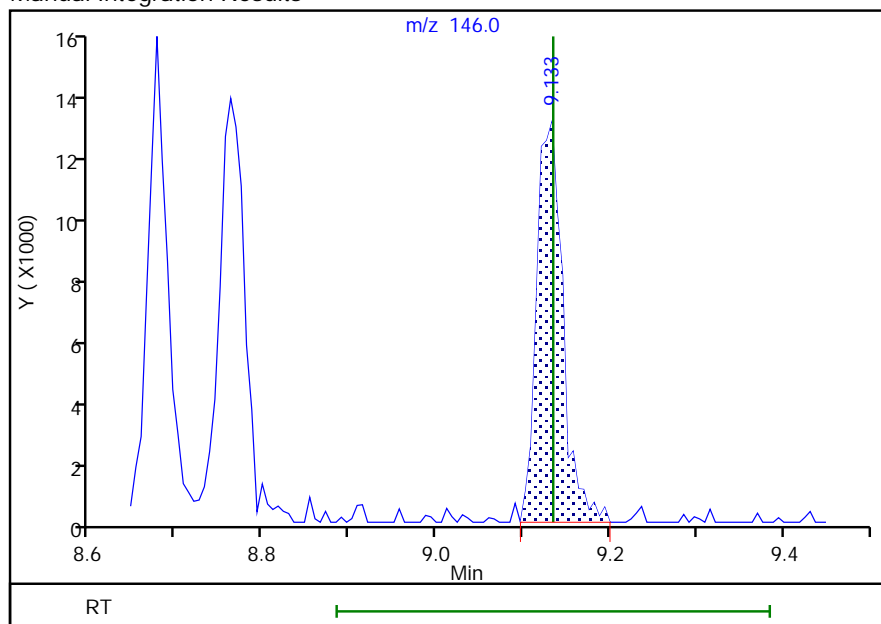
RT: 8.91
Area: 442
Amount: 0.020681
Amount Units: ug/l

Processing Integration Results



RT: 9.13
Area: 26652
Amount: 1.081292
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:45:00

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

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September 2020

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 03-Jun-2020 14:58:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-009
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:35 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:55:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.189	4.184	0.005	97	461546	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	92	326694	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	97	154800	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.645	-0.002	84	188950	10.0	10.2	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	91	158684	10.0	10.3	
7 Dichlorodifluoromethane	85	1.307	1.302	0.005	98	35937	2.00	2.16	
8 Chloromethane	50	1.483	1.478	0.005	98	39025	2.00	1.86	
9 Vinyl chloride	62	1.513	1.515	-0.002	96	41772	2.00	2.30	
10 Bromomethane	94	1.751	1.746	0.005	83	6945	2.00	1.93	
11 Chloroethane	64	1.805	1.800	0.005	97	22168	2.00	2.47	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	97	31180	2.00	1.88	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.267	2.269	-0.002	91	14519	2.00	2.03	
13 1,1-Dichloroethene	96	2.298	2.293	0.005	94	21826	2.00	2.14	
15 Acetone	58	2.347	2.342	0.004	83	15630	10.0	10.5	
16 Methylene Chloride	84	2.608	2.609	-0.001	96	67593	2.00	2.29	
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	93	22684	20.0	15.3	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	98	82821	2.00	1.94	
19 trans-1,2-Dichloroethene	96	2.766	2.767	-0.001	97	22495	2.00	2.11	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	98	51163	2.00	2.07	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	91	73353	1.60	1.69	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	88	39473	2.00	2.14	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	90	47281	2.00	2.11	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	99	17871	10.0	10.3	
26 Chlorobromomethane	130	3.593	3.594	-0.001	93	15270	2.00	2.22	
27 Chloroform	83	3.624	3.619	0.005	99	51825	2.00	2.28	
28 1,1,1-Trichloroethane	97	3.745	3.734	0.011	95	38117	2.00	1.92	
30 1,1-Dichloropropene	75	3.843	3.844	-0.001	89	36328	2.00	1.87	
29 Carbon tetrachloride	117	3.843	3.850	-0.007	81	32042	2.00	2.09	
31 Benzene	78	4.007	4.002	0.005	96	120674	2.00	2.05	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	93	66795	1.60	1.69	
32 1,2-Dichloroethane	62	4.037	4.032	0.005	78	33464	2.00	1.57	

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	91	21192	2.00	2.01	
35 1,2-Dichloropropane	63	4.633	4.628	0.005	86	29704	2.00	1.98	
36 Dibromomethane	93	4.743	4.738	0.005	84	18695	2.00	2.35	
37 Dichlorobromomethane	83	4.840	4.835	0.005	96	37079	2.00	2.09	
38 cis-1,3-Dichloropropene	75	5.162	5.170	-0.008	98	42786	2.00	1.97	
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	99	168833	10.0	9.67	
40 Toluene	92	5.418	5.419	-0.001	91	61146	2.00	1.81	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	96	37211	2.00	1.73	
42 1,1,2-Trichloroethane	83	5.770	5.778	-0.008	93	20709	2.00	1.91	
43 Tetrachloroethene	164	5.855	5.863	-0.008	90	16610	2.00	2.10	
44 1,3-Dichloropropane	76	5.916	5.911	0.005	94	48342	2.00	2.01	
45 2-Hexanone	43	5.953	5.948	0.005	99	115233	10.0	9.30	
46 Chlorodibromomethane	129	6.117	6.112	0.005	97	21851	2.00	1.96	
47 Ethylene Dibromide	107	6.220	6.216	0.004	99	20835	2.00	1.83	
48 Chlorobenzene	112	6.616	6.611	0.005	88	61363	2.00	1.84	
50 Ethylbenzene	91	6.676	6.678	-0.002	99	126427	2.00	1.99	
49 1,1,1,2-Tetrachloroethane	131	6.682	6.684	-0.002	42	20656	2.00	1.88	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	98	99583	2.00	2.01	
52 o-Xylene	91	7.145	7.140	0.005	90	101349	2.00	2.00	
53 Styrene	104	7.175	7.164	0.011	93	62647	2.00	1.78	
54 Bromoform	173	7.388	7.377	0.011	90	9985	2.00	1.60	
55 Isopropylbenzene	105	7.467	7.468	-0.001	97	121507	2.00	2.06	
56 Bromobenzene	156	7.801	7.797	0.004	94	26045	2.00	2.15	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	95	37636	2.00	2.06	
58 1,2,3-Trichloropropane	110	7.844	7.845	-0.001	60	9435	2.00	1.87	
59 n-Propylbenzene	91	7.850	7.851	-0.001	95	158630	2.00	2.01	
60 2-Chlorotoluene	91	7.960	7.955	0.005	95	96502	2.00	2.10	
61 1,3,5-Trimethylbenzene	105	8.014	8.010	0.005	91	96752	2.00	1.91	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	98	99700	2.00	2.01	
63 tert-Butylbenzene	119	8.318	8.320	-0.002	85	80836	2.00	1.93	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	97	95975	2.00	1.90	
65 sec-Butylbenzene	105	8.531	8.526	0.005	98	130234	2.00	1.94	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	112371	2.00	2.11	
66 1,3-Dichlorobenzene	146	8.677	8.678	-0.001	88	44717	2.00	1.85	
68 1,4-Dichlorobenzene	146	8.762	8.764	-0.002	88	51040	2.00	1.98	
70 n-Butylbenzene	91	9.066	9.068	-0.002	96	114152	2.00	2.00	
69 1,2-Dichlorobenzene	146	9.133	9.135	-0.002	94	53814	2.00	2.15	a
71 1,2-Dibromo-3-Chloropropane	157	9.954	9.962	-0.008	80	6179	2.00	1.96	M
72 1,2,4-Trichlorobenzene	180	10.903	10.898	0.005	93	24633	2.00	1.94	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	86	12912	2.00	2.25	
74 Naphthalene	128	11.177	11.178	-0.001	98	77418	2.00	1.80	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	90	23404	2.00	1.97	
S 76 Xylenes, Total	1				0		4.00	4.01	
S 77 Trihalomethanes, Total	1				0			7.94	
S 78 1,3-Dichloropropene, Total	1				0		4.00	3.71	

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.20

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D

Injection Date: 03-Jun-2020 14:58:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

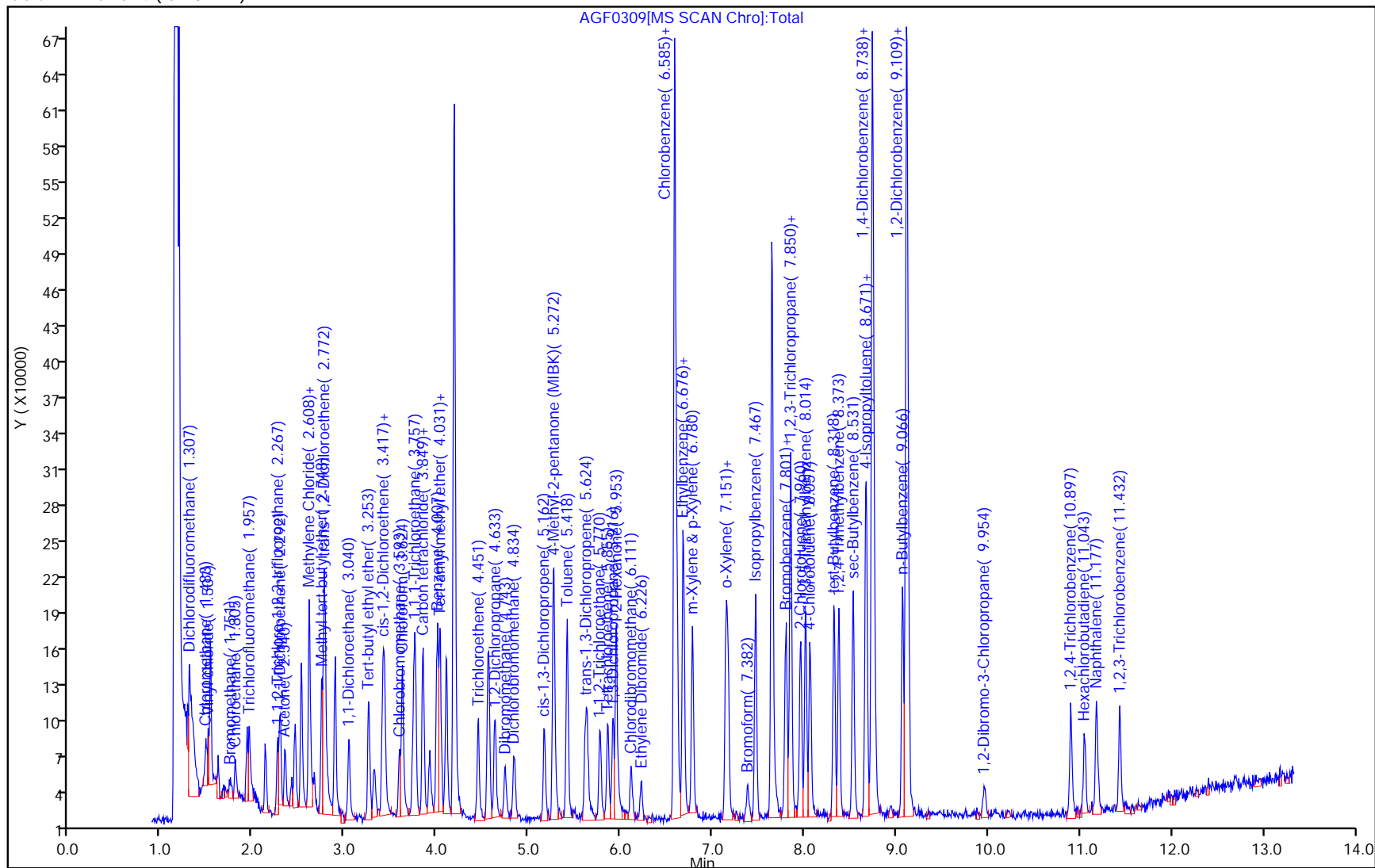
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

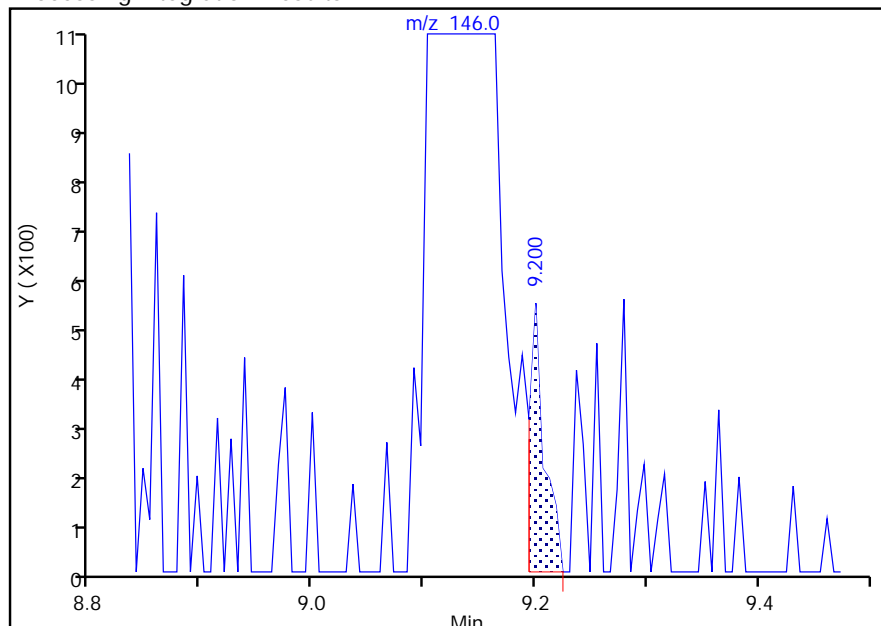
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Injection Date:	03-Jun-2020 14:58:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

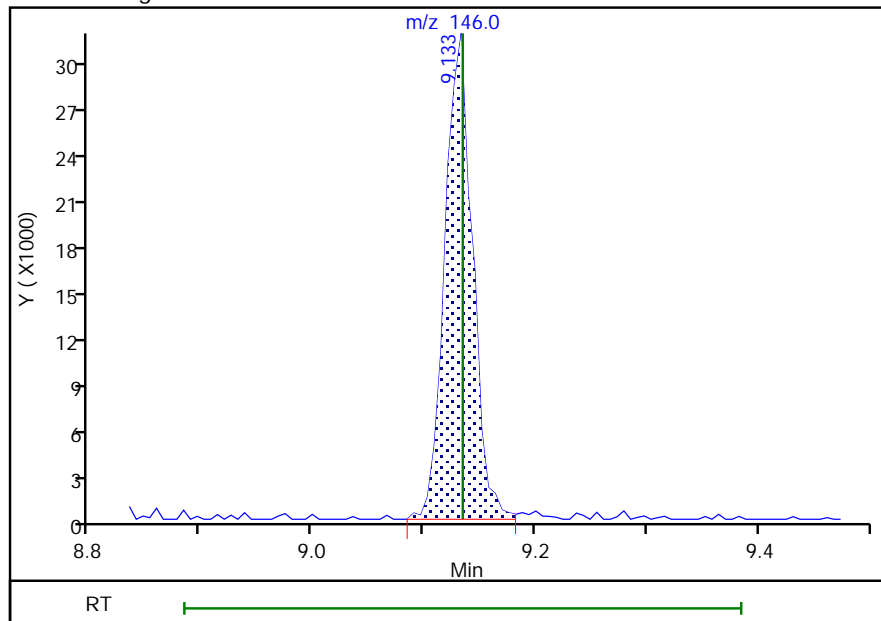
RT: 9.20
Area: 491
Amount: 0.022280
Amount Units: ug/l

Processing Integration Results



RT: 9.13
Area: 53814
Amount: 2.151865
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:55:11

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

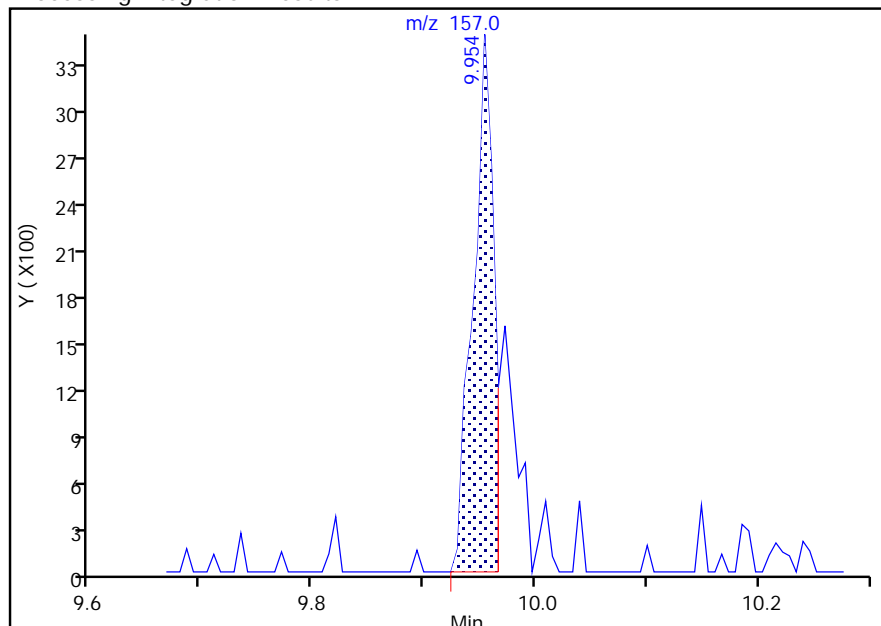
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D		
Injection Date:	03-Jun-2020 14:58:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

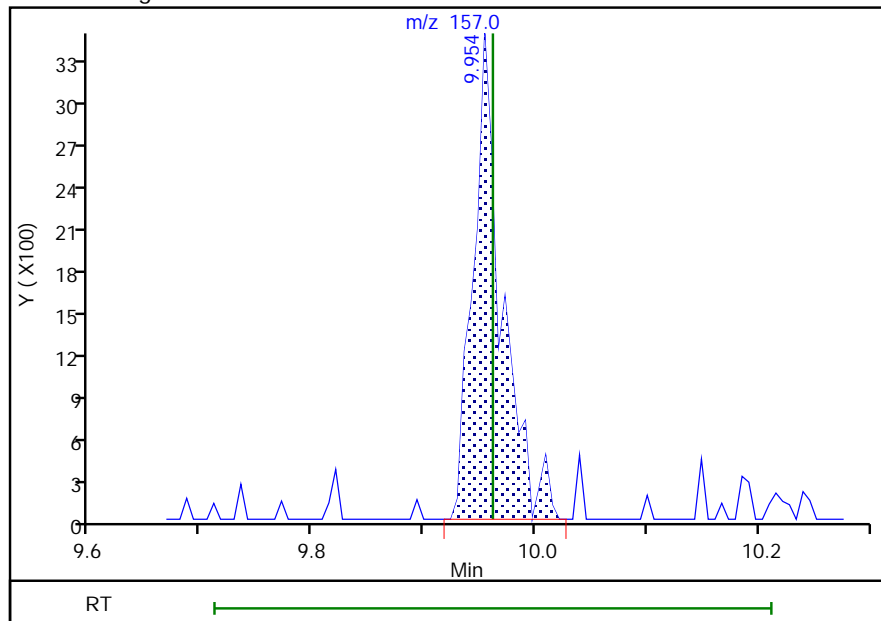
RT: 9.95
Area: 4453
Amount: 1.420099
Amount Units: ug/l

Processing Integration Results



RT: 9.95
Area: 6179
Amount: 1.961761
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:43:39

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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06/17/2020

September 2020

Report Date: 04-Jun-2020 12:47:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0310.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 03-Jun-2020 15:23:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-010
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:37 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: panhorstp

Date: 03-Jun-2020 17:26:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.183	4.184	-0.001	96	431402	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	92	319377	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	96	152644	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.645	-0.002	81	194915	10.0	11.3	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	91	151857	10.0	10.0	
7 Dichlorodifluoromethane	85	1.300	1.302	-0.002	99	84608	5.00	5.45	
8 Chloromethane	50	1.483	1.478	0.005	99	106647	5.00	5.45	
9 Vinyl chloride	62	1.513	1.515	-0.002	97	92873	5.00	5.48	
10 Bromomethane	94	1.744	1.746	-0.002	95	14901	5.00	4.42	
11 Chloroethane	64	1.811	1.800	0.011	96	46761	5.00	5.57	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	98	88312	5.00	5.71	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.267	2.269	-0.002	92	39516	5.00	5.92	
13 1,1-Dichloroethene	96	2.298	2.293	0.005	93	51712	5.00	5.42	
15 Acetone	58	2.346	2.342	0.004	87	40534	25.0	29.0	
16 Methylene Chloride	84	2.608	2.609	-0.001	97	91428	5.00	4.72	
17 2-Methyl-2-propanol	59	2.669	2.664	0.005	98	78548	50.0	56.8	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	97	219263	5.00	5.49	
19 trans-1,2-Dichloroethene	96	2.766	2.767	-0.001	97	56170	5.00	5.63	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	99	123770	5.00	5.36	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	89	169548	4.00	4.18	
25 2,2-Dichloropropane	77	3.411	3.406	0.005	79	92078	5.00	5.34	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	92	109653	5.00	5.24	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	100	45696	25.0	28.2	
26 Chlorobromomethane	130	3.587	3.594	-0.007	95	32988	5.00	5.13	
27 Chloroform	83	3.624	3.619	0.005	99	111826	5.00	5.27	
28 1,1,1-Trichloroethane	97	3.739	3.734	0.005	96	101789	5.00	5.26	
30 1,1-Dichloropropene	75	3.849	3.844	0.005	93	98894	5.00	5.20	
29 Carbon tetrachloride	117	3.842	3.850	-0.008	73	68978	5.00	4.61	
31 Benzene	78	4.001	4.002	-0.001	97	281909	5.00	4.90	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	97	159380	4.00	4.33	
32 1,2-Dichloroethane	62	4.031	4.032	-0.001	87	107898	5.00	5.16	

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Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0310.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	90	50414	5.00	4.90	
35 1,2-Dichloropropane	63	4.627	4.628	-0.001	82	72770	5.00	4.97	
36 Dibromomethane	93	4.743	4.738	0.005	91	35254	5.00	4.52	
37 Dichlorobromomethane	83	4.840	4.835	0.005	97	83576	5.00	4.83	
38 cis-1,3-Dichloropropene	75	5.168	5.170	-0.002	95	111344	5.00	5.25	
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	99	439805	25.0	25.8	
40 Toluene	92	5.418	5.419	-0.001	93	164373	5.00	4.98	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	97	102368	5.00	4.88	
42 1,1,2-Trichloroethane	83	5.776	5.778	-0.002	93	53943	5.00	5.10	
43 Tetrachloroethene	164	5.861	5.863	-0.002	85	42353	5.00	5.43	
44 1,3-Dichloropropane	76	5.916	5.911	0.005	97	119868	5.00	5.11	
45 2-Hexanone	43	5.947	5.948	-0.001	98	335023	25.0	27.4	
46 Chlorodibromomethane	129	6.111	6.112	-0.001	97	53806	5.00	4.89	
47 Ethylene Dibromide	107	6.220	6.216	0.004	99	56280	5.00	5.04	
48 Chlorobenzene	112	6.616	6.611	0.005	89	168877	5.00	5.19	
50 Ethylbenzene	91	6.682	6.678	0.004	99	323748	5.00	5.17	
49 1,1,1,2-Tetrachloroethane	131	6.676	6.684	-0.008	41	54515	5.00	5.03	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	98	254317	5.00	5.21	
52 o-Xylene	91	7.151	7.140	0.011	90	254115	5.00	5.08	
53 Styrene	104	7.163	7.164	-0.001	90	162372	5.00	4.67	
54 Bromoform	173	7.376	7.377	-0.001	90	32200	5.00	5.24	
55 Isopropylbenzene	105	7.461	7.468	-0.007	98	283862	5.00	4.88	
56 Bromobenzene	156	7.795	7.797	-0.002	89	59319	5.00	4.97	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	95	100827	5.00	5.60	
58 1,2,3-Trichloropropane	110	7.844	7.845	-0.001	82	26582	5.00	5.34	
59 N-Propylbenzene	91	7.850	7.851	-0.001	96	387772	5.00	4.99	
60 2-Chlorotoluene	91	7.960	7.955	0.005	96	232622	5.00	5.14	
61 1,3,5-Trimethylbenzene	105	8.008	8.010	-0.001	92	241018	5.00	4.82	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	99	239404	5.00	4.89	
63 tert-Butylbenzene	119	8.318	8.320	-0.002	89	217316	5.00	5.27	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	97	264513	5.00	5.32	
65 sec-Butylbenzene	105	8.525	8.526	-0.001	98	318068	5.00	4.81	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	260233	5.00	4.95	
66 1,3-Dichlorobenzene	146	8.671	8.678	-0.007	84	118258	5.00	4.95	
68 1,4-Dichlorobenzene	146	8.762	8.764	-0.002	89	132735	5.00	5.22	
70 n-Butylbenzene	91	9.066	9.068	-0.002	96	266969	5.00	4.74	
69 1,2-Dichlorobenzene	146	9.133	9.135	-0.002	90	116759	5.00	4.73	
71 1,2-Dibromo-3-Chloropropane	157	9.960	9.962	-0.002	82	15084	5.00	4.86	
72 1,2,4-Trichlorobenzene	180	10.897	10.898	-0.001	90	67907	5.00	5.43	
73 Hexachlorobutadiene	225	11.049	11.050	-0.001	87	28072	5.00	4.96	
74 Naphthalene	128	11.183	11.178	0.005	99	229598	5.00	5.43	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	93	62932	5.00	5.38	
S 76 Xylenes, Total	1				0		10.0	10.3	
S 77 Trihalomethanes, Total	1				0			20.2	
S 78 1,3-Dichloropropene, Total	1				0		10.0	10.1	

Reagents:

524mmix_00170

Amount Added: 0.50

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0310.D

Injection Date: 03-Jun-2020 15:23:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

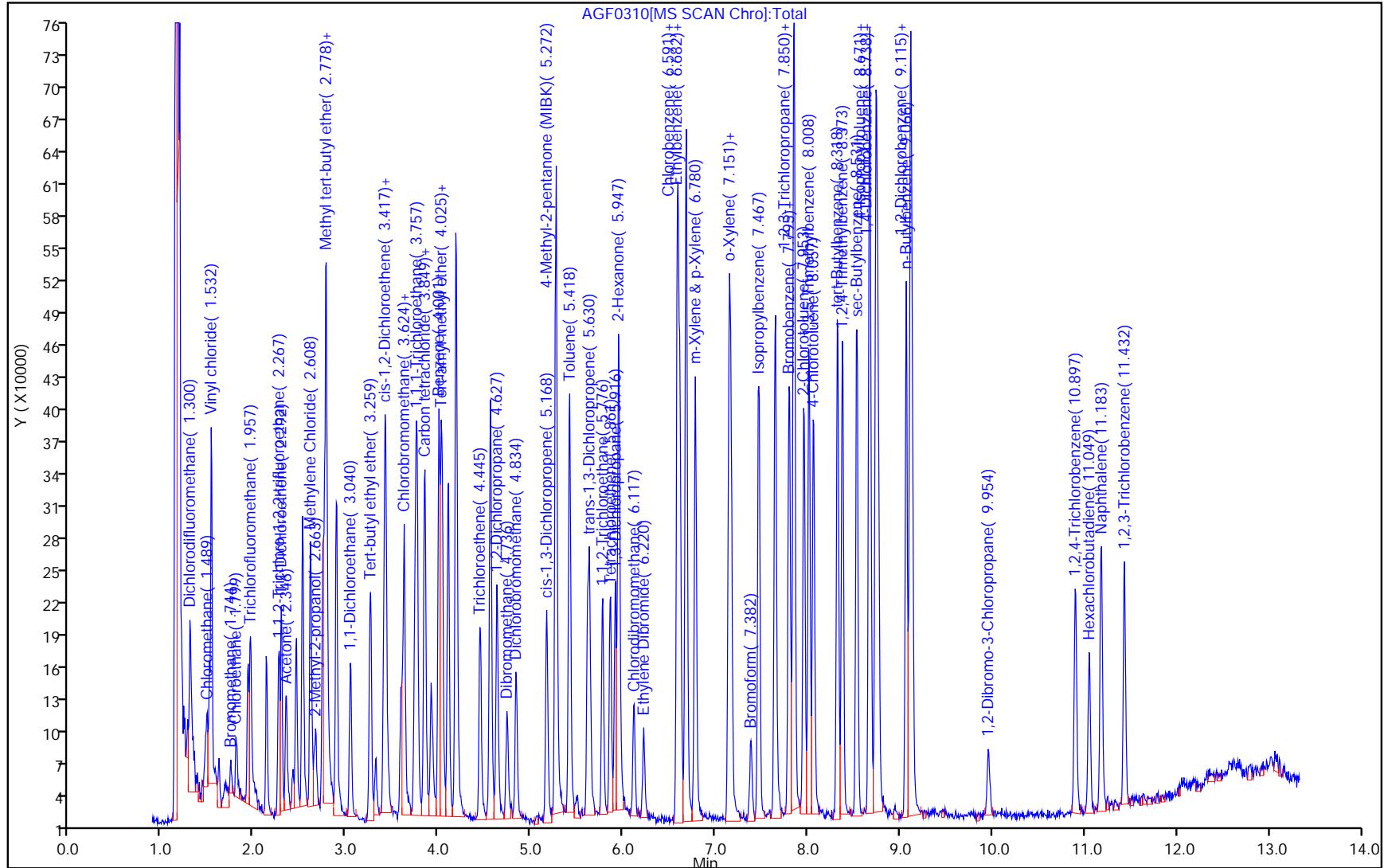
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:40

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0311.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 03-Jun-2020 15:48:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-011
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:40 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:53:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.189	4.184	0.005	97	482906	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	92	340514	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	96	154110	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.649	7.645	0.004	85	189050	10.0	9.76	
\$ 5 1,2-Dichlorobenzene-d4	152	9.115	9.110	0.005	88	157227	10.0	10.3	
7 Dichlorodifluoromethane	85	1.300	1.302	-0.002	99	171211	10.0	9.85	
8 Chloromethane	50	1.477	1.478	-0.001	100	214877	10.0	9.80	
9 Vinyl chloride	62	1.513	1.515	-0.002	98	171132	10.0	9.02	
10 Bromomethane	94	1.744	1.746	-0.002	93	31389	10.0	8.33	
11 Chloroethane	64	1.799	1.800	-0.001	99	86780	10.0	9.24	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	97	179039	10.0	10.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.267	2.269	-0.002	90	72197	10.0	9.67	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	94	104080	10.0	9.74	
15 Acetone	58	2.340	2.342	-0.002	85	64898	50.0	41.5	
16 Methylene Chloride	84	2.608	2.609	-0.001	97	173432	10.0	10.2	
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	98	149197	100.0	96.5	
18 Methyl tert-butyl ether	73	2.748	2.743	0.005	97	384999	10.0	8.61	
19 trans-1,2-Dichloroethene	96	2.766	2.767	-0.001	99	116154	10.0	10.4	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	100	239610	10.0	9.27	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	87	357332	8.00	7.88	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	93	182278	10.0	9.44	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	94	203540	10.0	8.69	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	100	82148	50.0	45.3	
26 Chlorobromomethane	130	3.593	3.594	-0.001	95	68078	10.0	9.45	
27 Chloroform	83	3.624	3.619	0.005	99	221920	10.0	9.35	
28 1,1,1-Trichloroethane	97	3.739	3.734	0.005	95	189874	10.0	9.20	
30 1,1-Dichloropropene	75	3.849	3.844	0.005	92	188807	10.0	9.30	
29 Carbon tetrachloride	117	3.849	3.850	-0.001	89	144650	10.0	9.07	
31 Benzene	78	4.001	4.002	-0.001	98	575865	10.0	9.38	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	96	330554	8.00	8.01	
32 1,2-Dichloroethane	62	4.031	4.032	-0.001	91	201886	10.0	9.06	

Report Date: 04-Jun-2020 12:47:40

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0311.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	93	97871	10.0	8.92	
35 1,2-Dichloropropane	63	4.633	4.628	0.005	91	152346	10.0	9.76	
36 Dibromomethane	93	4.736	4.738	-0.002	88	77721	10.0	9.36	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	96	163510	10.0	8.86	
38 cis-1,3-Dichloropropene	75	5.168	5.170	-0.002	96	218419	10.0	9.65	
39 4-Methyl-2-pentanone (MIBK)	43	5.266	5.267	-0.001	98	809547	50.0	44.5	
40 Toluene	92	5.411	5.419	-0.008	93	333922	10.0	9.50	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	97	206138	10.0	9.22	
42 1,1,2-Trichloroethane	83	5.770	5.778	-0.008	93	102025	10.0	9.04	
43 Tetrachloroethene	164	5.861	5.863	-0.002	95	82716	10.0	10.5	
44 1,3-Dichloropropane	76	5.910	5.911	-0.001	97	223258	10.0	8.92	
45 2-Hexanone	43	5.947	5.948	-0.001	99	623918	50.0	50.6	
46 Chlorodibromomethane	129	6.117	6.112	0.005	97	105755	10.0	9.53	
47 Ethylene Dibromide	107	6.220	6.216	0.004	98	114162	10.0	9.59	
48 Chlorobenzene	112	6.616	6.611	0.005	94	330333	10.0	9.53	
50 Ethylbenzene	91	6.676	6.678	-0.002	99	633778	10.0	10.0	
49 1,1,1,2-Tetrachloroethane	131	6.676	6.684	-0.008	61	102843	10.0	9.40	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	96	482350	10.0	9.79	
52 o-Xylene	91	7.145	7.140	0.005	92	502054	10.0	9.94	
53 Styrene	104	7.163	7.164	-0.001	90	346171	10.0	9.87	
54 Bromoform	173	7.382	7.377	0.005	89	58894	10.0	9.49	
55 Isopropylbenzene	105	7.467	7.468	-0.001	97	568987	10.0	9.69	
56 Bromobenzene	156	7.795	7.797	-0.002	89	112926	10.0	9.37	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	97	174909	10.0	9.62	
58 1,2,3-Trichloropropane	110	7.844	7.845	-0.001	93	52951	10.0	10.5	
59 N-Propylbenzene	91	7.850	7.851	-0.001	98	813263	10.0	10.4	
60 2-Chlorotoluene	91	7.960	7.955	0.005	96	441923	10.0	9.67	
61 1,3,5-Trimethylbenzene	105	8.014	8.010	0.005	88	526729	10.0	10.4	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	98	486655	10.0	9.85	
63 tert-Butylbenzene	119	8.318	8.320	-0.002	92	414272	10.0	9.95	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	97	520331	10.0	10.4	
65 sec-Butylbenzene	105	8.525	8.526	-0.001	98	700098	10.0	10.5	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	548398	10.0	10.3	
66 1,3-Dichlorobenzene	146	8.677	8.678	-0.001	81	226726	10.0	9.40	
68 1,4-Dichlorobenzene	146	8.768	8.764	0.004	87	244567	10.0	9.53	
70 n-Butylbenzene	91	9.066	9.068	-0.002	97	586148	10.0	10.3	
69 1,2-Dichlorobenzene	146	9.127	9.135	-0.008	88	240060	10.0	9.64	
71 1,2-Dibromo-3-Chloropropane	157	9.960	9.962	-0.002	86	27412	10.0	8.74	
72 1,2,4-Trichlorobenzene	180	10.903	10.898	0.005	92	124068	10.0	9.82	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	91	56374	10.0	9.87	
74 Naphthalene	128	11.177	11.178	-0.001	98	425654	10.0	9.97	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	90	121277	10.0	10.3	
S 76 Xylenes, Total	1				0		20.0	19.7	
S 77 Trihalomethanes, Total	1				0			37.2	
S 78 1,3-Dichloropropene, Total	1				0		20.0	18.9	

Reagents:

524mmix_00170

Amount Added: 1.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:40

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0311.D

Injection Date: 03-Jun-2020 15:48:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

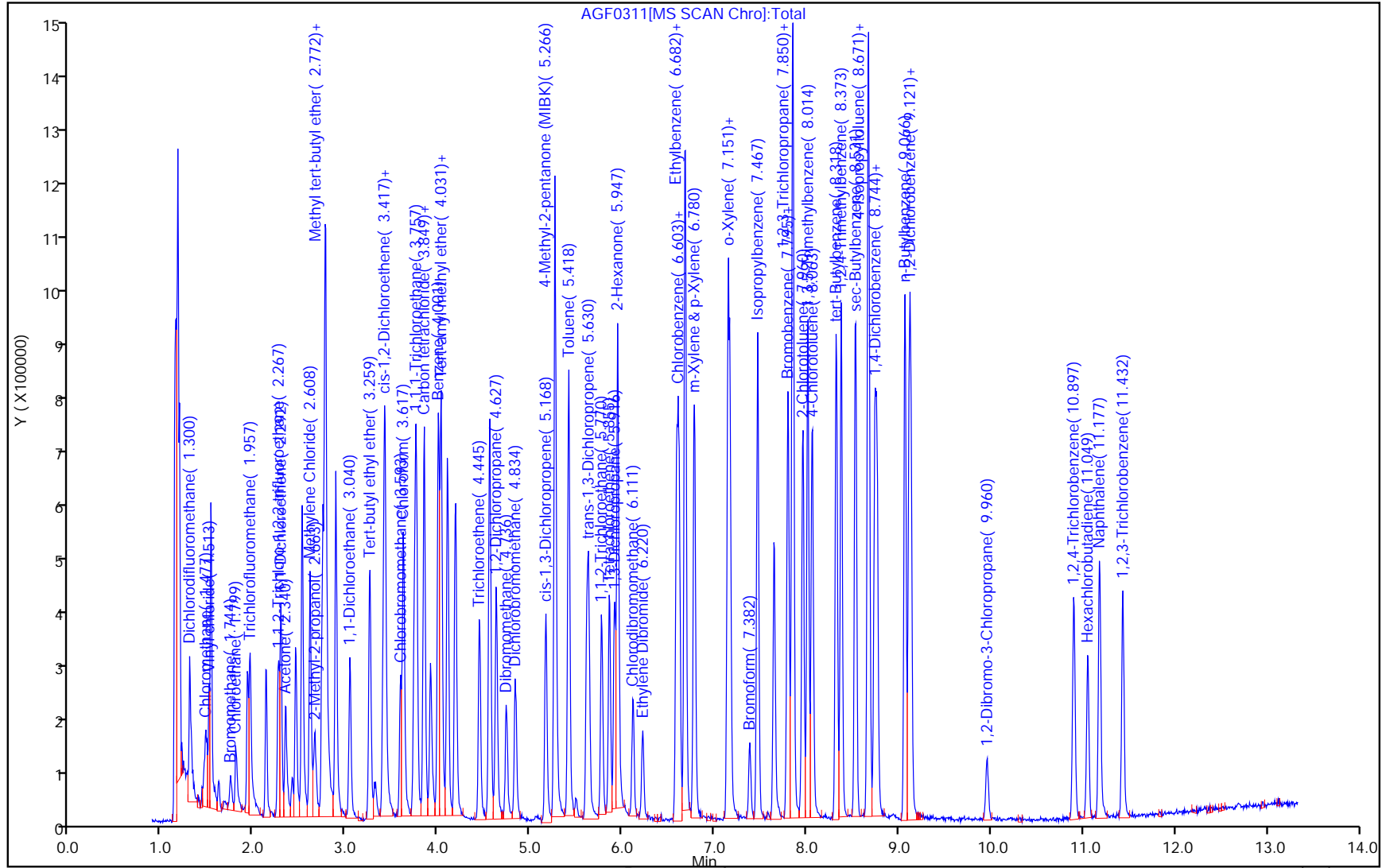
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:42

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 03-Jun-2020 16:12:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-012
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:42 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:41:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.184	0.000	97	472626	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.586	6.586	0.000	92	316943	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.739	8.739	0.000	96	166276	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.645	7.645	0.000	85	194623	10.0	10.3	
\$ 5 1,2-Dichlorobenzene-d4	152	9.110	9.110	0.000	89	157727	10.0	9.57	
7 Dichlorodifluoromethane	85	1.302	1.302	0.000	100	351965	20.0	20.7	
8 Chloromethane	50	1.478	1.478	0.000	99	436073	20.0	20.3	
9 Vinyl chloride	62	1.515	1.515	0.000	97	349412	20.0	18.8	
10 Bromomethane	94	1.746	1.746	0.000	97	73492	20.0	19.9	
11 Chloroethane	64	1.800	1.800	0.000	100	213744	20.0	23.2	
12 Trichlorofluoromethane	101	1.959	1.959	0.000	93	330708	20.0	19.5	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.269	2.269	0.000	90	151373	20.0	20.7	
13 1,1-Dichloroethene	96	2.293	2.293	0.000	94	206159	20.0	19.7	
15 Acetone	58	2.342	2.342	0.000	85	166264	100.0	108.6	
16 Methylene Chloride	84	2.609	2.609	0.000	98	326834	20.0	22.6	
17 2-Methyl-2-propanol	59	2.664	2.664	0.000	98	338321	200.0	223.5	
18 Methyl tert-butyl ether	73	2.743	2.743	0.000	98	942975	20.0	21.5	
19 trans-1,2-Dichloroethene	96	2.767	2.767	0.000	99	245781	20.0	22.5	
20 1,1-Dichloroethane	63	3.041	3.041	0.000	99	548276	20.0	21.7	
22 Tert-butyl ethyl ether	59	3.260	3.260	0.000	88	771322	16.0	17.4	
25 2,2-Dichloropropane	77	3.406	3.406	0.000	93	390442	20.0	20.7	
24 cis-1,2-Dichloroethene	61	3.418	3.418	0.000	91	503328	20.0	22.0	
23 2-Butanone (MEK)	72	3.424	3.424	0.000	100	161021	100.0	90.7	
26 Chlorobromomethane	130	3.594	3.594	0.000	94	136646	20.0	19.4	
27 Chloroform	83	3.619	3.619	0.000	97	465448	20.0	20.0	
28 1,1,1-Trichloroethane	97	3.734	3.734	0.000	95	408313	20.0	21.2	
30 1,1-Dichloropropene	75	3.844	3.844	0.000	90	394479	20.0	20.9	
29 Carbon tetrachloride	117	3.850	3.850	0.000	82	324235	20.0	21.8	
31 Benzene	78	4.002	4.002	0.000	96	1224804	20.0	21.4	
33 Tert-amyl methyl ether	73	4.026	4.026	0.000	95	695267	16.0	17.2	
32 1,2-Dichloroethane	62	4.032	4.032	0.000	96	447533	20.0	21.6	

Report Date: 04-Jun-2020 12:47:42

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.446	4.446	0.000	95	230675	20.0	22.6	
35 1,2-Dichloropropane	63	4.628	4.628	0.000	89	311262	20.0	21.4	
36 Dibromomethane	93	4.738	4.738	0.000	87	168220	20.0	21.8	
37 Dichlorobromomethane	83	4.835	4.835	0.000	99	377985	20.0	22.0	
38 cis-1,3-Dichloropropene	75	5.170	5.170	0.000	99	447400	20.0	21.2	
39 4-Methyl-2-pentanone (MIBK)	43	5.267	5.267	0.000	99	2019695	100.0	119.3	
40 Toluene	92	5.419	5.419	0.000	93	696598	20.0	21.3	
41 trans-1,3-Dichloropropene	75	5.613	5.613	0.000	97	454865	20.0	21.9	
42 1,1,2-Trichloroethane	83	5.778	5.778	0.000	94	224268	20.0	21.4	
43 Tetrachloroethene	164	5.863	5.863	0.000	91	176421	20.0	20.8	
44 1,3-Dichloropropane	76	5.911	5.911	0.000	98	513642	20.0	22.1	
45 2-Hexanone	43	5.948	5.948	0.000	99	1437372	100.0	107.9	
46 Chlorodibromomethane	129	6.112	6.112	0.000	96	228055	20.0	19.0	
47 Ethylene Dibromide	107	6.216	6.216	0.000	97	265180	20.0	23.9	
48 Chlorobenzene	112	6.611	6.611	0.000	93	692672	20.0	21.5	
50 Ethylbenzene	91	6.678	6.678	0.000	99	1409184	20.0	20.7	
49 1,1,1,2-Tetrachloroethane	131	6.684	6.684	0.000	90	232293	20.0	19.7	
51 m-Xylene & p-Xylene	91	6.781	6.781	0.000	99	1123946	20.0	21.2	
52 o-Xylene	91	7.140	7.140	0.000	97	1097720	20.0	20.1	
53 Styrene	104	7.164	7.164	0.000	93	830830	20.0	22.0	
54 Bromoform	173	7.377	7.377	0.000	91	136840	20.0	20.4	
55 Isopropylbenzene	105	7.468	7.468	0.000	97	1369565	20.0	21.6	
56 Bromobenzene	156	7.797	7.797	0.000	89	262049	20.0	20.2	
57 1,1,2,2-Tetrachloroethane	83	7.803	7.803	0.000	97	402982	20.0	20.6	
58 1,2,3-Trichloropropane	110	7.845	7.845	0.000	89	116679	20.0	21.5	
59 N-Propylbenzene	91	7.851	7.851	0.000	97	1832025	20.0	21.6	
60 2-Chlorotoluene	91	7.955	7.955	0.000	96	999160	20.0	20.3	
61 1,3,5-Trimethylbenzene	105	8.010	8.010	0.000	91	1191108	20.0	21.9	
62 4-Chlorotoluene	91	8.058	8.058	0.000	98	1121006	20.0	21.0	
63 tert-Butylbenzene	119	8.320	8.320	0.000	96	942312	20.0	21.0	
64 1,2,4-Trimethylbenzene	105	8.374	8.374	0.000	97	1175727	20.0	21.7	
65 sec-Butylbenzene	105	8.526	8.526	0.000	96	1457121	20.0	20.2	
67 4-Isopropyltoluene	119	8.666	8.666	0.000	95	1188093	20.0	20.7	
66 1,3-Dichlorobenzene	146	8.678	8.678	0.000	91	549723	20.0	21.1	
68 1,4-Dichlorobenzene	146	8.764	8.764	0.000	86	529847	20.0	19.1	
70 n-Butylbenzene	91	9.068	9.068	0.000	97	1345281	20.0	21.9	
69 1,2-Dichlorobenzene	146	9.135	9.135	0.000	90	543850	20.0	20.2	
71 1,2-Dibromo-3-Chloropropane	157	9.962	9.962	0.000	87	66001	20.0	19.5	Ma
72 1,2,4-Trichlorobenzene	180	10.898	10.898	0.000	92	284531	20.0	20.9	
73 Hexachlorobutadiene	225	11.050	11.050	0.000	86	123563	20.0	20.0	
74 Naphthalene	128	11.178	11.178	0.000	98	1021900	20.0	22.2	
75 1,2,3-Trichlorobenzene	180	11.427	11.427	0.000	93	267075	20.0	20.9	
S 76 Xylenes, Total	1				0		40.0	41.3	
S 78 1,3-Dichloropropene, Total	1				0		40.0	43.1	

Report Date: 04-Jun-2020 12:47:42

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:43

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D

Injection Date: 03-Jun-2020 16:12:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ics

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

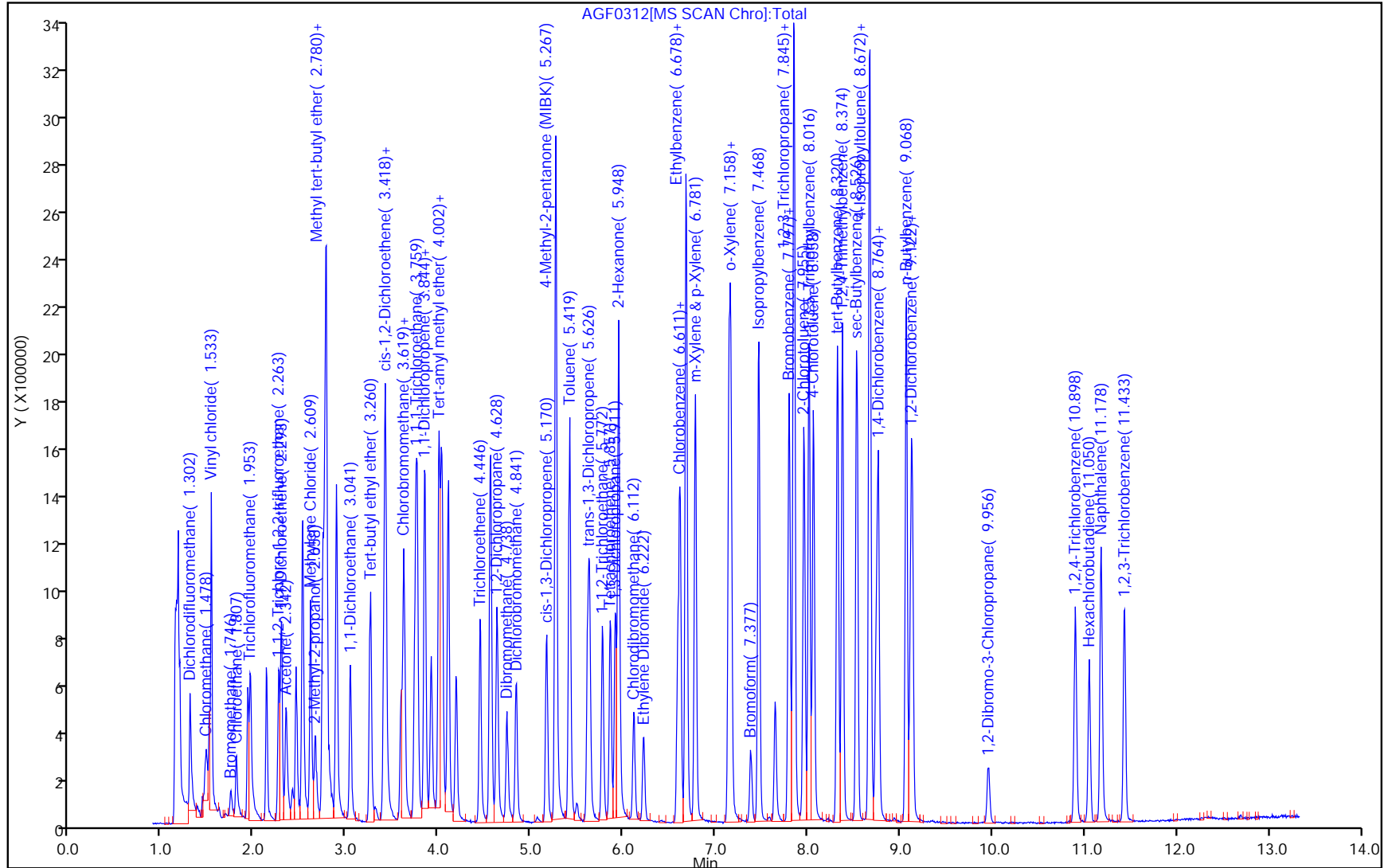
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:43

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

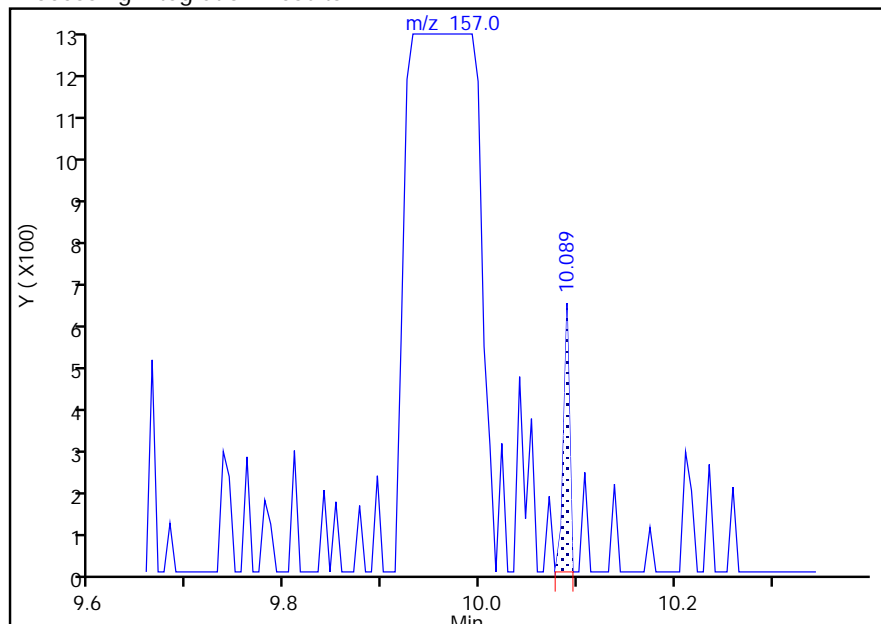
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D
 Injection Date: 03-Jun-2020 16:12:30 Instrument ID: CMSAG
 Lims ID: icis
 Client ID:
 Operator ID: rd ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

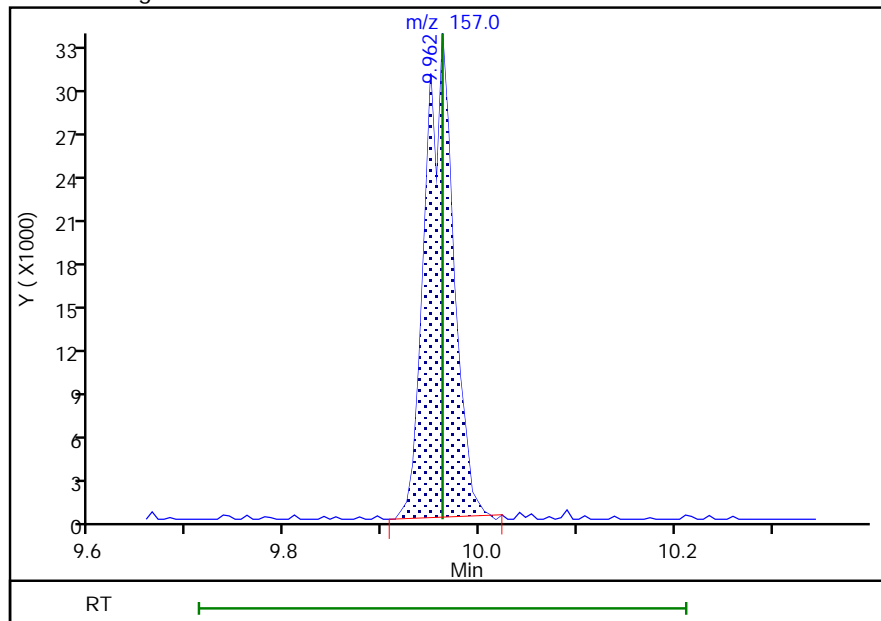
RT: 10.09
 Area: 273
 Amount: 0.110552
 Amount Units: ug/l

Processing Integration Results



RT: 9.96
 Area: 66001
 Amount: 19.508315
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:41:15

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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06/17/2020
September 2020

Report Date: 04-Jun-2020 12:47:45

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0313.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 03-Jun-2020 16:37:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-013
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:44 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:49:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.186	4.184	0.002	97	530381	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.588	6.586	0.002	89	352191	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.741	8.739	0.002	97	161564	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.647	7.645	0.002	89	195715	10.0	9.20	
\$ 5 1,2-Dichlorobenzene-d4	152	9.112	9.110	0.002	88	159620	10.0	9.97	
7 Dichlorodifluoromethane	85	1.304	1.302	0.002	99	886602	50.0	46.4	
8 Chloromethane	50	1.480	1.478	0.002	99	1056850	50.0	43.9	
9 Vinyl chloride	62	1.511	1.515	-0.005	98	974470	50.0	46.8	
10 Bromomethane	94	1.748	1.746	0.002	98	211155	50.0	51.0	
11 Chloroethane	64	1.808	1.800	0.008	99	493078	50.0	47.8	
12 Trichlorofluoromethane	101	1.961	1.959	0.001	97	866878	50.0	45.6	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.265	2.269	-0.004	90	364976	50.0	44.5	
13 1,1-Dichloroethene	96	2.295	2.293	0.002	92	534673	50.0	45.6	
15 Acetone	58	2.344	2.342	0.002	85	377006	250.0	219.5	
16 Methylene Chloride	84	2.611	2.609	0.002	96	702882	50.0	46.1	
17 2-Methyl-2-propanol	59	2.666	2.664	0.002	98	860791	500.0	506.7	
18 Methyl tert-butyl ether	73	2.745	2.743	0.002	98	2213899	50.0	45.1	
19 trans-1,2-Dichloroethene	96	2.769	2.767	0.002	97	571955	50.0	46.6	
20 1,1-Dichloroethane	63	3.043	3.041	0.002	99	1386722	50.0	48.9	
22 Tert-butyl ethyl ether	59	3.256	3.260	-0.004	88	1857913	40.0	37.3	
25 2,2-Dichloropropane	77	3.408	3.406	0.002	95	976200	50.0	46.0	
24 cis-1,2-Dichloroethene	61	3.420	3.418	0.002	92	1225890	50.0	47.6	
23 2-Butanone (MEK)	72	3.426	3.424	0.002	100	513582	250.0	257.7	
26 Chlorobromomethane	130	3.590	3.594	-0.004	96	347047	50.0	43.9	
27 Chloroform	83	3.621	3.619	0.002	98	1143764	50.0	43.9	
28 1,1,1-Trichloroethane	97	3.742	3.734	0.008	97	1001196	50.0	46.9	
30 1,1-Dichloropropene	75	3.846	3.844	0.002	91	1017911	50.0	48.5	
29 Carbon tetrachloride	117	3.846	3.850	-0.004	81	797677	50.0	48.4	
31 Benzene	78	3.998	4.002	-0.004	98	3001242	50.0	47.3	
33 Tert-amyl methyl ether	73	4.028	4.026	0.002	96	1662386	40.0	36.7	
32 1,2-Dichloroethane	62	4.028	4.032	-0.004	97	1094924	50.0	47.5	

Report Date: 04-Jun-2020 12:47:45

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0313.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.448	4.446	0.002	93	543381	50.0	47.9	
35 1,2-Dichloropropane	63	4.630	4.628	0.002	89	825123	50.0	51.1	
36 Dibromomethane	93	4.734	4.738	-0.004	89	407842	50.0	47.5	
37 Dichlorobromomethane	83	4.837	4.835	0.002	98	936532	50.0	49.1	
38 cis-1,3-Dichloropropene	75	5.171	5.170	0.001	98	1116380	50.0	47.7	
39 4-Methyl-2-pentanone (MIBK)	43	5.263	5.267	-0.004	98	4910626	250.0	261.0	
40 Toluene	92	5.421	5.419	0.002	94	1680285	50.0	46.2	
41 trans-1,3-Dichloropropene	75	5.609	5.613	-0.004	97	1119443	50.0	48.4	
42 1,1,2-Trichloroethane	83	5.774	5.778	-0.004	93	572088	50.0	49.0	
43 Tetrachloroethene	164	5.859	5.863	-0.004	89	454482	50.0	55.1	
44 1,3-Dichloropropane	76	5.913	5.911	0.002	93	1272392	50.0	49.2	
45 2-Hexanone	43	5.944	5.948	-0.004	99	3648222	250.0	282.0	
46 Chlorodibromomethane	129	6.114	6.112	0.002	96	626968	50.0	53.9	
47 Ethylene Dibromide	107	6.217	6.216	0.001	97	635890	50.0	51.7	
48 Chlorobenzene	112	6.613	6.611	0.002	87	1781694	50.0	49.7	
50 Ethylbenzene	91	6.680	6.678	0.002	99	3496448	50.0	52.7	
49 1,1,1,2-Tetrachloroethane	131	6.680	6.684	-0.004	66	562343	50.0	49.0	
51 m-Xylene & p-Xylene	91	6.777	6.781	-0.004	98	2839183	50.0	55.0	
52 o-Xylene	91	7.142	7.140	0.002	91	2837299	50.0	53.6	
53 Styrene	104	7.166	7.164	0.002	91	2054387	50.0	55.9	
54 Bromoform	173	7.385	7.377	0.008	92	360573	50.0	55.4	
55 Isopropylbenzene	105	7.470	7.468	0.002	96	3397792	50.0	55.2	
56 Bromobenzene	156	7.793	7.797	-0.004	92	601003	50.0	47.6	
57 1,1,2,2-Tetrachloroethane	83	7.805	7.803	0.002	98	925384	50.0	48.6	
58 1,2,3-Trichloropropane	110	7.847	7.845	0.002	92	250022	50.0	47.4	
59 N-Propylbenzene	91	7.853	7.851	0.002	95	4185275	50.0	50.9	
60 2-Chlorotoluene	91	7.957	7.955	0.002	96	2320936	50.0	48.4	
61 1,3,5-Trimethylbenzene	105	8.011	8.010	0.002	92	2680953	50.0	50.7	
62 4-Chlorotoluene	91	8.060	8.058	0.002	99	2558774	50.0	49.4	
63 tert-Butylbenzene	119	8.322	8.320	0.002	94	2084901	50.0	47.8	
64 1,2,4-Trimethylbenzene	105	8.370	8.374	-0.004	99	2606269	50.0	49.5	
65 sec-Butylbenzene	105	8.528	8.526	0.002	99	3624819	50.0	51.7	
67 4-Isopropyltoluene	119	8.668	8.666	0.002	96	2976122	50.0	53.5	
66 1,3-Dichlorobenzene	146	8.674	8.678	-0.004	92	1180009	50.0	46.7	
68 1,4-Dichlorobenzene	146	8.759	8.764	-0.005	90	1315639	50.0	48.9	
70 n-Butylbenzene	91	9.064	9.068	-0.004	98	3016038	50.0	50.6	
69 1,2-Dichlorobenzene	146	9.130	9.135	-0.005	89	1245744	50.0	47.7	
71 1,2-Dibromo-3-Chloropropane	157	9.957	9.962	-0.005	91	169332	50.0	51.5	
72 1,2,4-Trichlorobenzene	180	10.900	10.898	0.002	93	664556	50.0	50.2	
73 Hexachlorobutadiene	225	11.052	11.050	0.002	89	299195	50.0	50.0	
74 Naphthalene	128	11.180	11.178	0.002	99	2341679	50.0	52.3	
75 1,2,3-Trichlorobenzene	180	11.429	11.427	0.002	95	634364	50.0	51.2	
S 76 Xylenes, Total	1				0		100.0	108.6	
S 77 Trihalomethanes, Total	1				0			202.2	
S 78 1,3-Dichloropropene, Total	1				0		100.0	96.1	

Reagents:

524mmix_00170

Amount Added: 5.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:45

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0313.D

Injection Date: 03-Jun-2020 16:37:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

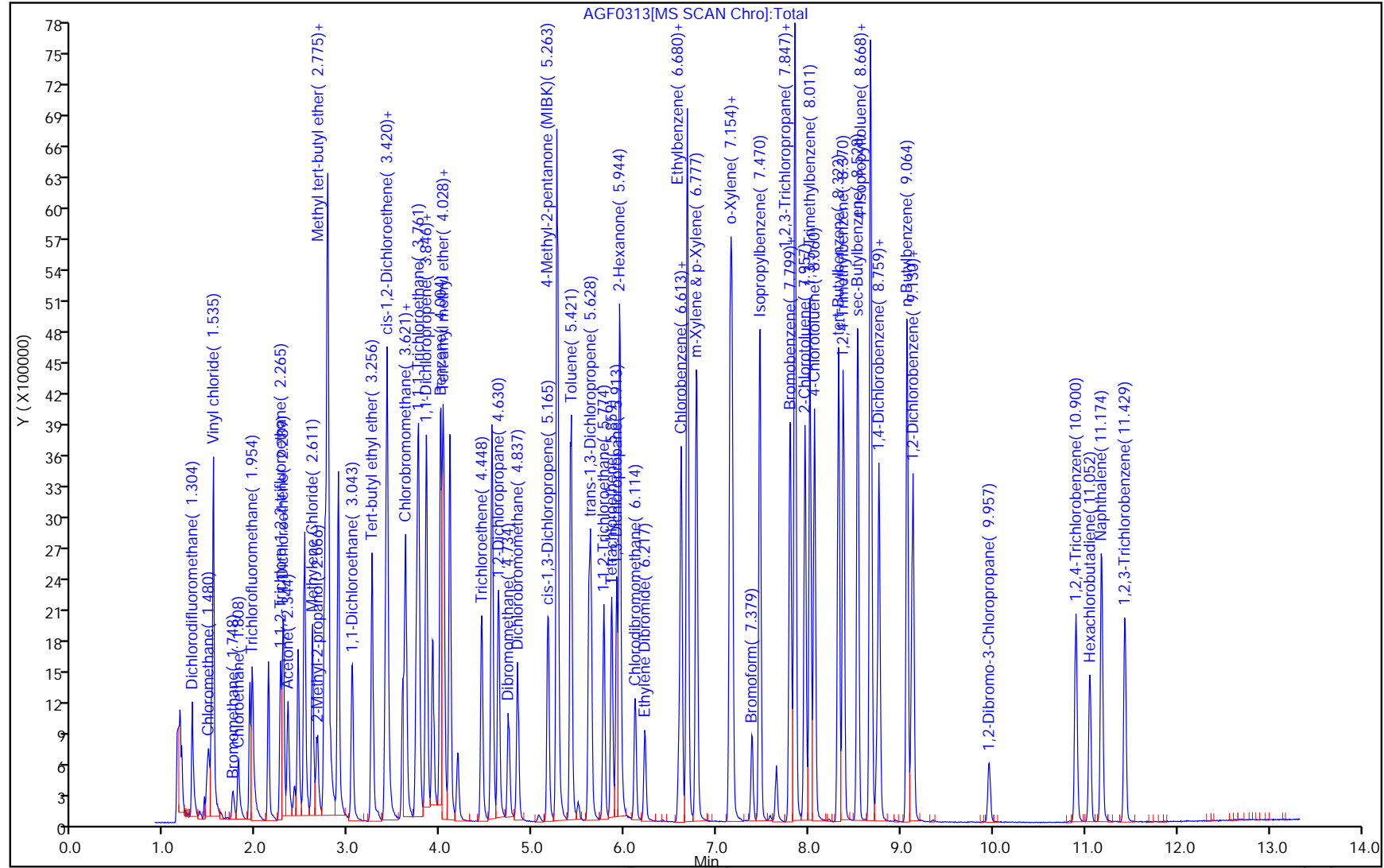
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 03-Jun-2020 17:02:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-014
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:47 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:52:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.184	0.000	98	498330	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.586	6.586	0.000	90	308012	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	94	165413	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.644	7.645	-0.001	90	205615	10.0	10.3	
\$ 5 1,2-Dichlorobenzene-d4	152	9.116	9.110	0.006	78	143402	10.0	8.75	
7 Dichlorodifluoromethane	85	1.301	1.302	-0.001	98	1594960	100.0	88.9	
8 Chloromethane	50	1.483	1.478	0.005	98	2126047	100.0	94.0	M
9 Vinyl chloride	62	1.514	1.515	-0.001	98	1892852	100.0	96.7	
10 Bromomethane	94	1.739	1.746	-0.007	98	418313	100.0	107.5	
11 Chloroethane	64	1.800	1.800	0.000	99	1016397	100.0	104.8	
12 Trichlorofluoromethane	101	1.952	1.959	-0.007	99	1917819	100.0	107.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.262	2.269	-0.007	89	720115	100.0	93.5	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	92	1040177	100.0	94.4	
15 Acetone	58	2.341	2.342	-0.001	85	1945552	500.0	1205.4	
16 Methylene Chloride	84	2.608	2.609	-0.001	97	1400145	100.0	101.3	
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	99	1847019	1000.0	1157.2	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	97	4842731	100.0	104.9	
19 trans-1,2-Dichloroethene	96	2.761	2.767	-0.007	95	1079464	100.0	93.7	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	99	2684988	100.0	100.7	
22 Tert-butyl ethyl ether	59	3.253	3.260	-0.007	87	4028735	80.0	86.1	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	96	1748455	100.0	87.7	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	91	2223608	100.0	92.0	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	100	2404094	500.0	1283.6	
26 Chlorobromomethane	130	3.588	3.594	-0.006	95	605930	100.0	81.5	
27 Chloroform	83	3.624	3.619	0.005	98	2424470	100.0	98.9	
28 1,1,1-Trichloroethane	97	3.740	3.734	0.006	98	2082391	100.0	111.5	
30 1,1-Dichloropropene	75	3.843	3.844	-0.001	90	1861968	100.0	101.4	
29 Carbon tetrachloride	117	3.843	3.850	-0.007	92	1695215	100.0	117.5	
31 Benzene	78	4.001	4.002	-0.001	97	6064818	100.0	109.2	
33 Tert-amyl methyl ether	73	4.032	4.026	0.006	98	3552483	80.0	83.5	
32 1,2-Dichloroethane	62	4.032	4.032	0.000	97	2223720	100.0	110.3	

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.445	4.446	-0.001	94	1082039	100.0	109.0	
35 1,2-Dichloropropane	63	4.627	4.628	-0.001	90	1567381	100.0	111.1	
36 Dibromomethane	93	4.737	4.738	-0.001	90	816710	100.0	108.7	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	99	1849012	100.0	110.7	
38 cis-1,3-Dichloropropene	75	5.169	5.170	-0.001	98	2298310	100.0	112.3	
39 4-Methyl-2-pentanone (MIBK)	43	5.260	5.267	-0.007	92	19872835	500.0	1207.9	eMa
40 Toluene	92	5.412	5.419	-0.007	93	3428078	100.0	107.8	
41 trans-1,3-Dichloropropene	75	5.613	5.613	0.000	97	2310975	100.0	114.3	
42 1,1,2-Trichloroethane	83	5.771	5.778	-0.007	93	1042149	100.0	102.1	
43 Tetrachloroethene	164	5.862	5.863	-0.001	91	830615	100.0	98.4	
44 1,3-Dichloropropane	76	5.917	5.911	0.006	97	2270684	100.0	100.3	
45 2-Hexanone	43	5.941	5.948	-0.007	96	17277798	500.0	1304.3	e
46 Chlorodibromomethane	129	6.117	6.112	0.005	98	1315418	100.0	110.4	
47 Ethylene Dibromide	107	6.221	6.216	0.005	98	1186992	100.0	110.3	
48 Chlorobenzene	112	6.616	6.611	0.005	96	3296238	100.0	105.1	
50 Ethylbenzene	91	6.677	6.678	-0.001	99	6670865	100.0	98.3	
49 1,1,1,2-Tetrachloroethane	131	6.683	6.684	-0.001	65	1127095	100.0	95.9	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	96	5557977	100.0	105.2	
52 o-Xylene	91	7.145	7.140	0.005	92	5572620	100.0	102.8	
53 Styrene	104	7.163	7.164	-0.001	92	4250922	100.0	112.9	
54 Bromoform	173	7.382	7.377	0.005	92	802910	100.0	120.5	
55 Isopropylbenzene	105	7.467	7.468	-0.001	96	7002214	100.0	111.1	
56 Bromobenzene	156	7.790	7.797	-0.007	92	1262152	100.0	97.6	
57 1,1,2,2-Tetrachloroethane	83	7.802	7.803	-0.001	98	1754719	100.0	90.0	
58 1,2,3-Trichloropropane	110	7.845	7.845	-0.001	87	540663	100.0	100.2	
59 n-Propylbenzene	91	7.851	7.851	0.000	97	8017904	100.0	95.2	
60 2-Chlorotoluene	91	7.960	7.955	0.005	95	5273676	100.0	107.5	
61 1,3,5-Trimethylbenzene	105	8.009	8.010	0.000	94	5520222	100.0	101.9	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	98	5541673	100.0	104.5	
63 tert-Butylbenzene	119	8.319	8.320	-0.001	89	4653631	100.0	104.2	
64 1,2,4-Trimethylbenzene	105	8.374	8.374	0.000	96	5991087	100.0	111.2	
65 sec-Butylbenzene	105	8.526	8.526	0.000	98	7193845	100.0	100.3	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	6046892	100.0	106.1	
66 1,3-Dichlorobenzene	146	8.678	8.678	0.000	91	2605351	100.0	100.7	
68 1,4-Dichlorobenzene	146	8.763	8.764	-0.001	90	2784218	100.0	101.1	
70 n-Butylbenzene	91	9.067	9.068	-0.001	97	6257659	100.0	102.6	
69 1,2-Dichlorobenzene	146	9.134	9.135	-0.001	93	2484606	100.0	93.0	
71 1,2-Dibromo-3-Chloropropane	157	9.961	9.962	-0.001	93	363301	100.0	107.9	
72 1,2,4-Trichlorobenzene	180	10.897	10.898	-0.001	93	1341054	100.0	98.9	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	90	605958	100.0	98.8	
74 Naphthalene	128	11.177	11.178	-0.001	99	4740107	100.0	103.4	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	94	1234515	100.0	97.3	
S 76 Xylenes, Total	1				0		200.0	208.0	
S 77 Trihalomethanes, Total	1				0			440.5	
S 78 1,3-Dichloropropene, Total	1				0		200.0	226.6	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 10.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Injection Date: 03-Jun-2020 17:02:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

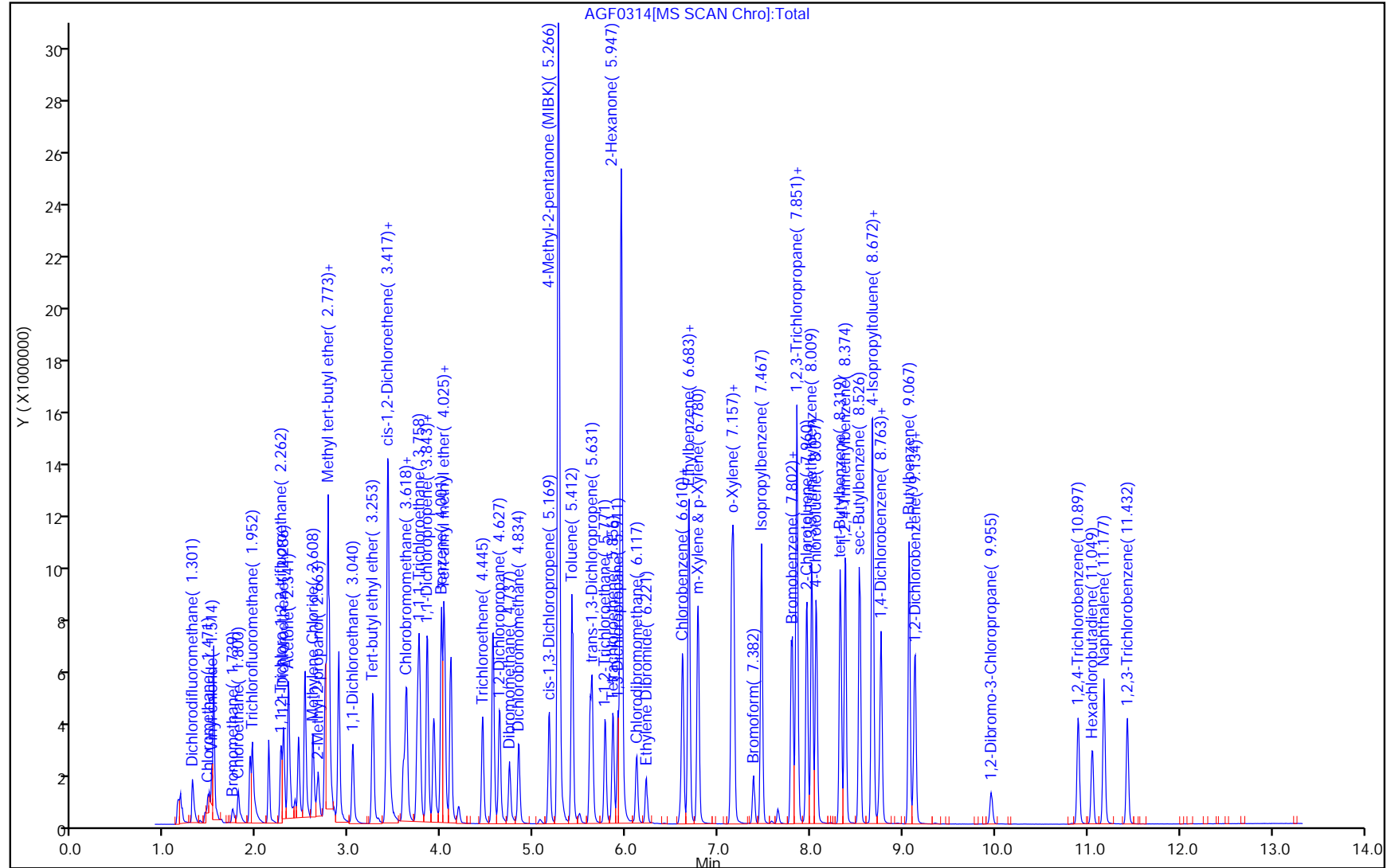
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

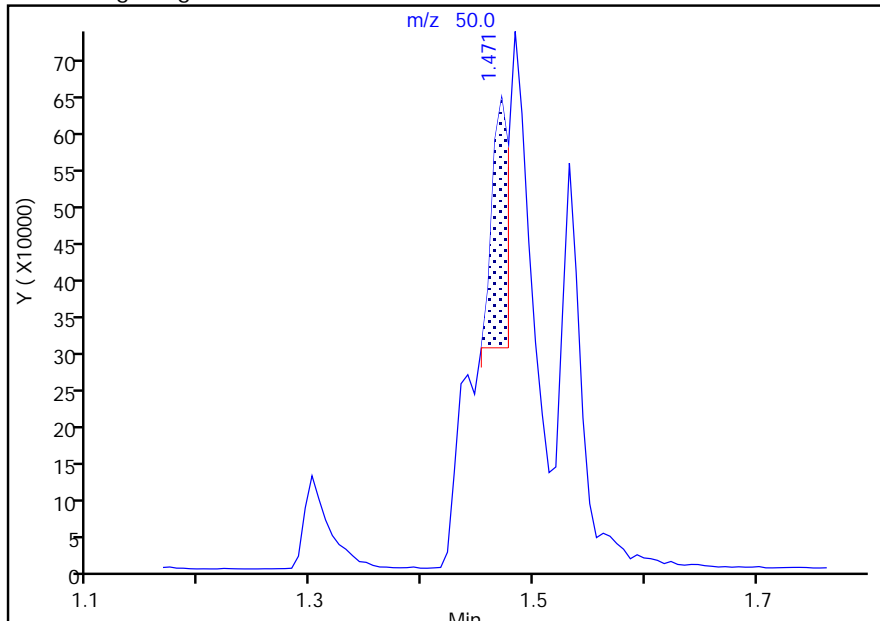
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Injection Date: 03-Jun-2020 17:02:30 Instrument ID: CMSAG
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: CMSAG_524New Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

8 Chloromethane, CAS: 74-87-3

Signal: 1

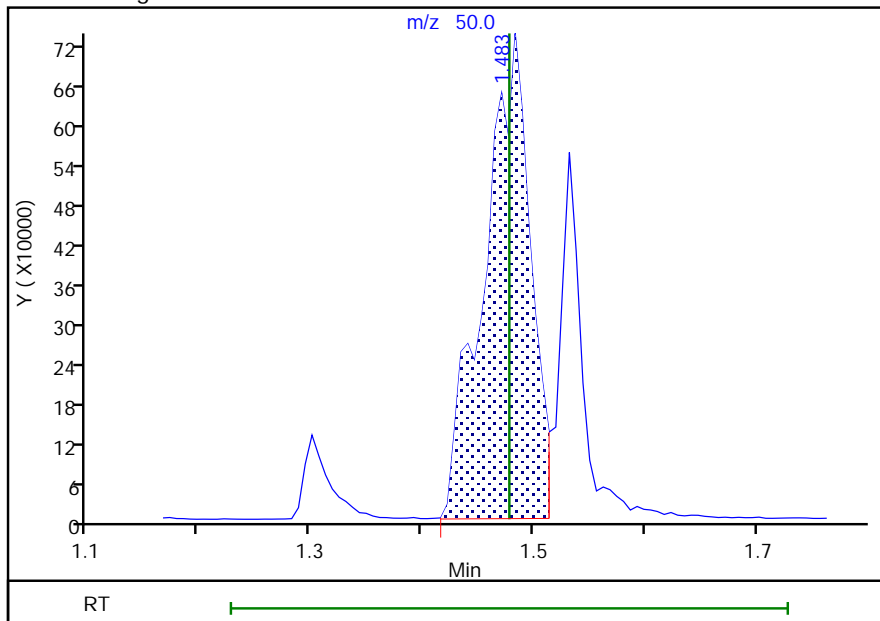
RT: 1.47
Area: 357174
Amount: 18.505430
Amount Units: ug/l

Processing Integration Results



RT: 1.48
Area: 2126047
Amount: 93.977939
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:51:47

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

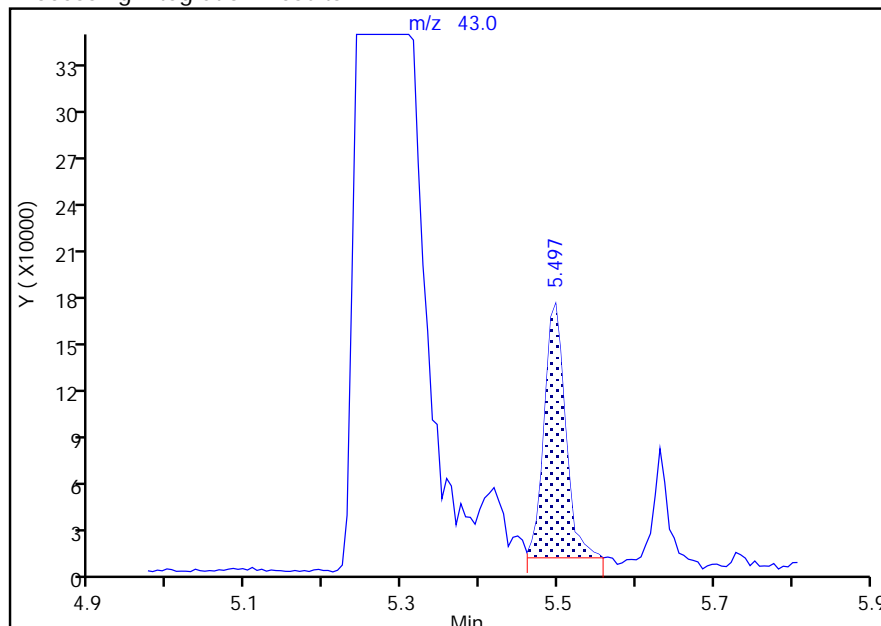
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Injection Date: 03-Jun-2020 17:02:30 Instrument ID: CMSAG
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

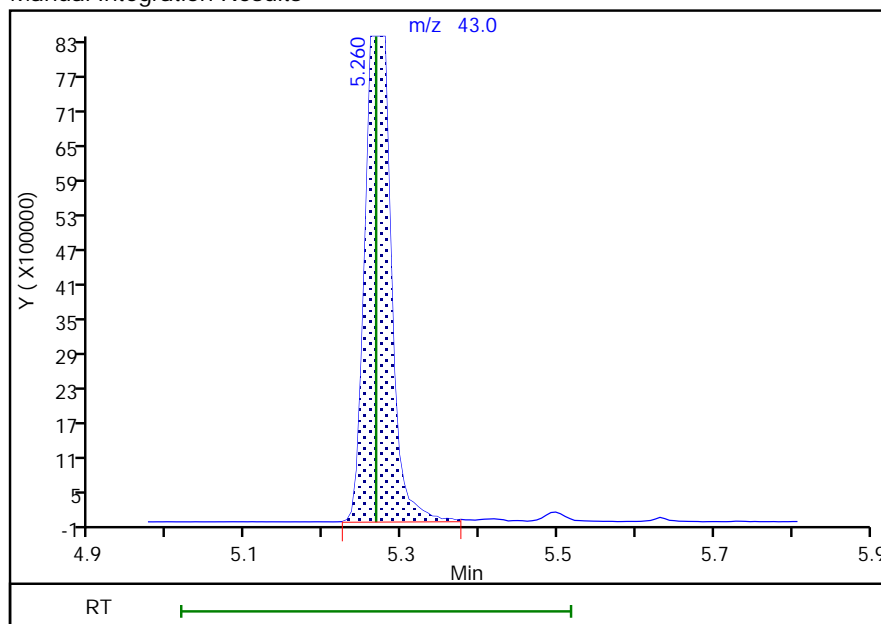
RT: 5.50
 Area: 302612
 Amount: 19.938136
 Amount Units: ug/l

Processing Integration Results



RT: 5.26
 Area: 19872835
 Amount: 1207.8686
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:52:18

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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06/17/2020

September 2020

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621036/9	UF0307.D
Level 2	IC 680-621036/10	UF0308.D
Level 3	IC 680-621036/11	UF0309.D
Level 4	IC 680-621036/12	UF0310.D
Level 5	IC 680-621036/13	UF0311.D
Level 6	ICIS 680-621036/14	UF0312.D
Level 7	IC 680-621036/15	UF0313.D
Level 8	IC 680-621036/16	UF0314.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3241 0.3331	0.2545 0.3202	0.3543 0.3226	0.3416	0.3353	Ave		0.3232			9.3		20.0				
Vinyl chloride	0.3326 0.3287	0.3421 0.3285	0.3506 0.3316	0.3396	0.3397	Ave		0.3367			2.3		20.0				
Chloromethane	0.2552 0.3391	0.2578 0.3440	0.2999 0.3830	0.3515	0.3352	Ave		0.3207			14.2		20.0				
Bromomethane	0.1201 0.1769	0.1398 0.1619	0.1579 0.1583	0.1711	0.1502	Ave		0.1545			11.7		20.0				
Chloroethane	0.1116 0.1817	0.1915 0.1757	0.1496 0.1717	0.1677	0.1664	Ave		0.1645			15.0		20.0				
Trichlorofluoromethane	0.2457 0.2963	0.2615 0.2639	0.3046 0.2715	0.2911	0.2480	Ave		0.2728			8.1		20.0				
Freon 113	0.2296 0.2351	0.2217 0.2134	0.2401 0.2214	0.2196	0.2308	Ave		0.2265			3.9		20.0				
1,1-Dichloroethene	0.1854 0.2140	0.2382 0.1925	0.2108 0.1874	0.2111	0.2101	Ave		0.2062			8.4		20.0				
Acetone	++++ 0.0214	++++ 0.0209	0.0291 ++++	0.0226	0.0249	Ave		0.0238			14.0		20.0				
Methylene Chloride	1.1631 0.2902	0.6974 0.2895	0.4413 ++++	0.2839	0.3082	Lin1	0.4049	0.2724						0.9940		0.9900	
tert-Butyl alcohol	0.0308 0.0264	0.0266 0.0269	0.0264 0.0276	0.0293	0.0278	Ave		0.0277			5.7		20.0				
Methyl tert-butyl ether	0.7938 0.7455	0.7870 0.7280	0.7466 0.7621	0.7527	0.7709	Ave		0.7608			2.9		20.0				
trans-1,2-Dichloroethene	0.2689 0.2618	0.2610 0.2543	0.2525 0.2644	0.2663	0.2679	Ave		0.2621			2.3		20.0				
1,1-Dichloroethane	0.4364 0.4386	0.4359 0.4315	0.4200 0.4438	0.4477	0.4436	Ave		0.4372			2.0		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036
SDG No.:
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

Table with columns: ANALYTE, RRF (LVL 1-5), CURVE TYPE, COEFFICIENT (B, M1, M2), #, MIN RRF, %RSD, #, MAX %RSD, R^2 OR COD, #, MIN R^2 OR COD. Rows include various chemical compounds like Tert-butyl ethyl ether, 2-Butanone, etc.

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036
 SDG No.: _____
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloroethane	0.2807 0.2648	0.2899 0.2627	0.2842 0.2664	0.2788	0.2822	Ave		0.2762			3.7		20.0				
Tetrachloroethene	0.5835 0.6161	0.6869 0.5898	0.6405 0.6109	0.6363	0.6140	Ave		0.6223			5.3		20.0				
1,3-Dichloropropane	0.5234 0.5213	0.5310 0.5179	0.5067 0.5339	0.5550	0.5389	Ave		0.5285			2.8		20.0				
2-Hexanone	0.3182 0.4028	0.3351 0.4286	0.3799 +++++	0.4048	0.4230	Ave		0.3846			11.1		20.0				
Chlorodibromomethane	0.6564 0.6781	0.7259 0.6789	0.6972 0.7149	0.6783	0.6972	Ave		0.6909			3.3		20.0				
Ethylene Dibromide	0.3253 0.3459	0.3409 0.3454	0.3504 0.3547	0.3549	0.3576	Ave		0.3469			3.0		20.0				
Chlorobenzene	1.0567 1.0080	1.0055 0.9947	1.0199 1.0366	1.0259	0.9972	Ave		1.0181			2.1		20.0				
1,1,1,2-Tetrachloroethane	0.7058 0.6586	0.7276 0.6526	0.7016 0.6723	0.6743	0.6692	Ave		0.6827			3.8		20.0				
Ethylbenzene	2.7057 3.0862	3.1783 3.1062	3.1848 3.2756	3.0359	3.0586	Ave		3.0789			5.5		20.0				
m-Xylene & p-Xylene	2.2851 2.3896	2.4550 2.3935	2.4476 2.5430	2.2923	2.4216	Ave		2.4035			3.6		20.0				
o-Xylene	2.4282 2.4440	2.5025 2.4858	2.4694 2.6214	2.4330	2.4823	Ave		2.4833			2.5		20.0				
Styrene	1.7521 2.0468	1.9691 2.0548	1.9890 2.1459	1.9473	2.0330	Ave		1.9922			5.8		20.0				
Bromoform	0.4978 0.5299	0.5507 0.5358	0.5077 0.5600	0.5385	0.5321	Ave		0.5316			3.9		20.0				
Isopropylbenzene	2.9372 3.0839	3.0849 3.1222	3.1166 3.2999	2.9943	3.0147	Ave		3.0817			3.5		20.0				
Bromobenzene	0.8799 0.8815	0.9071 0.8805	0.9023 0.8967	0.8870	0.8655	Ave		0.8876			1.5		20.0				
1,1,2,2-Tetrachloroethane	0.8173 0.8186	0.8394 0.8358	0.8781 0.8518	0.8968	0.8751	Ave		0.8516			3.4		20.0				
1,2,3-Trichloropropane	0.2752 0.2539	0.2586 0.2455	0.2588 0.2485	0.2636	0.2647	Ave		0.2586			3.7		20.0				
N-Propylbenzene	3.2697 3.6344	3.5129 3.6765	3.4973 3.8630	3.4828	3.5677	Ave		3.5630			4.8		20.0				
2-Chlorotoluene	2.0518 2.1250	2.2580 2.1271	2.2123 2.2439	2.0667	2.1158	Ave		2.1501			3.7		20.0				
1,3,5-Trimethylbenzene	2.1524 2.3146	2.2722 2.2939	2.1823 2.4445	2.1831	2.2878	Ave		2.2663			4.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036
 SDG No.: _____
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	2.2283 2.4223	2.4651 2.4131	2.4381 2.5404	2.4008	2.4088	Ave		2.4146			3.6		20.0				
tert-Butylbenzene	2.1968 2.2324	2.2413 2.2178	2.1738 2.3296	2.1193	2.1922	Ave		2.2129			2.7		20.0				
1,2,4-Trimethylbenzene	2.0271 2.2149	2.0617 2.2006	2.1435 2.3063	2.1018	2.1164	Ave		2.1465			4.2		20.0				
sec-Butylbenzene	2.9117 3.2089	3.0553 3.2025	3.1333 3.3881	3.0653	3.1145	Ave		3.1350			4.4		20.0				
1,3-Dichlorobenzene	1.5365 1.5804	1.5734 1.5680	1.5992 1.6456	1.5668	1.5848	Ave		1.5819			2.0		20.0				
4-Isopropyltoluene	2.3525 2.6190	2.4813 2.5846	2.4605 2.7248	2.4781	2.4996	Ave		2.5250			4.5		20.0				
1,4-Dichlorobenzene	1.6504 1.5937	1.6968 1.5578	1.6287 1.6463	1.5693	1.6205	Ave		1.6204			2.8		20.0				
1,2-Dichlorobenzene	1.5192 1.5393	1.5485 1.5324	1.5605 1.5753	1.5731	1.5582	Ave		1.5508			1.3		20.0				
n-Butylbenzene	1.5105 1.9603	1.7163 1.9651	1.7969 2.0816	1.8154	1.8274	Ave		1.8342			9.5		20.0				
1,2-Dibromo-3-Chloropropane	0.2211 0.2124	0.2162 0.2192	0.2003 0.2308	0.2179	0.2188	Ave		0.2171			4.0		20.0				
1,2,4-Trichlorobenzene	0.5824 0.7281	0.6517 0.7260	0.6794 0.7432	0.7057	0.6884	Ave		0.6881			7.6		20.0				
Hexachlorobutadiene	0.4453 0.4701	0.4924 0.4377	0.5064 0.4410	0.4592	0.4517	Ave		0.4630			5.4		20.0				
Naphthalene	1.7377 2.0162	2.0050 2.0412	1.9970 2.0803	2.0271	2.0023	Ave		1.9884			5.3		20.0				
1,2,3-Trichlorobenzene	0.6287 0.6893	0.6579 0.6796	0.6601 0.6958	0.6827	0.6630	Ave		0.6696			3.2		20.0				
4-Bromofluorobenzene	0.3776 0.3816	0.3774 0.3896	0.3692 0.3809	0.3732	0.3860	Ave		0.3794			1.7		20.0				
1,2-Dichlorobenzene-d4 (Surr)	0.9646 0.9939	0.9800 0.9774	0.9684 0.9986	0.9522	0.9638	Ave		0.9749			1.6		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621036/9	UF0307.D
Level 2	IC 680-621036/10	UF0308.D
Level 3	IC 680-621036/11	UF0309.D
Level 4	IC 680-621036/12	UF0310.D
Level 5	IC 680-621036/13	UF0311.D
Level 6	ICIS 680-621036/14	UF0312.D
Level 7	IC 680-621036/15	UF0313.D
Level 8	IC 680-621036/16	UF0314.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	9565 384404	14713 911408	41482 1858115	99998	191412	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	9816 379311	19783 935145	41048 1909857	99400	193926	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	7531 391264	14908 979113	35109 2205658	102886	191370	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	3545 204116	8086 460811	18493 911842	50073	85769	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	3293 209631	11070 500206	17519 988640	49083	94987	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	7251 341881	15118 751022	35663 1563654	85196	141595	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Freon 113	FB	Ave	6776 271266	12821 607437	28111 1274969	64287	131771	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	5471 246961	13773 548015	24682 1079344	61778	119959	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	++++ 123388	++++ 297787	17012 ++++	33038	71052	++++ 100	++++ 250	10.0 ++++	25.0	50.0
Methylene Chloride	FB	Linl	34324 334804	40324 823913	51669 ++++	83109	175942	0.500 20.0	1.00 50.0	2.00 ++++	5.00	10.0
tert-Butyl alcohol	FB	Ave	9090 304876	15357 764673	30863 1586806	85731	158755	5.00 200	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	23426 860145	45505 2071982	87412 4389439	220327	440136	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	7935 302122	15089 723744	29564 1522691	77944	152962	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	12879 506077	25205 1228114	49172 2556105	131051	253264	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tert-butyl ethyl ether	FB	Ave	17324 670822	32155 1681670	66797 3529163	175864	346653	0.400 16.0	0.800 40.0	1.60 80.0	4.00	8.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036
 SDG No.: _____
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Butanone (MEK)	FB	Ave	4937 196597	9666 481678	19215 ++++	49506	102343	2.50 100	5.00 250	10.0 ++++	25.0	50.0
cis-1,2-Dichloroethene	FB	Ave	11822 440514	21553 1051163	44082 2180827	116190	223758	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2,2-Dichloropropane	FB	Ave	11990 392953	20684 936783	40193 1918407	101507	197749	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobromomethane	FB	Ave	5325 229709	10519 541612	22305 899598	52366	104877	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroform	FB	Ave	14423 516751	27359 1246628	55217 2605613	130872	264845	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	CBNZ d5	Ave	11439 456045	22848 1073877	44903 2281856	112715	222632	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	CBNZ d5	Ave	11273 406509	20462 956665	41474 2025054	101314	198550	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	CBNZ d5	Ave	11003 417043	21588 1002143	41276 2067180	103578	202649	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	CBNZ d5	Ave	33347 1276156	63192 3116604	127297 6600977	323015	636120	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloroethane	CBNZ d5	Ave	9285 366119	19115 885112	33382 1806047	97375	188341	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tert-amyl methyl ether	FB	Ave	16965 654918	32486 1615376	62798 3420967	166950	333266	0.400 16.0	0.800 40.0	1.60 80.0	4.00	8.00
Trichloroethene	CBNZ d5	Ave	9045 348144	17265 824805	34452 1715649	85175	168932	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	CBNZ d5	Ave	7560 306792	16019 748850	31538 1551781	77925	154645	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	CBNZ d5	Ave	4914 196427	10134 480155	20394 983081	50201	99767	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorobromomethane	CBNZ d5	Ave	9725 393151	18869 971863	38508 2035550	101854	198418	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	10465 489304	23561 1221667	48118 2571345	122629	246112	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	33647 1449585	65030 3728343	136249 ++++	373341	757101	2.50 100	5.00 250	10.0 ++++	25.0	50.0
Toluene	CBNZ d5	Ave	19745 815150	38609 2027238	81089 4269778	202059	398195	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	10709 451799	20528 1123586	41066 2373434	110282	225487	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	6653 246855	13296 608681	26062 1239255	64203	129401	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	DCBd 4	Ave	7380 314211	16328 740655	31304 1522860	80249	152336	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036
SDG No.:
Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3-Dichloropropane	CBNZ d5	Ave	12405 485990	24355 1199972	46458 2484171	127792	247136	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	DCBd 4	Ave	20126 1027009	39831 2691244	92843 +++++	255244	524746	2.50 100	5.00 250	10.0 +++++	25.0	50.0
Chlorodibromomethane	DCBd 4	Ave	8303 345811	17255 852526	34076 1782188	85551	172977	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	7709 322523	15634 800388	32125 1650227	81710	163982	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	25043 939782	46115 2304812	93520 4822645	236202	457324	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	DCBd 4	Ave	8927 335870	17294 819517	34288 1676043	85048	166017	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	DCBd 4	Ave	34223 1573906	75546 3900630	155652 8166081	382894	758785	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
m-Xylene & p-Xylene	DCBd 4	Ave	28903 1218682	58354 3005689	119624 6339604	289106	600774	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	DCBd 4	Ave	30713 1246388	59482 3121606	120689 6535045	306849	615821	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	DCBd 4	Ave	22161 1043842	46805 2580276	97209 5349720	245591	504362	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	DCBd 4	Ave	6297 270265	13090 672889	24812 1396099	67911	132000	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	37151 1572753	73326 3920663	152316 8226572	377648	747898	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	11129 449557	21561 1105683	44099 2235491	111873	214711	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	10337 417451	19951 1049532	42914 2123573	113105	217110	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	3481 129496	6147 308252	12649 619550	33242	65656	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	41357 1853472	83498 4616770	170923 9630311	439249	885094	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	25952 1083704	53671 2671173	108123 5594079	260658	524908	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	27225 1180397	54008 2880519	106654 6094002	275329	567579	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	28185 1235355	58593 3030283	119156 6333163	302791	597581	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	27786 1138509	53275 2784969	106239 5807554	267290	543849	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	25640 1129580	49004 2763382	104758 5749615	265085	525056	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036

SDG No.: _____

Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
sec-Butylbenzene	DCBd 4	Ave	36829 1636504	72623 4021526	153136 8446529	386594	772664	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	19435 806001	37399 1969045	78160 4102344	197610	393169	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	29755 1335661	58978 3245592	120251 6792769	312546	620102	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	20875 812761	40331 1956188	79598 4104139	197923	402020	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	19215 785021	36807 1924356	76267 3927279	198396	386567	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	19105 999751	40795 2467670	87818 5189322	228966	453341	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	2796 108319	5139 275285	9788 575421	27477	54292	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	7367 371297	15490 911652	33206 1852774	88998	170783	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	5633 239739	11704 549637	24749 1099438	57918	112053	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	21979 1028210	47658 2563247	97601 5186268	255664	496733	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7952 351550	15638 853349	32262 1734733	86107	164473	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Bromofluorobenzene	FB	Ave	222859 220154	218214 221808	216114 219382	218477	220394	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0
1,2-Dichlorobenzene-d4 (Surr)	DCBd 4	Ave	244004 253447	232939 245463	236653 248960	240173	239116	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 621036
 SDG No.: _____
 Instrument ID: CMSU GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:39 Calibration End Date: 06/03/2020 17:01 Calibration ID: 76068

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621036/9	UF0307.D
Level 2	IC 680-621036/10	UF0308.D
Level 3	IC 680-621036/11	UF0309.D
Level 4	IC 680-621036/12	UF0310.D
Level 5	IC 680-621036/13	UF0311.D
Level 6	ICIS 680-621036/14	UF0312.D
Level 7	IC 680-621036/15	UF0313.D
Level 8	IC 680-621036/16	UF0314.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #					LVL 7	LVL 8				
Methylene Chloride	29.7	+++++					30					

Report Date: 04-Jun-2020 10:42:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0307.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 03-Jun-2020 14:39:30 ALS Bottle#: 7 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-009
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15

Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:23 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:17:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	590192	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	473988	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	252970	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	98	222859	10.0	9.95	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	244004	10.0	9.89	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	98	9565	0.5000	0.5014	
9 Vinyl chloride	62	1.237	1.232	0.005	98	9816	0.5000	0.4940	
8 Chloromethane	50	1.247	1.253	-0.006	83	7531	0.5000	0.3979	
10 Bromomethane	94	1.404	1.405	-0.001	86	3545	0.5000	0.3887	
11 Chloroethane	64	1.451	1.457	-0.006	96	3293	0.5000	0.3392	
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	96	7251	0.5000	0.4503	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	88	6776	0.5000	0.5070	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	96	5471	0.5000	0.4496	
15 Acetone	58	1.901	1.901	0.000	86	8564	2.50	6.11	
16 Methylene Chloride	84	2.194	2.194	0.000	85	34324	0.5000	0.6487	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	97	9090	5.00	5.56	
18 Methyl tert-butyl ether	73	2.361	2.362	-0.001	96	23426	0.5000	0.5217	a
19 trans-1,2-Dichloroethene	96	2.367	2.372	-0.005	86	7935	0.5000	0.5129	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	98	12879	0.5000	0.4991	
22 Tert-butyl ethyl ether	59	2.926	2.927	-0.001	91	17324	0.4000	0.3991	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	97	4937	2.50	2.47	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	95	11822	0.5000	0.5222	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	73	11990	0.5000	0.5798	
26 Chlorobromomethane	130	3.224	3.225	-0.001	80	5325	0.5000	0.4940	
27 Chloroform	83	3.287	3.287	0.000	99	14423	0.5000	0.5309	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	95	11439	0.5000	0.4965	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	86	11273	0.5000	0.5388	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	11003	0.5000	0.5157	
31 Benzene	78	3.659	3.664	-0.005	94	33347	0.5000	0.5072	
32 1,2-Dichloroethane	62	3.706	3.701	0.005	96	9285	0.5000	0.4945	
33 Tert-amyl methyl ether	73	3.747	3.748	-0.001	97	16965	0.4000	0.4038	

Report Date: 04-Jun-2020 10:42:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0307.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	91	9045	0.5000	0.5140	
35 1,2-Dichloropropane	63	4.328	4.323	0.005	86	7560	0.5000	0.4772	
36 Dibromomethane	93	4.391	4.386	0.005	85	4914	0.5000	0.4835	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	98	9725	0.5000	0.4834	
38 cis-1,3-Dichloropropene	75	4.846	4.841	0.005	92	10465	0.5000	0.4252	
39 4-Methyl-2-pentanone (MIBK)	43	4.956	4.951	0.005	96	33647	2.50	2.31	
40 Toluene	92	5.097	5.092	0.005	93	19745	0.5000	0.4780	
41 trans-1,3-Dichloropropene	75	5.280	5.275	0.005	94	10709	0.5000	0.4759	
42 1,1,2-Trichloroethane	83	5.426	5.421	0.005	93	6653	0.5000	0.5082	
43 Tetrachloroethene	164	5.489	5.484	0.005	95	7380	0.5000	0.4688	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	91	12405	0.5000	0.4952	
45 2-Hexanone	43	5.599	5.589	0.010	93	20126	2.50	2.07	
46 Chlorodibromomethane	129	5.714	5.714	0.000	96	8303	0.5000	0.4751	
47 Ethylene Dibromide	107	5.808	5.803	0.005	97	7709	0.5000	0.4689	
48 Chlorobenzene	112	6.190	6.190	0.000	96	25043	0.5000	0.5190	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	92	8927	0.5000	0.5169	
50 Ethylbenzene	91	6.274	6.269	0.005	97	34223	0.5000	0.4394	
51 m-Xylene & p-Xylene	91	6.378	6.373	0.005	99	28903	0.5000	0.4754	
52 o-Xylene	91	6.687	6.682	0.005	93	30713	0.5000	0.4889	
53 Styrene	104	6.708	6.698	0.010	96	22161	0.5000	0.4397	
54 Bromoform	173	6.844	6.844	0.000	96	6297	0.5000	0.4683	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	37151	0.5000	0.4766	
56 Bromobenzene	156	7.236	7.231	0.005	91	11129	0.5000	0.4957	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.236	0.005	97	10337	0.5000	0.4798	
58 1,2,3-Trichloropropane	110	7.278	7.283	-0.005	96	3481	0.5000	0.5321	
59 n-Propylbenzene	91	7.325	7.320	0.005	100	41357	0.5000	0.4588	
60 2-Chlorotoluene	91	7.393	7.388	0.005	96	25952	0.5000	0.4771	
61 1,3,5-Trimethylbenzene	105	7.471	7.472	-0.001	94	27225	0.5000	0.4749	
62 4-Chlorotoluene	91	7.498	7.493	0.005	97	28185	0.5000	0.4614	
63 tert-Butylbenzene	119	7.728	7.728	0.000	94	27786	0.5000	0.4964	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	95	25640	0.5000	0.4722	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	36829	0.5000	0.4644	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	98	19435	0.5000	0.4857	
67 4-Isopropyltoluene	119	8.047	8.042	0.005	96	29755	0.5000	0.4658	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	95	20875	0.5000	0.5092	
70 n-Butylbenzene	91	8.387	8.382	0.005	88	19105	0.5000	0.4118	
69 1,2-Dichlorobenzene	146	8.381	8.382	-0.001	94	19215	0.5000	0.4898	a
71 1,2-Dibromo-3-Chloropropane	157	9.040	9.041	-0.001	86	2796	0.5000	0.5091	
72 1,2,4-Trichlorobenzene	180	9.726	9.715	0.011	91	7367	0.5000	0.4232	
73 Hexachlorobutadiene	225	9.835	9.841	-0.006	93	5633	0.5000	0.4810	
74 Naphthalene	128	9.945	9.930	0.015	99	21979	0.5000	0.4370	
75 1,2,3-Trichlorobenzene	180	10.123	10.118	0.005	95	7952	0.5000	0.4694	
S 76 Xylenes, Total	1				0		1.00	0.9643	
S 77 Trihalomethanes, Total	1				0			1.96	
S 78 1,3-Dichloropropene, Total	1				0		1.00	0.9011	

Report Date: 04-Jun-2020 10:42:24

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.05

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0307.D

Injection Date: 03-Jun-2020 14:39:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

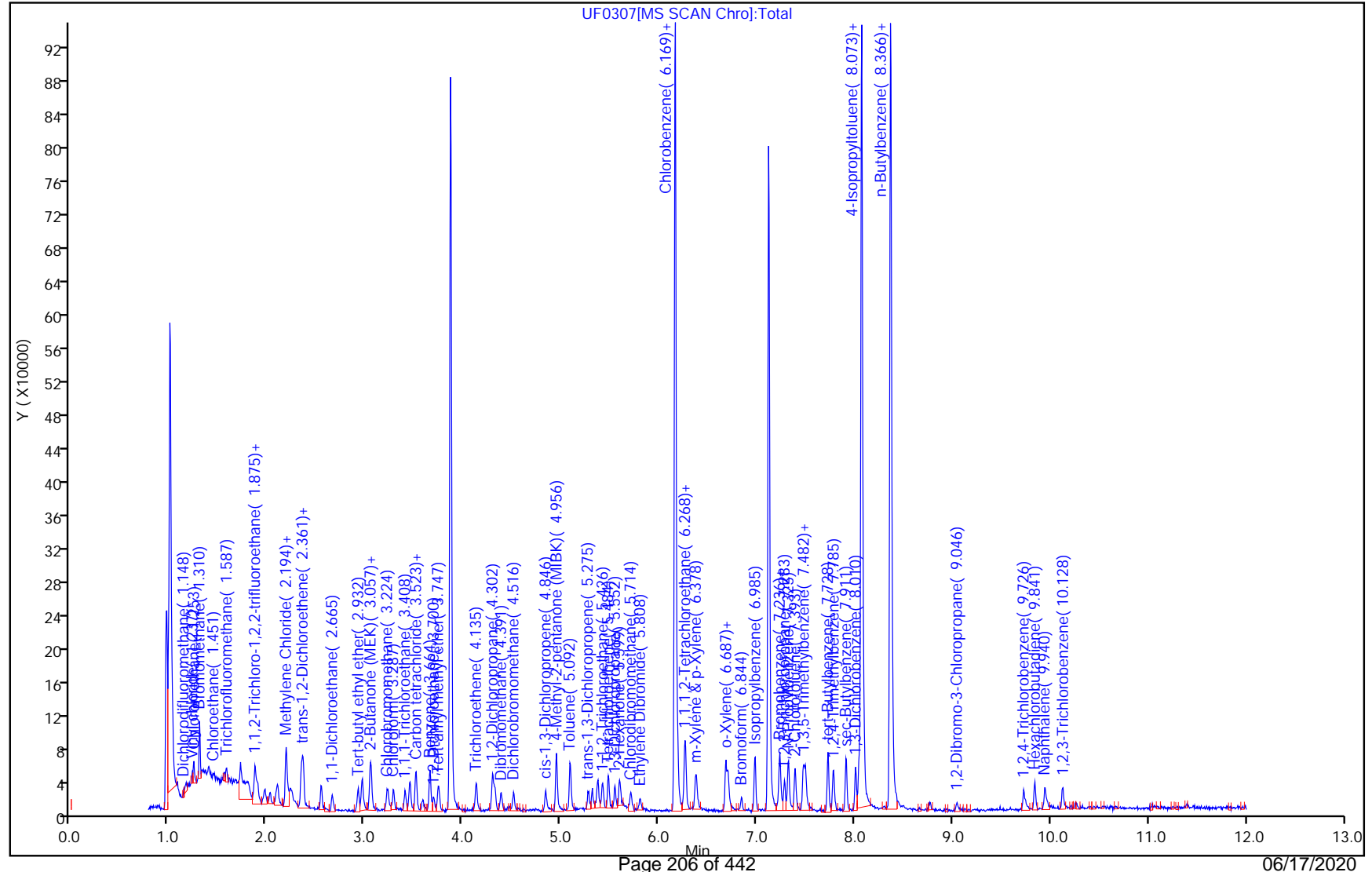
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

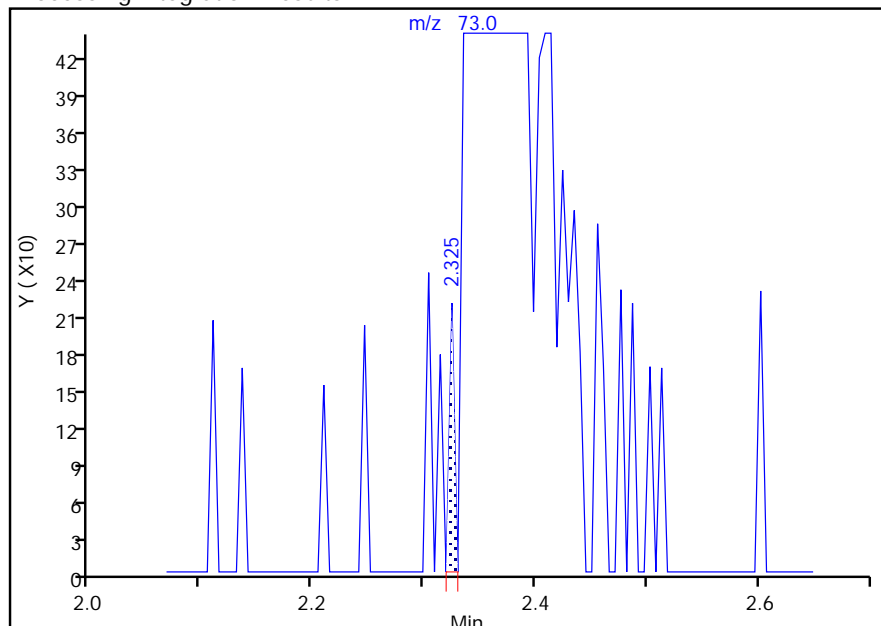
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Injection Date:	03-Jun-2020 14:39:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	SMP	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

18 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

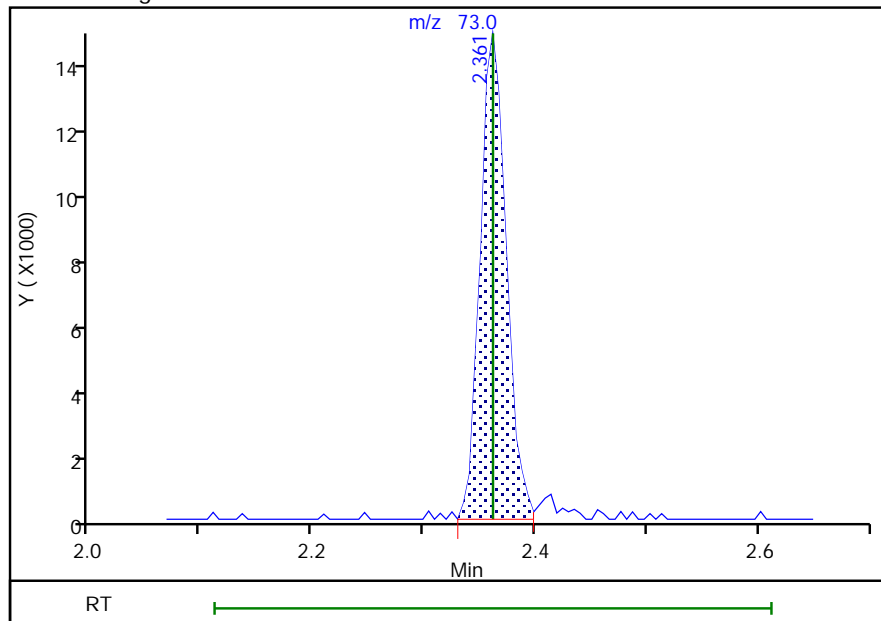
RT: 2.32
Area: 69
Amount: 0.262651
Amount Units: ug/l

Processing Integration Results



RT: 2.36
Area: 23426
Amount: 0.521704
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 10:25:35

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 04-Jun-2020 10:42:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

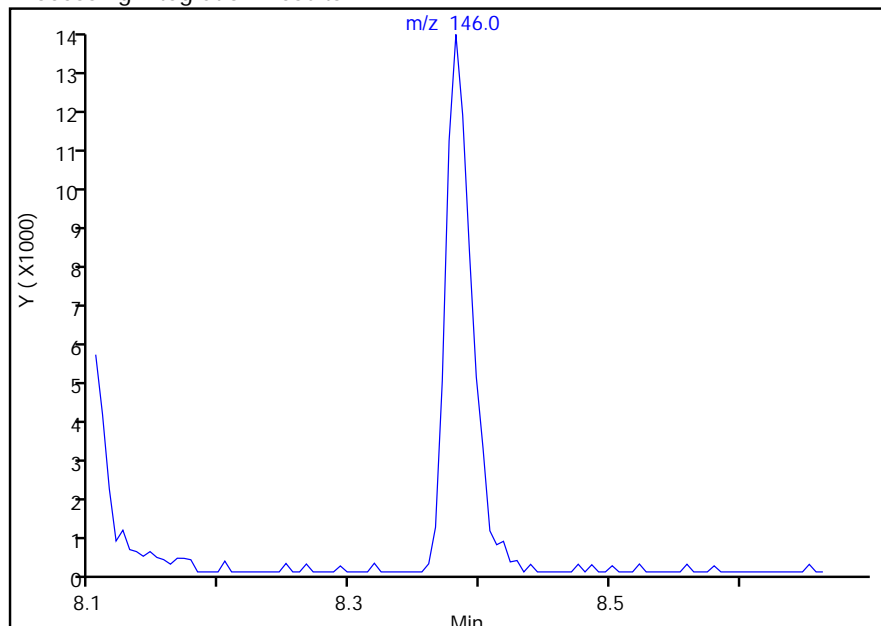
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0307.D				
Injection Date:	03-Jun-2020 14:39:30	Instrument ID:	CMSU		
Lims ID:	ic				
Client ID:					
Operator ID:	SMP	ALS Bottle#:	7	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	U524.2	Limit Group:	524.2		
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN		

69 1,2-Dichlorobenzene, CAS: 95-50-1

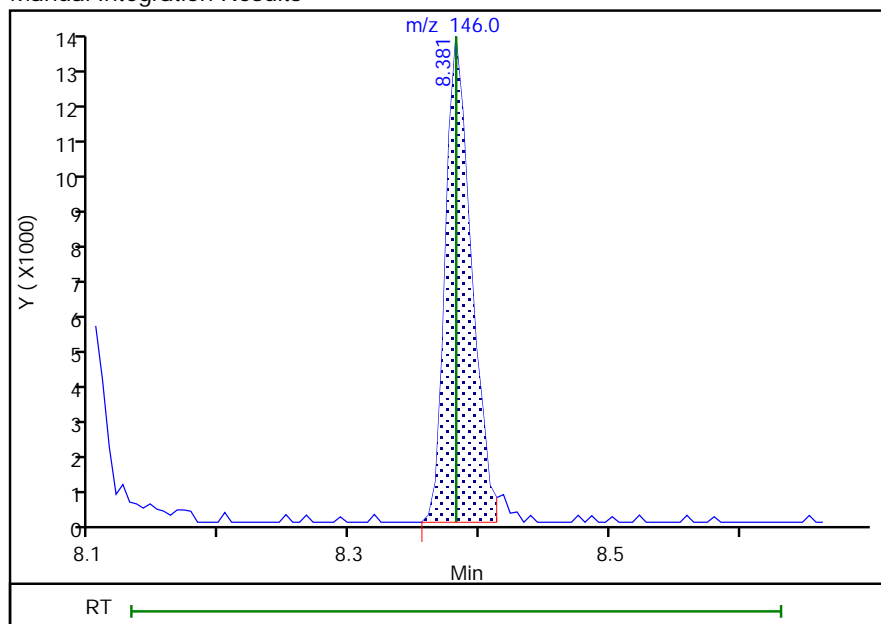
Signal: 1

Not Detected
Expected RT: 8.38

Processing Integration Results



Manual Integration Results



Reviewer: proctors, 04-Jun-2020 10:17:39

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 04-Jun-2020 10:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0308.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 03-Jun-2020 14:59:30 ALS Bottle#: 8 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-010
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:41:59 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:18:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	578202	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	84	458626	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	237692	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	97	218214	10.0	9.95	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	232939	10.0	10.1	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	14713	1.00	0.7873	
9 Vinyl chloride	62	1.232	1.232	0.000	98	19783	1.00	1.02	
8 Chloromethane	50	1.253	1.253	0.000	72	14908	1.00	0.8040	
10 Bromomethane	94	1.404	1.405	-0.001	98	8086	1.00	0.9049	
11 Chloroethane	64	1.452	1.457	-0.005	95	11070	1.00	1.16	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	97	15118	1.00	0.9584	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	12821	1.00	0.9791	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	95	13773	1.00	1.16	
15 Acetone	58	1.896	1.901	-0.005	90	11945	5.00	8.69	
16 Methylene Chloride	84	2.194	2.194	0.000	87	40324	1.00	1.07	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	98	15357	10.0	9.59	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	45505	1.00	1.03	
19 trans-1,2-Dichloroethene	96	2.367	2.372	-0.005	88	15089	1.00	1.00	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	25205	1.00	1.00	
22 Tert-butyl ethyl ether	59	2.926	2.927	-0.001	91	32155	0.8000	0.7562	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	97	9666	5.00	4.93	
24 cis-1,2-Dichloroethene	61	3.052	3.057	-0.005	97	21553	1.00	0.9718	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	78	20684	1.00	1.02	
26 Chlorobromomethane	130	3.219	3.225	-0.006	81	10519	1.00	1.00	
27 Chloroform	83	3.293	3.287	0.006	99	27359	1.00	1.03	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	98	22848	1.00	1.02	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	95	20462	1.00	1.01	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	21588	1.00	1.05	
31 Benzene	78	3.664	3.664	0.000	96	63192	1.00	0.99	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	99	19115	1.00	1.05	
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	32486	0.8000	0.7892	

Report Date: 04-Jun-2020 10:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0308.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	17265	1.00	1.01	
35 1,2-Dichloropropane	63	4.328	4.323	0.005	91	16019	1.00	1.05	
36 Dibromomethane	93	4.391	4.386	0.005	91	10134	1.00	1.03	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	94	18869	1.00	0.9694	
38 cis-1,3-Dichloropropene	75	4.846	4.841	0.005	89	23561	1.00	0.9894	
39 4-Methyl-2-pentanone (MIBK)	43	4.956	4.951	0.005	94	65030	5.00	4.61	
40 Toluene	92	5.092	5.092	0.000	94	38609	1.00	0.9659	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	20528	1.00	0.9429	
42 1,1,2-Trichloroethane	83	5.427	5.421	0.006	95	13296	1.00	1.05	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	16328	1.00	1.10	
44 1,3-Dichloropropane	76	5.552	5.547	0.005	91	24355	1.00	1.00	
45 2-Hexanone	43	5.594	5.589	0.005	97	39831	5.00	4.36	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	17255	1.00	1.05	
47 Ethylene Dibromide	107	5.803	5.803	0.000	97	15634	1.00	0.9827	
48 Chlorobenzene	112	6.190	6.190	0.000	96	46115	1.00	0.9877	
49 1,1,1,2-Tetrachloroethane	131	6.258	6.263	-0.005	93	17294	1.00	1.07	
50 Ethylbenzene	91	6.269	6.269	0.000	98	75546	1.00	1.03	
51 m-Xylene & p-Xylene	91	6.378	6.373	0.005	98	58354	1.00	1.02	
52 o-Xylene	91	6.682	6.682	0.000	95	59482	1.00	1.01	
53 Styrene	104	6.708	6.698	0.010	97	46805	1.00	0.9884	
54 Bromoform	173	6.844	6.844	0.000	95	13090	1.00	1.04	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	73326	1.00	1.00	
56 Bromobenzene	156	7.231	7.231	0.000	91	21561	1.00	1.02	
57 1,1,2,2-Tetrachloroethane	83	7.241	7.236	0.005	98	19951	1.00	0.9856	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	97	6147	1.00	1.00	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	83498	1.00	0.9859	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	53671	1.00	1.05	
61 1,3,5-Trimethylbenzene	105	7.472	7.472	0.000	92	54008	1.00	1.00	
62 4-Chlorotoluene	91	7.498	7.493	0.005	96	58593	1.00	1.02	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	53275	1.00	1.01	
64 1,2,4-Trimethylbenzene	105	7.785	7.780	0.005	96	49004	1.00	0.9605	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	72623	1.00	0.9746	
66 1,3-Dichlorobenzene	146	8.010	8.005	0.005	99	37399	1.00	0.99	
67 4-Isopropyltoluene	119	8.047	8.042	0.005	98	58978	1.00	0.9827	
68 1,4-Dichlorobenzene	146	8.094	8.089	0.005	96	40331	1.00	1.05	
69 1,2-Dichlorobenzene	146	8.387	8.382	0.005	95	36807	1.00	1.00	a
70 n-Butylbenzene	91	8.387	8.382	0.005	95	40795	1.00	0.9357	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	93	5139	1.00	1.00	
72 1,2,4-Trichlorobenzene	180	9.726	9.715	0.011	92	15490	1.00	0.9471	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	93	11704	1.00	1.06	
74 Naphthalene	128	9.940	9.930	0.010	99	47658	1.00	1.01	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	93	15638	1.00	0.9825	
S 76 Xylenes, Total	1				0		2.00	2.03	
S 77 Trihalomethanes, Total	1				0			4.08	
S 78 1,3-Dichloropropene, Total	1				0		2.00	1.93	

Report Date: 04-Jun-2020 10:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.10

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0308.D

Injection Date: 03-Jun-2020 14:59:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

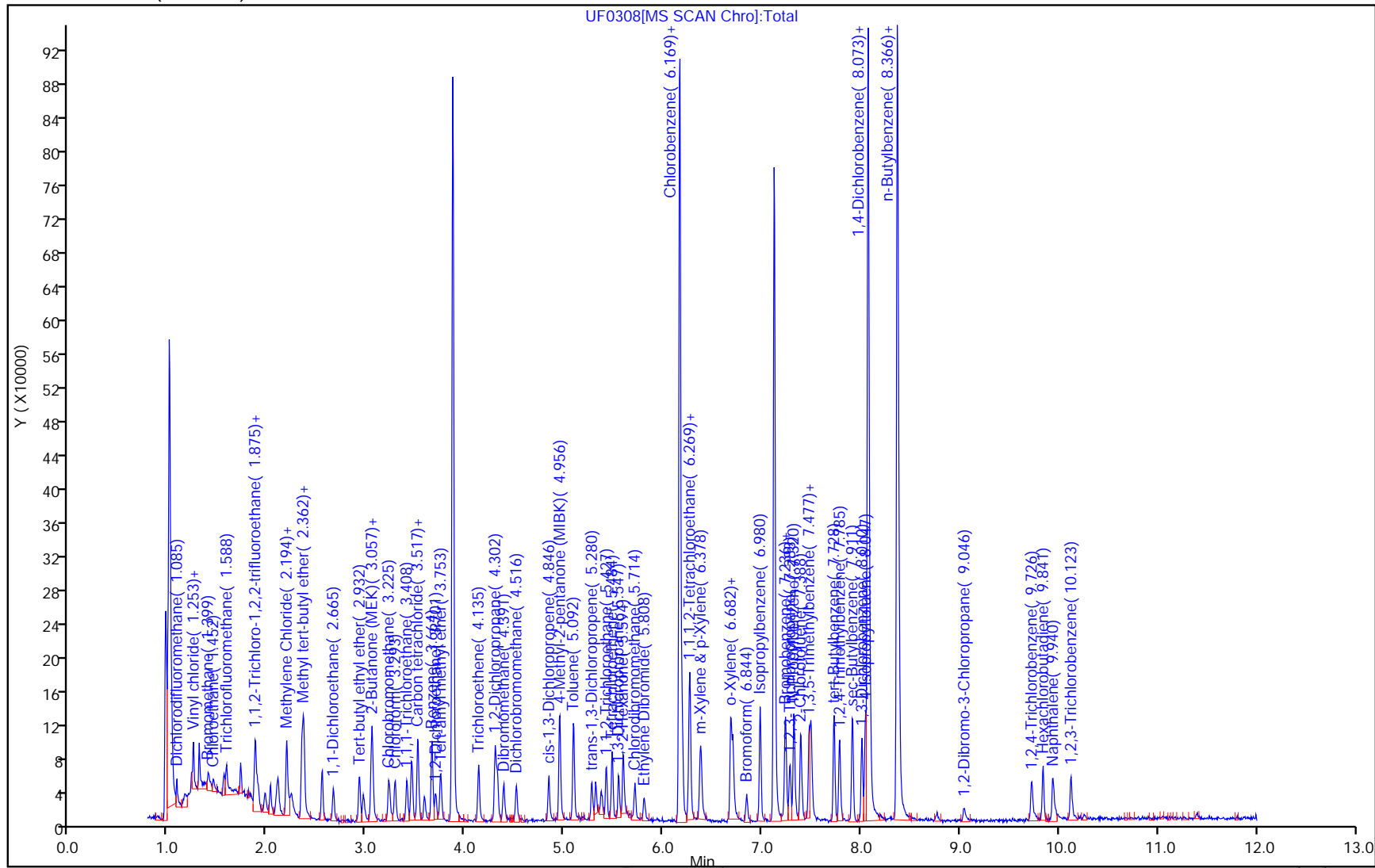
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

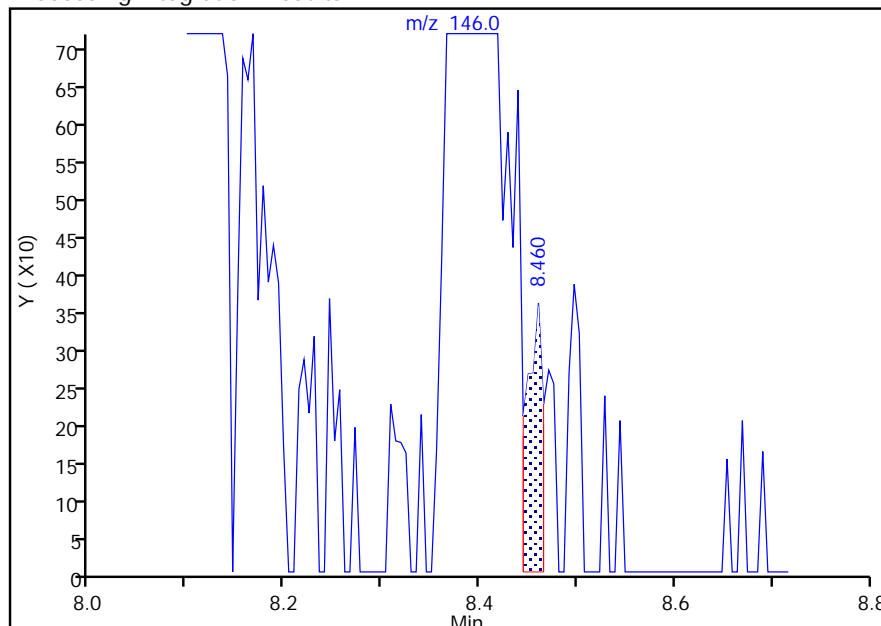
Data File:	\\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0308.D		
Injection Date:	03-Jun-2020 14:59:30	Instrument ID:	CMSU
Lims ID:	ic		
Client ID:			
Operator ID:	SMP	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	U524.2	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	10

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

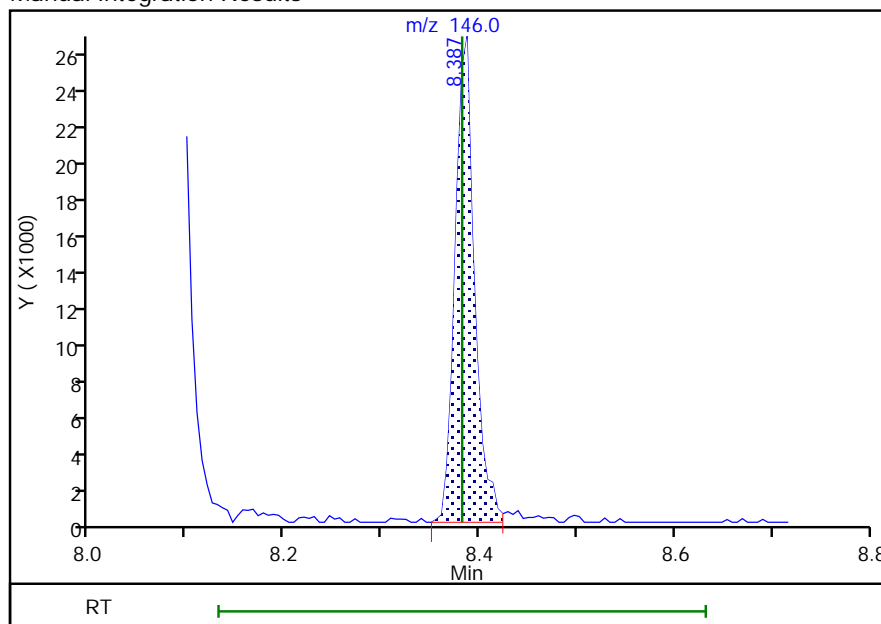
RT: 8.46
Area: 412
Amount: 0.000225
Amount Units: ug/l

Processing Integration Results



RT: 8.39
Area: 36807
Amount: 0.998519
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 10:18:01

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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06/17/2020

September 2020

Report Date: 04-Jun-2020 10:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0309.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 03-Jun-2020 15:19:30 ALS Bottle#: 9 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-011
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:08 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	585428	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	458463	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	244366	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	97	216114	10.0	9.73	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	236653	10.0	9.93	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	41482	2.00	2.19	
9 Vinyl chloride	62	1.232	1.232	0.000	97	41048	2.00	2.08	
8 Chloromethane	50	1.253	1.253	0.000	72	35109	2.00	1.87	
10 Bromomethane	94	1.404	1.405	-0.001	98	18493	2.00	2.04	
11 Chloroethane	64	1.457	1.457	0.000	99	17519	2.00	1.82	
12 Trichlorofluoromethane	101	1.582	1.588	-0.006	97	35663	2.00	2.23	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	94	28111	2.00	2.12	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	95	24682	2.00	2.04	
15 Acetone	58	1.896	1.901	-0.005	87	17012	10.0	12.2	
16 Methylene Chloride	84	2.194	2.194	0.000	88	51669	2.00	1.75	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	100	30863	20.0	19.0	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	87412	2.00	1.96	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	89	29564	2.00	1.93	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	100	49172	2.00	1.92	
22 Tert-butyl ethyl ether	59	2.932	2.927	0.005	91	66797	1.60	1.55	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	19215	10.0	9.68	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	44082	2.00	1.96	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	96	40193	2.00	1.96	
26 Chlorobromomethane	130	3.230	3.225	0.005	79	22305	2.00	2.09	
27 Chloroform	83	3.287	3.287	0.000	99	55217	2.00	2.05	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	98	44903	2.00	2.01	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	98	41474	2.00	2.05	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	41276	2.00	2.00	
31 Benzene	78	3.664	3.664	0.000	94	127297	2.00	2.00	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	97	33382	2.00	1.84	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	62798	1.60	1.51	
34 Trichloroethene	132	4.135	4.135	0.000	96	34452	2.00	2.02	

Report Date: 04-Jun-2020 10:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0309.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.328	4.323	0.005	94	31538	2.00	2.06	
36 Dibromomethane	93	4.391	4.386	0.005	93	20394	2.00	2.07	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	98	38508	2.00	1.98	
38 cis-1,3-Dichloropropene	75	4.846	4.841	0.005	89	48118	2.00	2.02	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	95	136249	10.0	9.67	
40 Toluene	92	5.092	5.092	0.000	92	81089	2.00	2.03	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	94	41066	2.00	1.89	
42 1,1,2-Trichloroethane	83	5.426	5.421	0.005	95	26062	2.00	2.06	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	31304	2.00	2.06	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	46458	2.00	1.92	
45 2-Hexanone	43	5.594	5.589	0.005	94	92843	10.0	9.88	
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	34076	2.00	2.02	
47 Ethylene Dibromide	107	5.808	5.803	0.005	100	32125	2.00	2.02	
48 Chlorobenzene	112	6.190	6.190	0.000	97	93520	2.00	2.00	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	34288	2.00	2.06	
50 Ethylbenzene	91	6.269	6.269	0.000	98	155652	2.00	2.07	
51 m-Xylene & p-Xylene	91	6.378	6.373	0.005	99	119624	2.00	2.04	
52 o-Xylene	91	6.682	6.682	0.000	94	120689	2.00	1.99	
53 Styrene	104	6.703	6.698	0.005	98	97209	2.00	2.00	
54 Bromoform	173	6.844	6.844	0.000	97	24812	2.00	1.91	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	152316	2.00	2.02	
56 Bromobenzene	156	7.231	7.231	0.000	94	44099	2.00	2.03	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	99	42914	2.00	2.06	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	97	12649	2.00	2.00	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	170923	2.00	1.96	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	108123	2.00	2.06	
61 1,3,5-Trimethylbenzene	105	7.477	7.472	0.005	94	106654	2.00	1.93	
62 4-Chlorotoluene	91	7.492	7.493	-0.001	98	119156	2.00	2.02	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	106239	2.00	1.96	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	104758	2.00	2.00	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	153136	2.00	2.00	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	78160	2.00	2.02	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	97	120251	2.00	1.95	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	79598	2.00	2.01	
70 n-Butylbenzene	91	8.382	8.382	0.000	96	87818	2.00	1.96	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	92	76267	2.00	2.01	
71 1,2-Dibromo-3-Chloropropane	157	9.046	9.041	0.005	90	9788	2.00	1.85	
72 1,2,4-Trichlorobenzene	180	9.721	9.715	0.006	92	33206	2.00	1.97	
73 Hexachlorobutadiene	225	9.836	9.841	-0.005	95	24749	2.00	2.19	
74 Naphthalene	128	9.935	9.930	0.005	99	97601	2.00	2.01	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	94	32262	2.00	1.97	
S 76 Xylenes, Total	1				0		4.00	4.03	
S 77 Trihalomethanes, Total	1				0			7.96	
S 78 1,3-Dichloropropene, Total	1				0		4.00	3.91	

Reagents:

524mmix_00170

Amount Added: 0.20

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0309.D

Injection Date: 03-Jun-2020 15:19:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

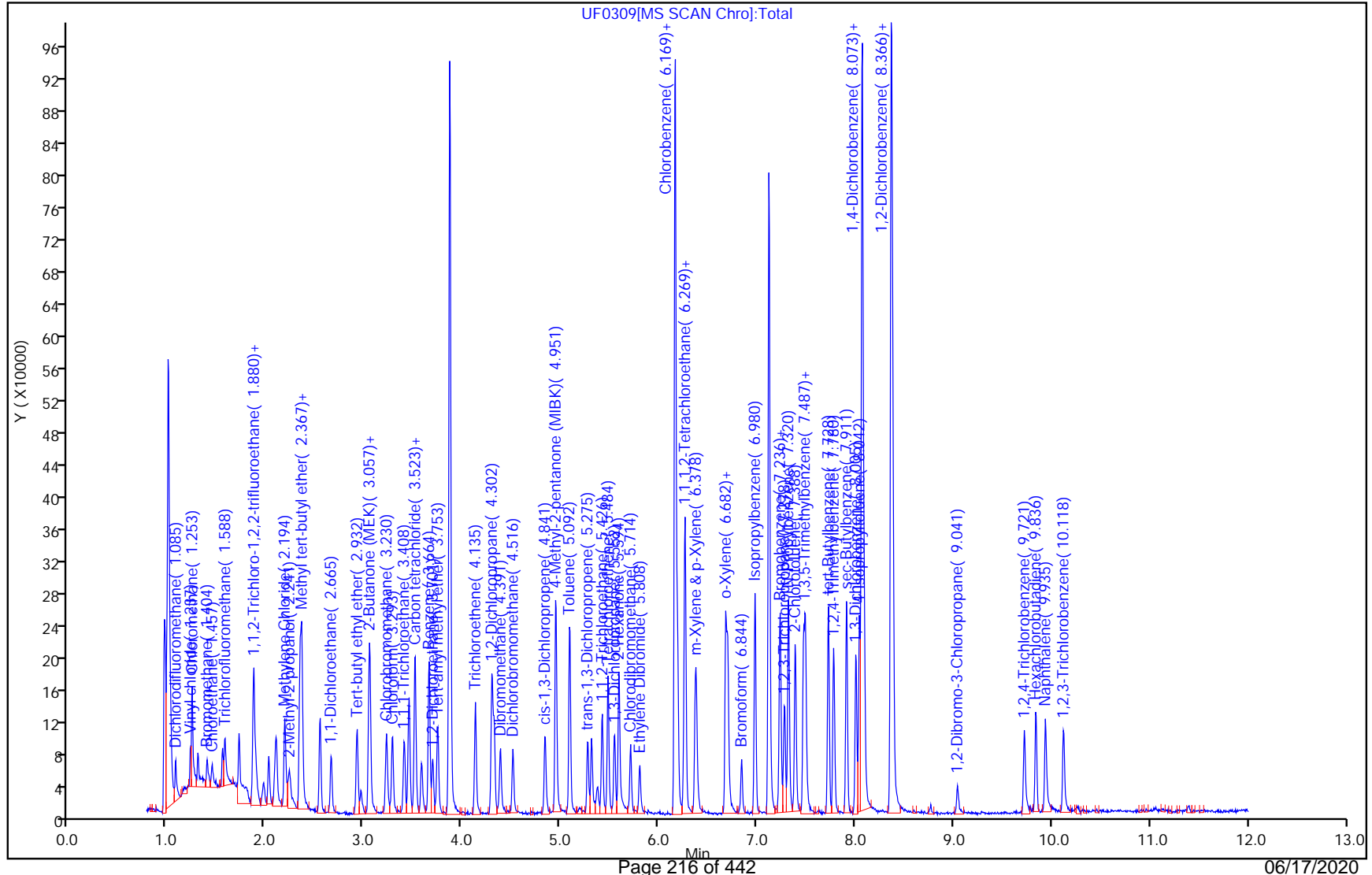
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0310.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 03-Jun-2020 15:40:30 ALS Bottle#: 10 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-012
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:10 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	585421	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	460493	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	252242	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	96	218477	10.0	9.84	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	240173	10.0	9.77	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	99998	5.00	5.28	
9 Vinyl chloride	62	1.232	1.232	0.000	98	99400	5.00	5.04	
8 Chloromethane	50	1.253	1.253	0.000	77	102886	5.00	5.48	
10 Bromomethane	94	1.404	1.405	-0.001	99	50073	5.00	5.53	
11 Chloroethane	64	1.457	1.457	0.000	98	49083	5.00	5.10	
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	97	85196	5.00	5.33	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	64287	5.00	4.85	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	97	61778	5.00	5.12	
15 Acetone	58	1.901	1.901	0.000	88	33038	25.0	23.7	
16 Methylene Chloride	84	2.194	2.194	0.000	85	83109	5.00	3.73	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	85731	50.0	52.9	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	97	220327	5.00	4.95	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	91	77944	5.00	5.08	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	131051	5.00	5.12	
22 Tert-butyl ethyl ether	59	2.932	2.927	0.005	90	175864	4.00	4.08	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	100	49506	25.0	24.9	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	116190	5.00	5.17	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	93	101507	5.00	4.95	
26 Chlorobromomethane	130	3.225	3.225	-0.001	83	52366	5.00	4.90	
27 Chloroform	83	3.287	3.287	0.000	100	130872	5.00	4.86	
28 1,1,1-Trichloroethane	97	3.413	3.408	0.005	97	112715	5.00	5.04	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	96	101314	5.00	4.98	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	103578	5.00	5.00	
31 Benzene	78	3.664	3.664	0.000	94	323015	5.00	5.06	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	98	97375	5.00	5.34	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	166950	4.00	4.01	
34 Trichloroethene	132	4.135	4.135	0.000	97	85175	5.00	4.98	

Report Date: 04-Jun-2020 10:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0310.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.323	4.323	0.000	90	77925	5.00	5.06	
36 Dibromomethane	93	4.391	4.386	0.005	91	50201	5.00	5.08	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	99	101854	5.00	5.21	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	90	122629	5.00	5.13	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	-0.001	95	373341	25.0	26.4	
40 Toluene	92	5.092	5.092	0.000	93	202059	5.00	5.03	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	95	110282	5.00	5.04	
42 1,1,2-Trichloroethane	83	5.426	5.421	0.005	96	64203	5.00	5.05	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	80249	5.00	5.11	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	91	127792	5.00	5.25	
45 2-Hexanone	43	5.594	5.589	0.005	95	255244	25.0	26.3	
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	85551	5.00	4.91	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	81710	5.00	5.12	
48 Chlorobenzene	112	6.190	6.190	0.000	97	236202	5.00	5.04	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	94	85048	5.00	4.94	
50 Ethylbenzene	91	6.269	6.269	-0.001	98	382894	5.00	4.93	
51 m-Xylene & p-Xylene	91	6.378	6.373	0.005	100	289106	5.00	4.77	
52 o-Xylene	91	6.682	6.682	0.000	95	306849	5.00	4.90	
53 Styrene	104	6.703	6.698	0.005	96	245591	5.00	4.89	
54 Bromoform	173	6.844	6.844	0.000	98	67911	5.00	5.06	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	377648	5.00	4.86	
56 Bromobenzene	156	7.231	7.231	0.000	94	111873	5.00	5.00	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	113105	5.00	5.27	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	33242	5.00	5.10	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	439249	5.00	4.89	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	260658	5.00	4.81	
61 1,3,5-Trimethylbenzene	105	7.477	7.472	0.005	93	275329	5.00	4.82	
62 4-Chlorotoluene	91	7.492	7.493	-0.001	97	302791	5.00	4.97	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	267290	5.00	4.79	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	265085	5.00	4.90	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	386594	5.00	4.89	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	197610	5.00	4.95	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	312546	5.00	4.91	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	95	197923	5.00	4.84	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	91	198396	5.00	5.07	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	228966	5.00	4.95	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	27477	5.00	5.02	
72 1,2,4-Trichlorobenzene	180	9.720	9.715	0.005	93	88998	5.00	5.13	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	94	57918	5.00	4.96	
74 Naphthalene	128	9.935	9.930	0.005	99	255664	5.00	5.10	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	86107	5.00	5.10	
S 76 Xylenes, Total	1				0		10.0	9.67	
S 77 Trihalomethanes, Total	1				0			20.0	
S 78 1,3-Dichloropropene, Total	1				0		10.0	10.2	

Reagents:

524mmix_00170

Amount Added: 0.50

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0310.D

Injection Date: 03-Jun-2020 15:40:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

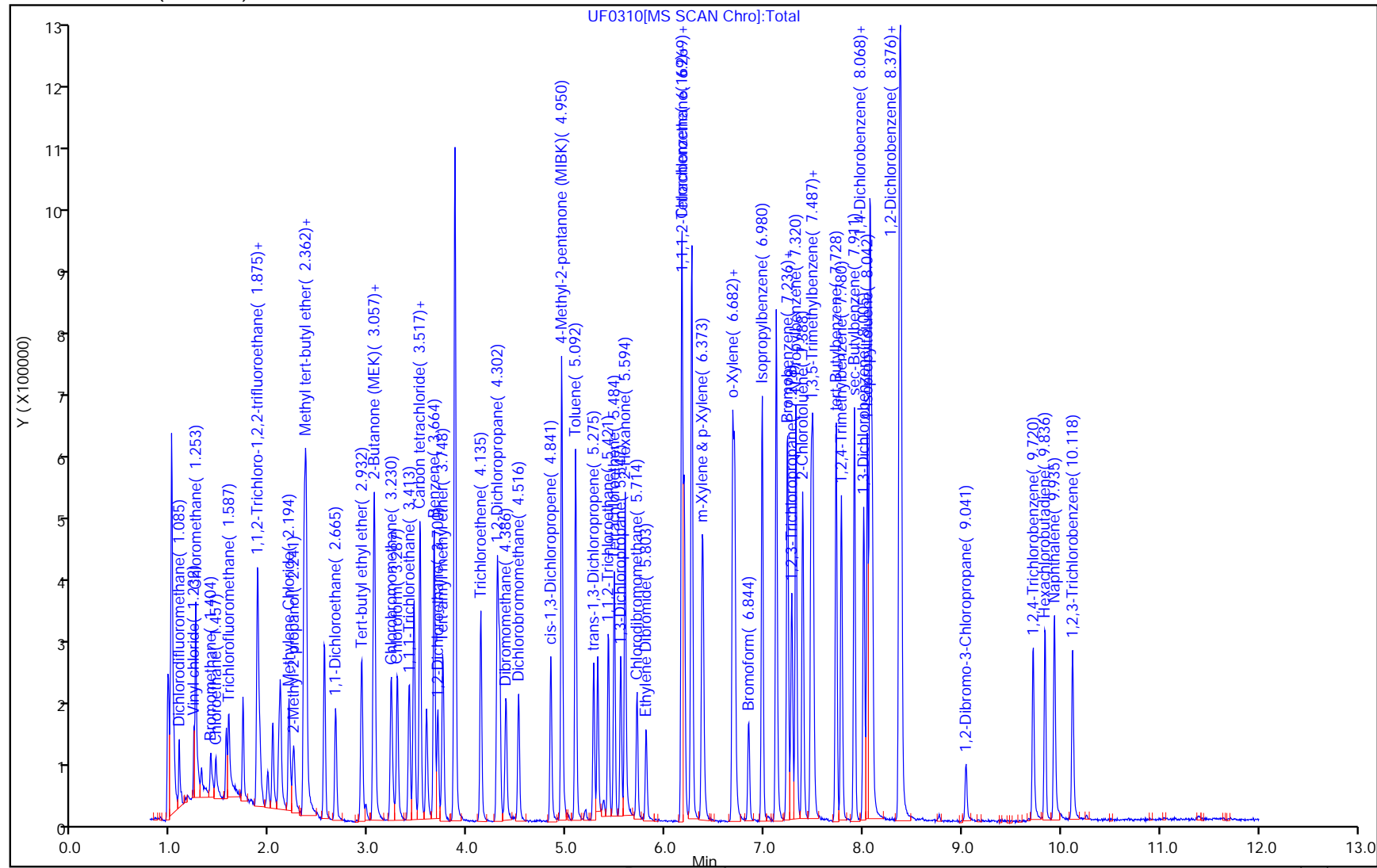
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:13

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0311.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 03-Jun-2020 16:00:30 ALS Bottle#: 11 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-013
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:13 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:18:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	98	570944	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	458618	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	91	248085	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	97	220394	10.0	10.2	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	239116	10.0	9.89	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	191412	10.0	10.4	
9 Vinyl chloride	62	1.232	1.232	0.000	98	193926	10.0	10.1	
8 Chloromethane	50	1.253	1.253	0.000	77	191370	10.0	10.5	
10 Bromomethane	94	1.404	1.405	-0.001	97	85769	10.0	9.72	
11 Chloroethane	64	1.457	1.457	0.000	98	94987	10.0	10.1	
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	97	141595	10.0	9.09	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	131771	10.0	10.2	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	97	119959	10.0	10.2	
15 Acetone	58	1.896	1.901	-0.005	88	71052	50.0	52.4	
16 Methylene Chloride	84	2.194	2.194	0.000	88	175942	10.0	9.83	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	158755	100.0	100.4	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	97	440136	10.0	10.1	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	152962	10.0	10.2	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	253264	10.0	10.1	
22 Tert-butyl ethyl ether	59	2.932	2.927	0.005	90	346653	8.00	8.26	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	102343	50.0	52.9	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	223758	10.0	10.2	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	93	197749	10.0	9.88	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	104877	10.0	10.1	
27 Chloroform	83	3.293	3.287	0.006	100	264845	10.0	10.1	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	98	222632	10.0	9.99	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	98	198550	10.0	9.81	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	202649	10.0	9.82	
31 Benzene	78	3.664	3.664	0.000	94	636120	10.0	10.0	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	98	188341	10.0	10.4	
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	333266	8.00	8.20	

Report Date: 04-Jun-2020 10:42:13

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0311.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	168932	10.0	9.92	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	93	154645	10.0	10.1	
36 Dibromomethane	93	4.386	4.386	0.000	93	99767	10.0	10.1	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	98	198418	10.0	10.2	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	90	246112	10.0	10.3	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	-0.001	95	757101	50.0	53.7	
40 Toluene	92	5.092	5.092	0.000	93	398195	10.0	9.96	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	97	225487	10.0	10.4	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	96	129401	10.0	10.2	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	152336	10.0	9.87	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	247136	10.0	10.2	
45 2-Hexanone	43	5.594	5.589	0.005	94	524746	50.0	55.0	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	172977	10.0	10.1	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	163982	10.0	10.3	
48 Chlorobenzene	112	6.190	6.190	0.000	96	457324	10.0	9.79	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	96	166017	10.0	9.80	
50 Ethylbenzene	91	6.269	6.269	0.000	98	758785	10.0	9.93	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	600774	10.0	10.1	
52 o-Xylene	91	6.682	6.682	0.000	94	615821	10.0	10.0	
53 Styrene	104	6.697	6.698	-0.001	97	504362	10.0	10.2	
54 Bromoform	173	6.844	6.844	0.000	98	132000	10.0	10.0	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	747898	10.0	9.78	
56 Bromobenzene	156	7.231	7.231	0.000	95	214711	10.0	9.75	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	217110	10.0	10.3	
58 1,2,3-Trichloropropane	110	7.278	7.283	-0.005	98	65656	10.0	10.2	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	885094	10.0	10.0	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	524908	10.0	9.84	
61 1,3,5-Trimethylbenzene	105	7.471	7.472	-0.001	93	567579	10.0	10.1	
62 4-Chlorotoluene	91	7.492	7.493	-0.001	97	597581	10.0	9.98	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	543849	10.0	9.91	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	525056	10.0	9.86	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	772664	10.0	9.93	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	393169	10.0	10.0	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	620102	10.0	9.90	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	402020	10.0	10.0	
70 n-Butylbenzene	91	8.382	8.382	0.000	97	453341	10.0	9.96	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	95	386567	10.0	10.0	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	54292	10.0	10.1	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	170783	10.0	10.0	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	112053	10.0	9.76	
74 Naphthalene	128	9.935	9.930	0.005	99	496733	10.0	10.1	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	164473	10.0	9.90	
S 76 Xylenes, Total	1				0		20.0	20.1	
S 77 Trihalomethanes, Total	1				0			40.4	
S 78 1,3-Dichloropropene, Total	1				0		20.0	20.7	

Reagents:

524mmix_00170

Amount Added: 1.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:13

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0311.D

Injection Date: 03-Jun-2020 16:00:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

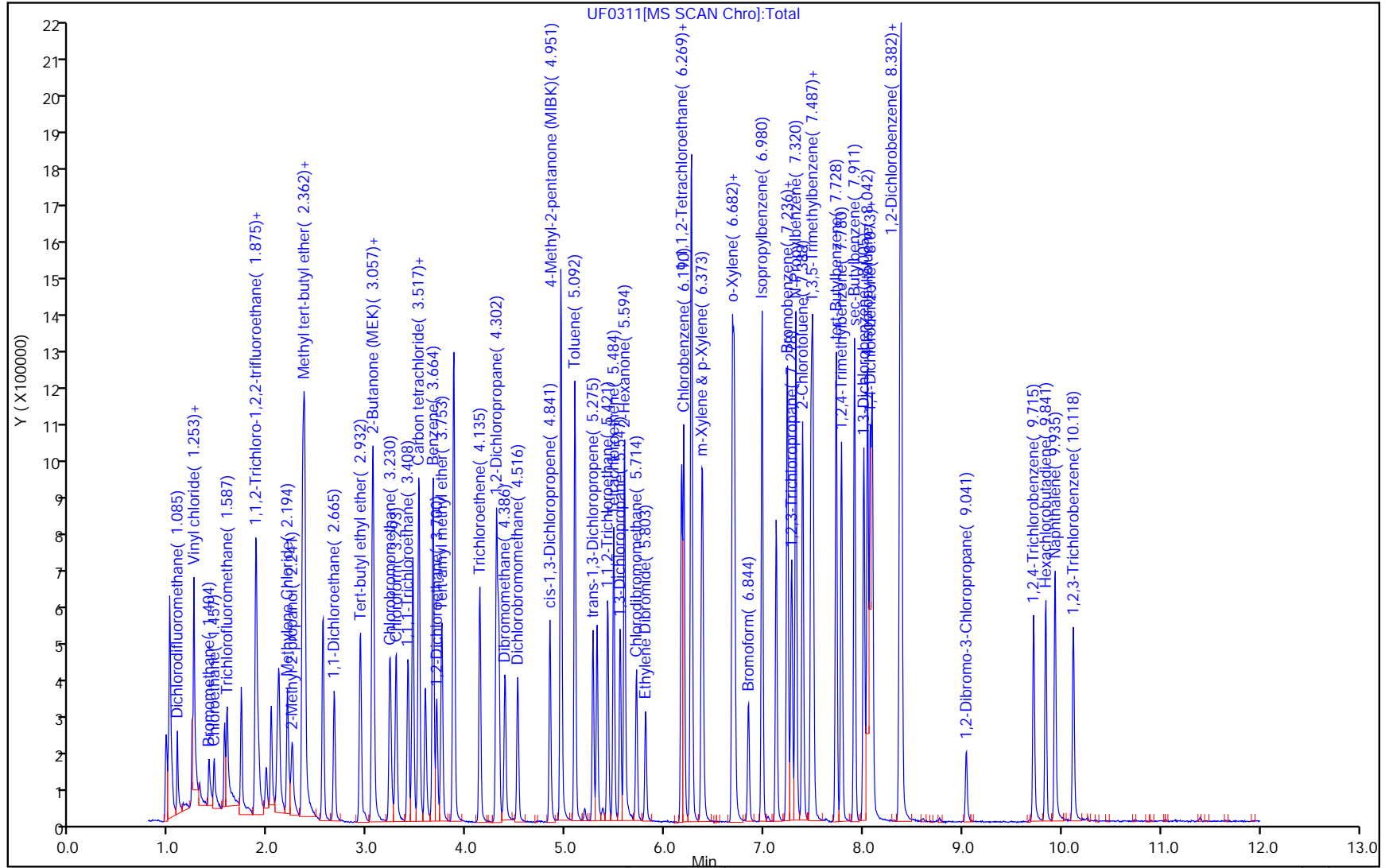
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



06/17/2020

Report Date: 04-Jun-2020 10:42:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0312.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 03-Jun-2020 16:20:30 ALS Bottle#: 12 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-014
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:15 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:18:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	576926	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	466148	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	89	254993	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	95	220154	10.0	10.1	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	85	253447	10.0	10.2	
7 Dichlorodifluoromethane	85	1.086	1.086	0.000	99	384404	20.0	20.6	
9 Vinyl chloride	62	1.232	1.232	0.000	97	379311	20.0	19.5	
8 Chloromethane	50	1.253	1.253	0.000	67	391264	20.0	21.1	
10 Bromomethane	94	1.405	1.405	0.000	100	204116	20.0	22.9	
11 Chloroethane	64	1.457	1.457	0.000	99	209631	20.0	22.1	
12 Trichlorofluoromethane	101	1.588	1.588	0.000	97	341881	20.0	21.7	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	96	271266	20.0	20.8	
13 1,1-Dichloroethene	96	1.881	1.881	0.000	95	246961	20.0	20.8	
15 Acetone	58	1.901	1.901	0.000	89	123388	100.0	90.0	
16 Methylene Chloride	84	2.194	2.194	0.000	87	334804	20.0	19.8	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	304876	200.0	190.7	
18 Methyl tert-butyl ether	73	2.362	2.362	0.000	96	860145	20.0	19.6	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	302122	20.0	20.0	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	100	506077	20.0	20.1	
22 Tert-butyl ethyl ether	59	2.927	2.927	0.000	90	670822	16.0	15.8	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	196597	100.0	100.5	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	440514	20.0	19.9	
25 2,2-Dichloropropane	77	3.063	3.063	0.000	93	392953	20.0	19.4	
26 Chlorobromomethane	130	3.225	3.225	0.000	83	229709	20.0	21.8	
27 Chloroform	83	3.287	3.287	0.000	100	516751	20.0	19.5	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	456045	20.0	20.1	
29 Carbon tetrachloride	117	3.518	3.518	0.000	98	406509	20.0	19.8	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	417043	20.0	19.9	
31 Benzene	78	3.664	3.664	0.000	94	1276156	20.0	19.7	
32 1,2-Dichloroethane	62	3.701	3.701	0.000	98	366119	20.0	19.8	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	654918	16.0	15.9	

Report Date: 04-Jun-2020 10:42:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0312.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	348144	20.0	20.1	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	93	306792	20.0	19.7	
36 Dibromomethane	93	4.386	4.386	0.000	92	196427	20.0	19.7	
37 Dichlorobromomethane	83	4.517	4.517	0.000	99	393151	20.0	19.9	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	90	489304	20.0	20.2	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	95	1449585	100.0	101.2	
40 Toluene	92	5.092	5.092	0.000	92	815150	20.0	20.1	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	95	451799	20.0	20.4	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	96	246855	20.0	19.2	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	314211	20.0	19.8	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	91	485990	20.0	19.7	
45 2-Hexanone	43	5.589	5.589	0.000	94	1027009	100.0	104.7	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	345811	20.0	19.6	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	322523	20.0	19.9	
48 Chlorobenzene	112	6.190	6.190	0.000	96	939782	20.0	19.8	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	335870	20.0	19.3	
50 Ethylbenzene	91	6.269	6.269	0.000	98	1573906	20.0	20.0	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	1218682	20.0	19.9	
52 o-Xylene	91	6.682	6.682	0.000	94	1246388	20.0	19.7	
53 Styrene	104	6.698	6.698	0.000	97	1043842	20.0	20.5	
54 Bromoform	173	6.844	6.844	0.000	99	270265	20.0	19.9	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1572753	20.0	20.0	
56 Bromobenzene	156	7.231	7.231	0.000	94	449557	20.0	19.9	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	417451	20.0	19.2	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	129496	20.0	19.6	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1853472	20.0	20.4	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	1083704	20.0	19.8	
61 1,3,5-Trimethylbenzene	105	7.472	7.472	0.000	93	1180397	20.0	20.4	
62 4-Chlorotoluene	91	7.493	7.493	0.000	96	1235355	20.0	20.1	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	1138509	20.0	20.2	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1129580	20.0	20.6	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1636504	20.0	20.5	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	806001	20.0	20.0	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1335661	20.0	20.7	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	812761	20.0	19.7	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	88	785021	20.0	19.9	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	999751	20.0	21.4	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.041	0.000	92	108319	20.0	19.6	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	371297	20.0	21.2	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	239739	20.0	20.3	
74 Naphthalene	128	9.930	9.930	0.000	99	1028210	20.0	20.3	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	95	351550	20.0	20.6	
S 76 Xylenes, Total	1				0		40.0	39.6	
S 78 1,3-Dichloropropene, Total	1				0		40.0	40.6	

Reagents:

524mmix_00170

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:16

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0312.D

Injection Date: 03-Jun-2020 16:20:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ics

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

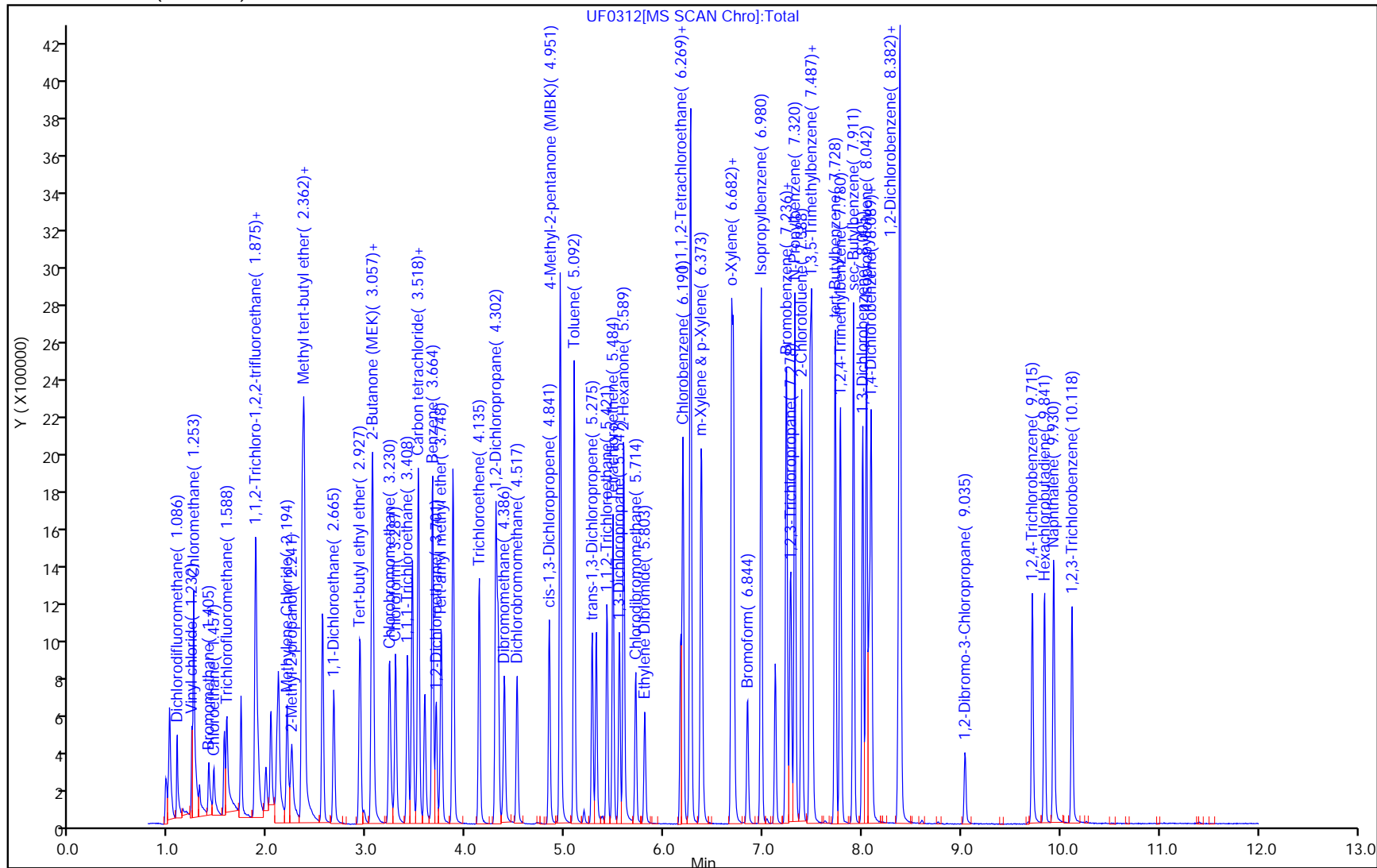
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:18

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0313.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 03-Jun-2020 16:41:30 ALS Bottle#: 13 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-015
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:17 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:21:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	97	569263	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	463419	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	88	251151	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	96	221808	10.0	10.3	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	90	245463	10.0	10.0	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	911408	50.0	49.5	
9 Vinyl chloride	62	1.232	1.232	0.000	98	935145	50.0	48.8	
8 Chloromethane	50	1.253	1.253	0.000	78	979113	50.0	53.6	
10 Bromomethane	94	1.404	1.405	-0.001	99	460811	50.0	52.4	
11 Chloroethane	64	1.457	1.457	0.000	99	500206	50.0	53.4	
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	99	751022	50.0	48.4	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	607437	50.0	47.1	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	96	548015	50.0	46.7	
15 Acetone	58	1.901	1.901	0.000	88	297787	250.0	220.1	
16 Methylene Chloride	84	2.194	2.194	0.000	87	823913	50.0	51.7	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	764673	500.0	484.8	
18 Methyl tert-butyl ether	73	2.361	2.362	-0.001	96	2071982	50.0	47.8	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	723744	50.0	48.5	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	1228114	50.0	49.3	
22 Tert-butyl ethyl ether	59	2.932	2.927	0.005	89	1681670	40.0	40.2	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	481678	250.0	249.6	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	98	1051163	50.0	48.1	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	93	936783	50.0	47.0	
26 Chlorobromomethane	130	3.224	3.225	-0.001	86	541612	50.0	52.1	
27 Chloroform	83	3.287	3.287	0.000	100	1246628	50.0	47.6	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	1073877	50.0	47.7	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	99	956665	50.0	46.8	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	1002143	50.0	48.0	
31 Benzene	78	3.664	3.664	0.000	94	3116604	50.0	48.5	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	97	885112	50.0	48.2	
33 Tert-amyl methyl ether	73	3.753	3.748	0.005	99	1615376	40.0	39.9	

Report Date: 04-Jun-2020 10:42:18

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0313.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	824805	50.0	47.9	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	92	748850	50.0	48.4	
36 Dibromomethane	93	4.386	4.386	0.000	92	480155	50.0	48.3	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	99	971863	50.0	49.4	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	90	1221667	50.0	50.8	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	-0.001	95	3728343	250.0	261.7	
40 Toluene	92	5.092	5.092	0.000	92	2027238	50.0	50.2	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	95	1123586	50.0	51.1	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	97	608681	50.0	47.6	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	740655	50.0	47.4	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	1199972	50.0	49.0	
45 2-Hexanone	43	5.589	5.589	0.000	95	2691244	250.0	278.6	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	852526	50.0	49.1	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	800388	50.0	49.8	
48 Chlorobenzene	112	6.190	6.190	0.000	97	2304812	50.0	48.9	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	819517	50.0	47.8	
50 Ethylbenzene	91	6.268	6.269	-0.001	98	3900630	50.0	50.4	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	3005689	50.0	49.8	
52 o-Xylene	91	6.682	6.682	0.000	94	3121606	50.0	50.1	
53 Styrene	104	6.697	6.698	-0.001	98	2580276	50.0	51.6	
54 Bromoform	173	6.844	6.844	0.000	99	672889	50.0	50.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	3920663	50.0	50.7	
56 Bromobenzene	156	7.231	7.231	0.000	93	1105683	50.0	49.6	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	1049532	50.0	49.1	
58 1,2,3-Trichloropropane	110	7.278	7.283	-0.005	98	308252	50.0	47.5	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	4616770	50.0	51.6	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	2671173	50.0	49.5	
61 1,3,5-Trimethylbenzene	105	7.471	7.472	-0.001	92	2880519	50.0	50.6	
62 4-Chlorotoluene	91	7.492	7.493	-0.001	97	3030283	50.0	50.0	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	2784969	50.0	50.1	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	2763382	50.0	51.3	
65 sec-Butylbenzene	105	7.911	7.911	0.000	100	4021526	50.0	51.1	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	1969045	50.0	49.6	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	3245592	50.0	51.2	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	1956188	50.0	48.1	
70 n-Butylbenzene	91	8.381	8.382	-0.001	98	2467670	50.0	53.6	
69 1,2-Dichlorobenzene	146	8.381	8.382	-0.001	98	1924356	50.0	49.4	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	91	275285	50.0	50.5	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	911652	50.0	52.8	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	549637	50.0	47.3	
74 Naphthalene	128	9.930	9.930	0.000	99	2563247	50.0	51.3	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	853349	50.0	50.7	
S 76 Xylenes, Total	1				0		100.0	99.8	
S 77 Trihalomethanes, Total	1				0			196.5	
S 78 1,3-Dichloropropene, Total	1				0		100.0	101.8	

Reagents:

524mmix_00170

Amount Added: 5.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:18

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0313.D

Injection Date: 03-Jun-2020 16:41:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

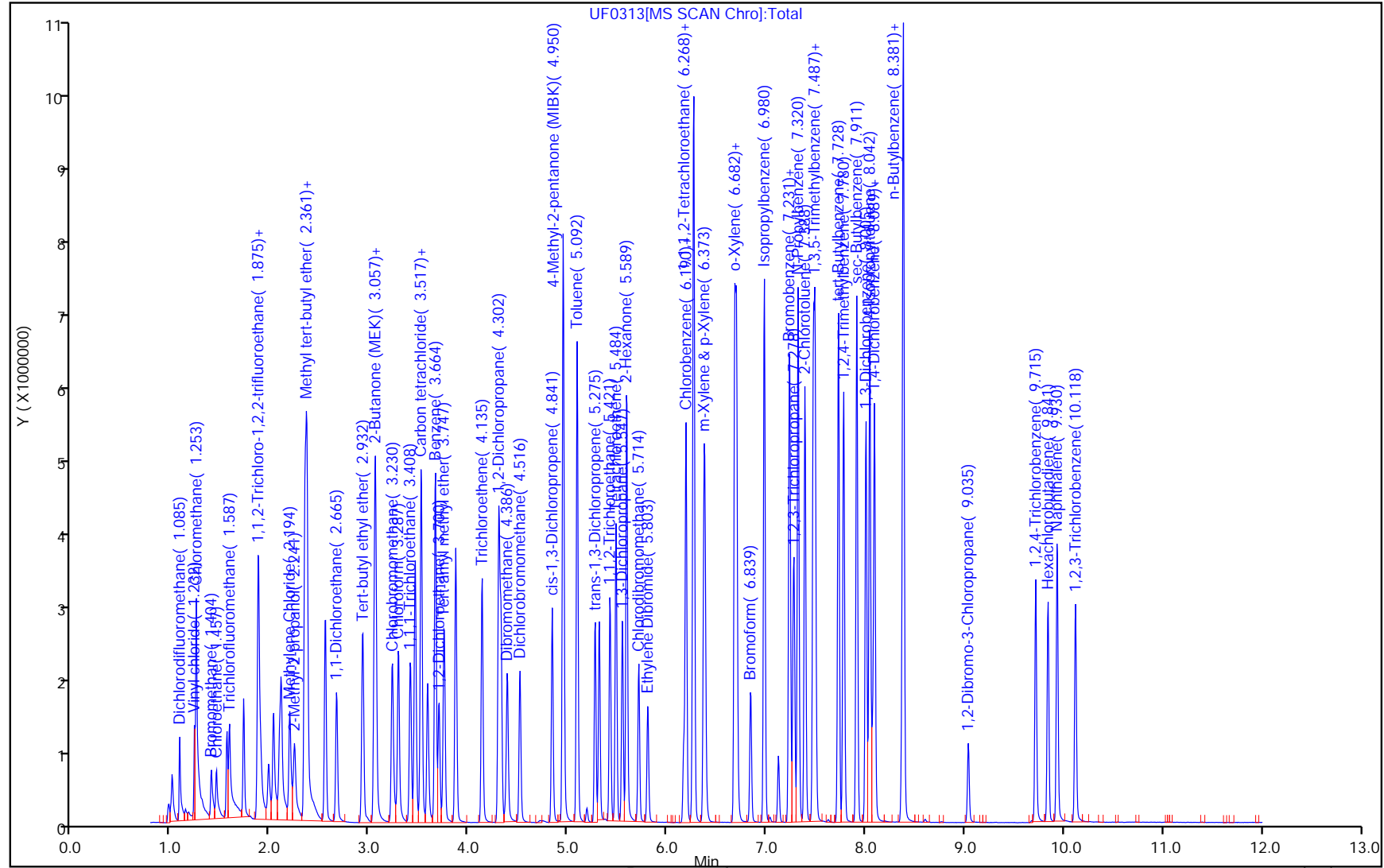
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 03-Jun-2020 17:01:30 ALS Bottle#: 14 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-016
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:20 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:20:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	575954	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	465256	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	87	249298	10.0	10.0	a
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	97	219382	10.0	10.0	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	85	248960	10.0	10.2	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	1858115	100.0	99.8	
9 Vinyl chloride	62	1.232	1.232	0.000	98	1909857	100.0	98.5	
8 Chloromethane	50	1.253	1.253	0.000	85	2205658	100.0	119.4	
10 Bromomethane	94	1.399	1.405	-0.006	99	911842	100.0	102.4	
11 Chloroethane	64	1.451	1.457	-0.006	99	988640	100.0	104.4	
12 Trichlorofluoromethane	101	1.582	1.588	-0.006	99	1563654	100.0	99.5	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	1274969	100.0	97.7	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	96	1079344	100.0	90.9	
15 Acetone	58	1.901	1.901	0.000	88	1541905	500.0	1126.4	
16 Methylene Chloride	84	2.194	2.194	0.000	87	1659142	100.0	104.3	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	1586806	1000.0	994.4	
18 Methyl tert-butyl ether	73	2.361	2.362	-0.001	96	4389439	100.0	100.2	
19 trans-1,2-Dichloroethene	96	2.367	2.372	-0.005	91	1522691	100.0	100.9	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	2556105	100.0	101.5	
22 Tert-butyl ethyl ether	59	2.932	2.927	0.005	89	3529163	80.0	83.3	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	2495698	500.0	1278.1	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	2180827	100.0	98.7	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	90	1918407	100.0	95.1	
26 Chlorobromomethane	130	3.224	3.225	-0.001	84	899598	100.0	85.5	
27 Chloroform	83	3.287	3.287	0.000	100	2605613	100.0	98.3	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	2281856	100.0	100.9	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	98	2025054	100.0	98.6	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	98	2067180	100.0	98.7	
31 Benzene	78	3.664	3.664	0.000	93	6600977	100.0	102.3	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	97	1806047	100.0	98.0	
33 Tert-amyl methyl ether	73	3.747	3.748	-0.001	99	3420967	80.0	83.4	

Report Date: 04-Jun-2020 10:42:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	96	1715649	100.0	99.3	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	94	1551781	100.0	99.8	
36 Dibromomethane	93	4.386	4.386	0.000	94	983081	100.0	98.5	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	99	2035550	100.0	103.1	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	91	2571345	100.0	106.4	
39 4-Methyl-2-pentanone (MIBK)	43	5.191	4.951	0.240	82	218302	500.0	15.3	
40 Toluene	92	5.092	5.092	0.000	92	4269778	100.0	105.3	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	95	2373434	100.0	107.5	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	97	1239255	100.0	96.4	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	1522860	100.0	98.2	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	91	2484171	100.0	101.0	
45 2-Hexanone	43	5.589	5.589	0.000	89	12576451	500.0	1311.5	e
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	1782188	100.0	103.5	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	1650227	100.0	102.3	
48 Chlorobenzene	112	6.190	6.190	0.000	97	4822645	100.0	101.8	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	1676043	100.0	98.5	
50 Ethylbenzene	91	6.268	6.269	-0.001	98	8166081	100.0	106.4	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	99	6339604	100.0	105.8	
52 o-Xylene	91	6.682	6.682	0.000	94	6535045	100.0	105.6	
53 Styrene	104	6.697	6.698	-0.001	98	5349720	100.0	107.7	
54 Bromoform	173	6.839	6.844	-0.005	99	1396099	100.0	105.4	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	8226572	100.0	107.1	
56 Bromobenzene	156	7.231	7.231	0.000	93	2235491	100.0	101.0	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	99	2123573	100.0	100.0	
58 1,2,3-Trichloropropane	110	7.283	7.283	0.000	98	619550	100.0	96.1	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	9630311	100.0	108.4	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	5594079	100.0	104.4	
61 1,3,5-Trimethylbenzene	105	7.471	7.472	-0.001	93	6094002	100.0	107.9	
62 4-Chlorotoluene	91	7.492	7.493	-0.001	99	6333163	100.0	105.2	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	5807554	100.0	105.3	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	5749615	100.0	107.4	
65 sec-Butylbenzene	105	7.911	7.911	0.000	100	8446529	100.0	108.1	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	4102344	100.0	104.0	
67 4-Isopropyltoluene	119	8.042	8.042	-0.001	99	6792769	100.0	107.9	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	4104139	100.0	101.6	
69 1,2-Dichlorobenzene	146	8.381	8.382	-0.001	98	3927279	100.0	101.6	
70 n-Butylbenzene	91	8.381	8.382	-0.001	98	5189322	100.0	113.5	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	90	575421	100.0	106.3	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	94	1852774	100.0	108.0	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	1099438	100.0	95.3	
74 Naphthalene	128	9.930	9.930	0.000	100	5186268	100.0	104.6	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	1734733	100.0	103.9	
S 76 Xylenes, Total	1				0		200.0	211.4	
S 77 Trihalomethanes, Total	1				0			410.2	
S 78 1,3-Dichloropropene, Total	1				0		200.0	213.9	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Report Date: 04-Jun-2020 10:42:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Review Flags

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 10.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:20

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D

Injection Date: 03-Jun-2020 17:01:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ic

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

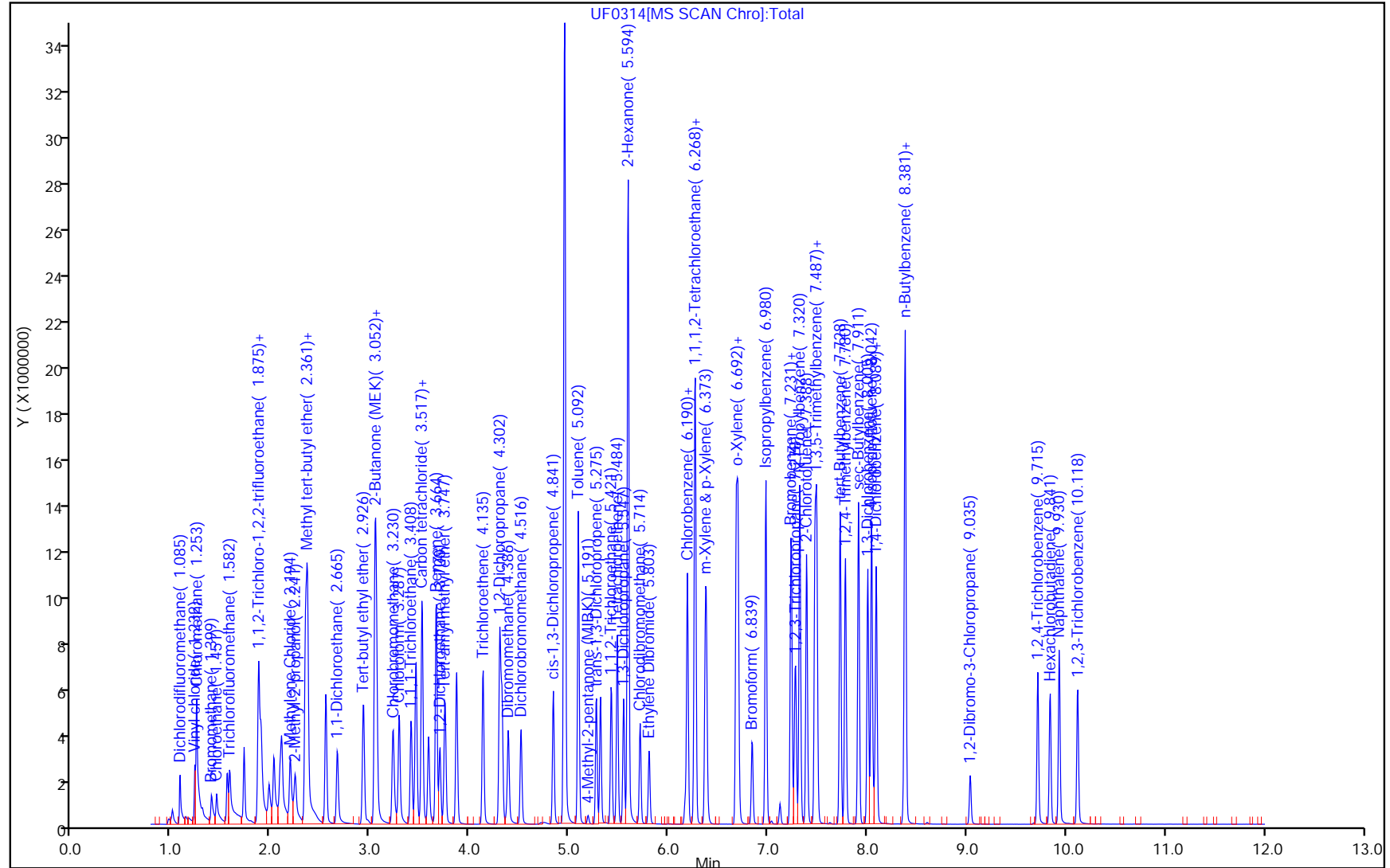
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:20

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D

Injection Date: 03-Jun-2020 17:01:30

Instrument ID: CMSU

Lims ID: ic

Client ID:

Operator ID: SMP

ALS Bottle#:

14

Worklist Smp#:

16

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: U524.2

Limit Group:

524.2

Column: Rtx-624 (0.18 mm)

Detector

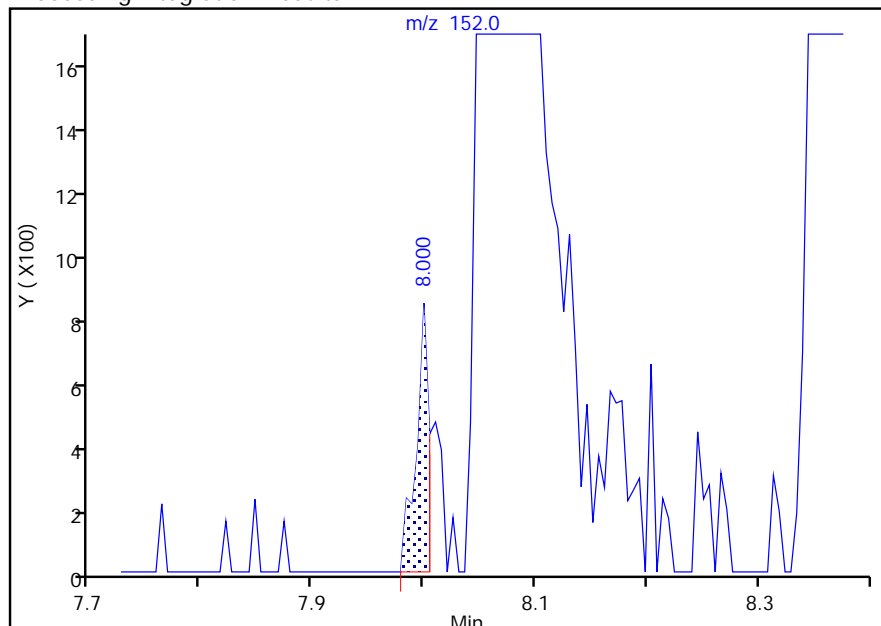
MS SCAN

* 3 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

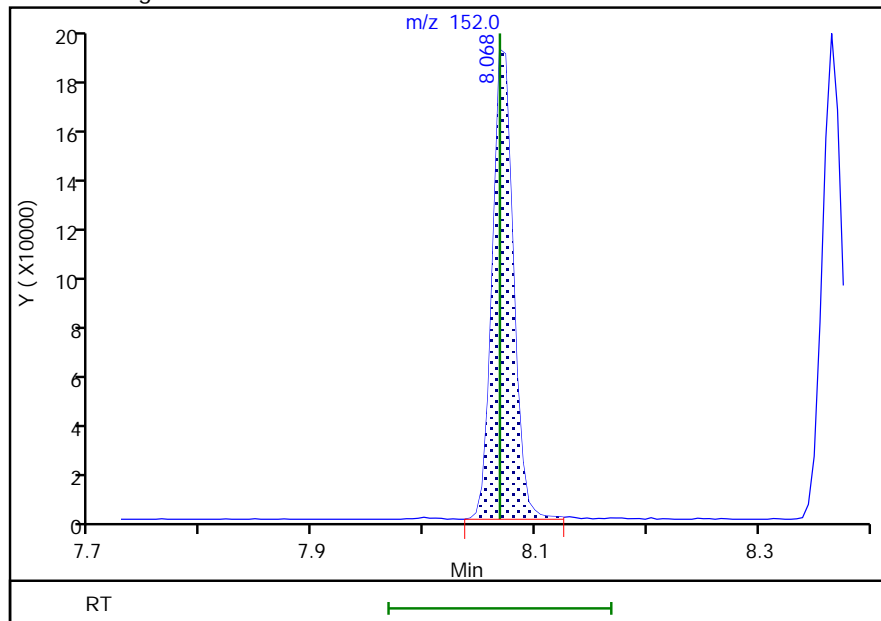
Signal: 1

RT: 8.00
Area: 648
Amount: 10.000000
Amount Units: ug/l

Processing Integration Results

RT: 8.07
Area: 249298
Amount: 10.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 10:19:15

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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06/17/2020

September 2020

Kirtland AFB BFF
Quarterly Report - April-June 2020
SWMUs ST-106/SS-111

H-2-2088

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-621037/16 Calibration Date: 06/03/2020 17:52
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF0316.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3599	0.3407		18.9	20.0	-5.3	30.0
Chloromethane	Ave	0.4540	0.3906		17.2	20.0	-14.0	30.0
Vinyl chloride	Ave	0.3929	0.3629		18.5	20.0	-7.6	30.0
Bromomethane	Ave	0.0781	0.0789		20.2	20.0	1.1	30.0
Chloroethane	Ave	0.1945	0.2135		21.9	20.0	9.7	30.0
Trichlorofluoromethane	Ave	0.3587	0.3482		19.4	20.0	-2.9	30.0
Freon 113	Ave	0.1546	0.1499		19.4	20.0	-3.0	30.0
1,1-Dichloroethene	Ave	0.2212	0.2024		18.3	20.0	-8.5	30.0
Acetone	Ave	0.0324	0.0318		98.3	100	-1.7	30.0
Methylene Chloride	Lin1		0.3211		20.7	20.0	3.6	30.0
tert-Butyl alcohol	Ave	0.0320	0.0314		196	200	-2.1	30.0
Methyl tert-butyl ether	Ave	0.9265	0.8659		18.7	20.0	-6.5	30.0
trans-1,2-Dichloroethene	Ave	0.2313	0.2350		20.3	20.0	1.6	30.0
1,1-Dichloroethane	Ave	0.5350	0.4904		18.3	20.0	-8.3	30.0
2,2-Dichloropropane	Ave	0.4000	0.3460		17.3	20.0	-13.5	30.0
cis-1,2-Dichloroethene	Ave	0.4851	0.4356		18.0	20.0	-10.2	30.0
2-Butanone (MEK)	Ave	0.0376	0.0382		102	100	1.5	30.0
Chlorobromomethane	Ave	0.1492	0.1291		17.3	20.0	-13.5	30.0
Chloroform	Ave	0.4917	0.4650		18.9	20.0	-5.4	30.0
1,1,1-Trichloroethane	Ave	0.6064	0.5786		19.1	20.0	-4.6	30.0
1,1-Dichloropropene	Ave	0.5960	0.5435		18.2	20.0	-8.8	30.0
Carbon tetrachloride	Ave	0.4684	0.4332		18.5	20.0	-7.5	30.0
Benzene	Ave	1.803	1.582		17.5	20.0	-12.3	30.0
1,2-Dichloroethane	Ave	0.6543	0.5957		18.2	20.0	-9.0	30.0
Trichloroethene	Ave	0.3223	0.3019		18.7	20.0	-6.3	30.0
1,2-Dichloropropane	Ave	0.4582	0.4474		19.5	20.0	-2.3	30.0
Dibromomethane	Ave	0.2440	0.2313		19.0	20.0	-5.2	30.0
Dichlorobromomethane	Ave	0.5421	0.5222		19.3	20.0	-3.7	30.0
cis-1,3-Dichloropropene	Ave	0.6645	0.6693		20.1	20.0	0.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5342	0.5307		99.4	100	-0.6	30.0
Toluene	Ave	1.032	0.9394		18.2	20.0	-9.0	30.0
trans-1,3-Dichloropropene	Ave	0.6565	0.6034		18.4	20.0	-8.1	30.0
1,1,2-Trichloroethane	Ave	0.3314	0.2880		17.4	20.0	-13.1	30.0
Tetrachloroethene	Ave	0.5105	0.4905		19.2	20.0	-3.9	30.0
1,3-Dichloropropane	Ave	0.7347	0.6432		17.5	20.0	-12.5	30.0
2-Hexanone	Ave	0.8008	0.8115		101	100	1.3	30.0
Chlorodibromomethane	Ave	0.7204	0.6741		18.7	20.0	-6.4	30.0
Ethylene Dibromide	Ave	0.3494	0.3241		18.5	20.0	-7.3	30.0
Chlorobenzene	Ave	1.018	0.9544		18.7	20.0	-6.3	30.0
1,1,1,2-Tetrachloroethane	Ave	0.7102	0.6958		19.6	20.0	-2.0	30.0
Ethylbenzene	Ave	4.103	4.017		19.6	20.0	-2.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-621037/16 Calibration Date: 06/03/2020 17:52
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF0316.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
m-Xylene & p-Xylene	Ave	3.195	3.276		20.5	20.0	2.5	30.0
o-Xylene	Ave	3.277	3.285		20.0	20.0	0.2	30.0
Styrene	Ave	2.276	2.402		21.1	20.0	5.5	30.0
Bromoform	Ave	0.4029	0.4176		20.7	20.0	3.6	30.0
Isopropylbenzene	Ave	3.811	3.727		19.6	20.0	-2.2	30.0
Bromobenzene	Ave	0.7819	0.7500		19.2	20.0	-4.1	30.0
1,1,2,2-Tetrachloroethane	Ave	1.179	1.233		20.9	20.0	4.6	30.0
1,2,3-Trichloropropane	Ave	0.3263	0.3696		22.7	20.0	13.3	30.0
N-Propylbenzene	Ave	5.089	5.392		21.2	20.0	5.9	30.0
2-Chlorotoluene	Ave	2.965	3.137		21.2	20.0	5.8	30.0
1,3,5-Trimethylbenzene	Ave	3.274	3.186		19.5	20.0	-2.7	30.0
4-Chlorotoluene	Ave	3.206	3.316		20.7	20.0	3.4	30.0
tert-Butylbenzene	Ave	2.700	2.708		20.1	20.0	0.3	30.0
1,2,4-Trimethylbenzene	Ave	3.258	3.615		22.2	20.0	11.0	30.0
sec-Butylbenzene	Ave	4.336	4.390		20.3	20.0	1.3	30.0
4-Isopropyltoluene	Ave	3.446	3.401		19.7	20.0	-1.3	30.0
1,3-Dichlorobenzene	Ave	1.564	1.607		20.5	20.0	2.7	30.0
1,4-Dichlorobenzene	Ave	1.665	1.672		20.1	20.0	0.4	30.0
n-Butylbenzene	Ave	3.687	3.650		19.8	20.0	-1.0	30.0
1,2-Dichlorobenzene	Ave	1.616	1.623		20.1	20.0	0.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2035	0.2126		20.9	20.0	4.5	30.0
1,2,4-Trichlorobenzene	Ave	0.8194	0.8430		20.6	20.0	2.9	30.0
Hexachlorobutadiene	Ave	0.3707	0.3816		20.6	20.0	3.0	30.0
Naphthalene	Ave	2.771	3.029		21.9	20.0	9.3	30.0
1,2,3-Trichlorobenzene	Ave	0.7670	0.8216		21.4	20.0	7.1	30.0
4-Bromofluorobenzene	Ave	0.4011	0.3860		9.62	10.0	-3.8	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9907	0.9673		9.76	10.0	-2.4	30.0

Report Date: 04-Jun-2020 12:47:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0316.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 03-Jun-2020 17:52:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-016
 Operator ID: rd Instrument ID: CMSAG
 Sublist:
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:49 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 11:28:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.187	4.184	0.003	97	472885	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.589	6.586	0.003	90	339428	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.736	8.739	-0.003	93	154432	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.647	7.645	0.002	87	182546	10.0	9.62	
\$ 5 1,2-Dichlorobenzene-d4	152	9.113	9.110	0.003	87	149387	10.0	9.76	
7 Dichlorodifluoromethane	85	1.304	1.302	0.002	99	322225	20.0	18.9	
8 Chloromethane	50	1.481	1.478	0.003	99	369406	20.0	17.2	
9 Vinyl chloride	62	1.511	1.515	-0.004	97	343233	20.0	18.5	
10 Bromomethane	94	1.742	1.746	-0.004	96	74618	20.0	20.2	
11 Chloroethane	64	1.803	1.800	0.003	98	201891	20.0	21.9	
12 Trichlorofluoromethane	101	1.961	1.959	0.002	99	329313	20.0	19.4	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.265	2.269	-0.004	91	141803	20.0	19.4	
13 1,1-Dichloroethene	96	2.295	2.293	0.002	94	191458	20.0	18.3	
15 Acetone	58	2.344	2.342	0.002	86	150481	100.0	98.3	
16 Methylene Chloride	84	2.606	2.609	-0.003	99	303644	20.0	20.7	
17 2-Methyl-2-propanol	59	2.666	2.664	0.002	97	296638	200.0	195.9	
18 Methyl tert-butyl ether	73	2.739	2.743	-0.004	97	818963	20.0	18.7	
19 trans-1,2-Dichloroethene	96	2.764	2.767	-0.003	99	222273	20.0	20.3	
20 1,1-Dichloroethane	63	3.043	3.041	0.002	99	463836	20.0	18.3	
25 2,2-Dichloropropane	77	3.402	3.406	-0.004	95	327198	20.0	17.3	
24 cis-1,2-Dichloroethene	61	3.421	3.418	0.002	87	411958	20.0	18.0	
23 2-Butanone (MEK)	72	3.427	3.424	0.003	99	180448	100.0	101.5	
26 Chlorobromomethane	130	3.591	3.594	-0.003	97	122062	20.0	17.3	
27 Chloroform	83	3.621	3.619	0.002	97	439768	20.0	18.9	
28 1,1,1-Trichloroethane	97	3.737	3.734	0.003	98	392750	20.0	19.1	
30 1,1-Dichloropropene	75	3.846	3.844	0.002	92	368970	20.0	18.2	
29 Carbon tetrachloride	117	3.846	3.850	-0.004	82	294098	20.0	18.5	
31 Benzene	78	3.998	4.002	-0.004	98	1073888	20.0	17.5	
32 1,2-Dichloroethane	62	4.035	4.032	0.003	95	404373	20.0	18.2	
34 Trichloroethene	132	4.448	4.446	0.002	94	204931	20.0	18.7	
35 1,2-Dichloropropane	63	4.631	4.628	0.003	94	303735	20.0	19.5	

Report Date: 04-Jun-2020 12:47:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0316.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.740	4.738	0.002	91	157017	20.0	19.0	
37 Dichlorobromomethane	83	4.837	4.835	0.002	97	354524	20.0	19.3	
38 cis-1,3-Dichloropropene	75	5.166	5.170	-0.004	96	454333	20.0	20.1	
39 4-Methyl-2-pentanone (MIBK)	43	5.269	5.267	0.002	98	1801433	100.0	99.4	
40 Toluene	92	5.415	5.419	-0.004	93	637695	20.0	18.2	
41 trans-1,3-Dichloropropene	75	5.610	5.613	-0.003	98	409643	20.0	18.4	
42 1,1,2-Trichloroethane	83	5.774	5.778	-0.004	93	195500	20.0	17.4	
43 Tetrachloroethene	164	5.853	5.863	-0.010	89	151498	20.0	19.2	
44 1,3-Dichloropropane	76	5.914	5.911	0.003	95	436636	20.0	17.5	
45 2-Hexanone	43	5.950	5.948	0.002	97	1253199	100.0	101.3	
46 Chlorodibromomethane	129	6.108	6.112	-0.004	97	208200	20.0	18.7	
47 Ethylene Dibromide	107	6.212	6.216	-0.004	99	220011	20.0	18.5	
48 Chlorobenzene	112	6.613	6.611	0.002	93	647915	20.0	18.7	
50 Ethylbenzene	91	6.680	6.678	0.002	99	1240693	20.0	19.6	
49 1,1,1,2-Tetrachloroethane	131	6.680	6.684	-0.004	47	214908	20.0	19.6	
51 m-Xylene & p-Xylene	91	6.777	6.781	-0.004	99	1011942	20.0	20.5	
52 o-Xylene	91	7.142	7.140	0.002	91	1014571	20.0	20.0	
53 Styrene	104	7.167	7.164	0.003	91	741796	20.0	21.1	
54 Bromoform	173	7.386	7.377	0.009	89	128966	20.0	20.7	
55 Isopropylbenzene	105	7.471	7.468	0.003	96	1151094	20.0	19.6	
56 Bromobenzene	156	7.799	7.797	0.002	92	231661	20.0	19.2	
57 1,1,2,2-Tetrachloroethane	83	7.805	7.803	0.002	98	380960	20.0	20.9	
58 1,2,3-Trichloropropane	110	7.842	7.845	-0.003	60	114170	20.0	22.7	
59 N-Propylbenzene	91	7.848	7.851	-0.003	96	1665303	20.0	21.2	
60 2-Chlorotoluene	91	7.957	7.955	0.002	95	968930	20.0	21.2	
61 1,3,5-Trimethylbenzene	105	8.006	8.010	-0.003	93	983965	20.0	19.5	
62 4-Chlorotoluene	91	8.061	8.058	0.003	98	1024073	20.0	20.7	
63 tert-Butylbenzene	119	8.322	8.320	0.002	91	836506	20.0	20.1	
64 1,2,4-Trimethylbenzene	105	8.377	8.374	0.003	96	1116619	20.0	22.2	
65 sec-Butylbenzene	105	8.535	8.526	0.009	99	1355952	20.0	20.3	
67 4-Isopropyltoluene	119	8.669	8.666	0.003	96	1050314	20.0	19.7	
66 1,3-Dichlorobenzene	146	8.675	8.678	-0.003	95	496352	20.0	20.5	
68 1,4-Dichlorobenzene	146	8.760	8.764	-0.004	90	516272	20.0	20.1	
70 n-Butylbenzene	91	9.064	9.068	-0.004	97	1127392	20.0	19.8	
69 1,2-Dichlorobenzene	146	9.131	9.135	-0.004	90	501418	20.0	20.1	
71 1,2-Dibromo-3-Chloropropane	157	9.964	9.962	0.002	89	65657	20.0	20.9	
72 1,2,4-Trichlorobenzene	180	10.901	10.898	0.003	91	260382	20.0	20.6	
73 Hexachlorobutadiene	225	11.053	11.050	0.003	90	117871	20.0	20.6	
74 Naphthalene	128	11.180	11.178	0.002	98	935443	20.0	21.9	
75 1,2,3-Trichlorobenzene	180	11.430	11.427	0.003	93	253747	20.0	21.4	
S 76 Xylenes, Total	1				0		40.0	40.6	
S 78 1,3-Dichloropropene, Total	1				0		40.0	38.5	

Reagents:

VM_MMIX SEC_00126

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0316.D

Injection Date: 03-Jun-2020 17:52:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: icv

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

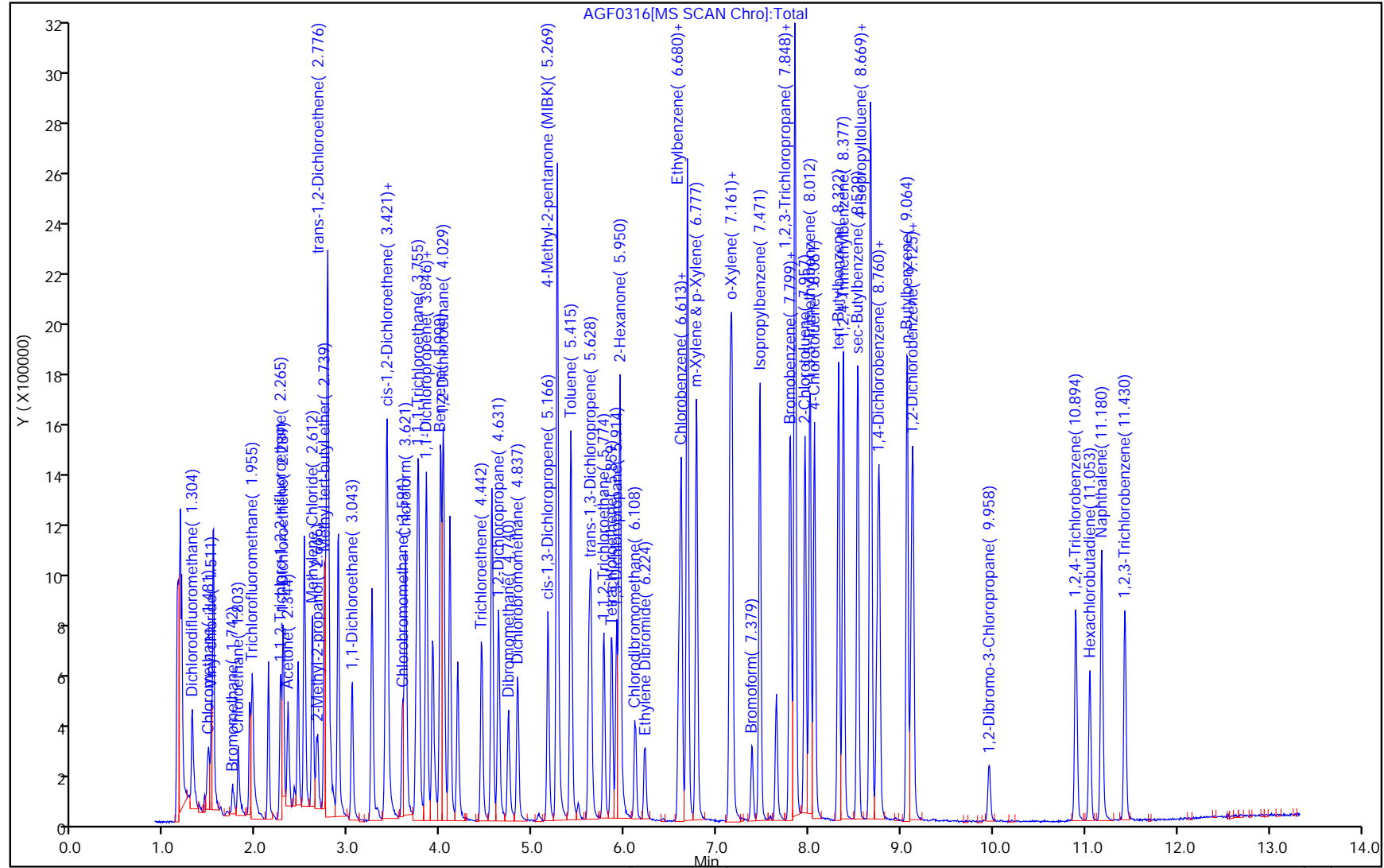
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-622635/4 Calibration Date: 06/16/2020 11:45
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF1604.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3599	0.4016		55.8	50.0	11.6	30.0
Chloromethane	Ave	0.4540	0.5211		57.4	50.0	14.8	30.0
Vinyl chloride	Ave	0.3929	0.4199		53.4	50.0	6.9	30.0
Bromomethane	Ave	0.0781	0.0684		43.8	50.0	-12.4	30.0
Chloroethane	Ave	0.1945	0.2375		61.0	50.0	22.1	30.0
Trichlorofluoromethane	Ave	0.3587	0.3926		54.7	50.0	9.4	30.0
Freon 113	Ave	0.1546	0.1574		50.9	50.0	1.8	30.0
1,1-Dichloroethene	Ave	0.2212	0.2377		53.7	50.0	7.5	30.0
Acetone	Ave	0.0324	0.0242		187	250	-25.2	30.0
Methylene Chloride	Lin1		0.3137		55.2	50.0	10.3	30.0
tert-Butyl alcohol	Ave	0.0320	0.0226		353	500	-29.4	30.0
Methyl tert-butyl ether	Ave	0.9265	0.8486		45.8	50.0	-8.4	30.0
trans-1,2-Dichloroethene	Ave	0.2313	0.2449		53.0	50.0	5.9	30.0
1,1-Dichloroethane	Ave	0.5350	0.5697		53.2	50.0	6.5	30.0
Tert-butyl ethyl ether	Ave	0.9392	0.9719		41.4	40.0	3.5	30.0
2,2-Dichloropropane	Ave	0.4000	0.4962		62.0	50.0	24.0	30.0
2-Butanone (MEK)	Ave	0.0376	0.0332		221	250	-11.7	30.0
cis-1,2-Dichloroethene	Ave	0.4851	0.5397		55.6	50.0	11.2	30.0
Chlorobromomethane	Ave	0.1492	0.1418		47.5	50.0	-5.0	30.0
Chloroform	Ave	0.4917	0.5199		52.9	50.0	5.7	30.0
1,1,1-Trichloroethane	Ave	0.6064	0.7163		59.1	50.0	18.1	30.0
1,1-Dichloropropene	Ave	0.5960	0.6671		56.0	50.0	11.9	30.0
Carbon tetrachloride	Ave	0.4684	0.5630		60.1	50.0	20.2	30.0
Benzene	Ave	1.803	2.130		59.1	50.0	18.1	30.0
1,2-Dichloroethane	Ave	0.6543	0.7553		57.7	50.0	15.4	30.0
Tert-amyl methyl ether	Ave	0.8542	0.8520		39.9	40.0	-0.3	30.0
Trichloroethene	Ave	0.3223	0.3604		55.9	50.0	11.8	30.0
1,2-Dichloropropane	Ave	0.4582	0.5673		61.9	50.0	23.8	30.0
Dibromomethane	Ave	0.2440	0.2865		58.7	50.0	17.4	30.0
Dichlorobromomethane	Ave	0.5421	0.6713		61.9	50.0	23.8	30.0
cis-1,3-Dichloropropene	Ave	0.6645	0.8364		62.9	50.0	25.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5342	0.5386		252	250	0.8	30.0
Toluene	Ave	1.032	1.152		55.8	50.0	11.5	30.0
trans-1,3-Dichloropropene	Ave	0.6565	0.6987		53.2	50.0	6.4	30.0
1,1,2-Trichloroethane	Ave	0.3314	0.3649		55.1	50.0	10.1	30.0
Tetrachloroethene	Ave	0.5105	0.4978		48.8	50.0	-2.5	30.0
1,3-Dichloropropane	Ave	0.7347	0.7801		53.1	50.0	6.2	30.0
2-Hexanone	Ave	0.8008	0.7137		223	250	-10.9	30.0
Chlorodibromomethane	Ave	0.7204	0.7126		49.5	50.0	-1.1	30.0
Ethylene Dibromide	Ave	0.3494	0.3712		53.1	50.0	6.2	30.0
Chlorobenzene	Ave	1.018	1.144		56.1	50.0	12.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-622635/4 Calibration Date: 06/16/2020 11:45
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF1604.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylbenzene	Ave	4.103	4.149		50.6	50.0	1.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.7102	0.6464		45.5	50.0	-9.0	30.0
m-Xylene & p-Xylene	Ave	3.195	3.375		52.8	50.0	5.6	30.0
o-Xylene	Ave	3.277	3.452		52.7	50.0	5.4	30.0
Styrene	Ave	2.276	2.365		52.0	50.0	3.9	30.0
Bromoform	Ave	0.4029	0.4241		52.6	50.0	5.3	30.0
Isopropylbenzene	Ave	3.811	4.060		53.3	50.0	6.5	30.0
Bromobenzene	Ave	0.7819	0.7202		46.1	50.0	-7.9	30.0
1,1,2,2-Tetrachloroethane	Ave	1.179	0.9739		41.3	50.0	-17.4	30.0
1,2,3-Trichloropropane	Ave	0.3263	0.2982		45.7	50.0	-8.6	30.0
N-Propylbenzene	Ave	5.089	5.155		50.6	50.0	1.3	30.0
2-Chlorotoluene	Ave	2.965	3.030		51.1	50.0	2.2	30.0
1,3,5-Trimethylbenzene	Ave	3.274	3.592		54.9	50.0	9.7	30.0
4-Chlorotoluene	Ave	3.206	3.363		52.5	50.0	4.9	30.0
tert-Butylbenzene	Ave	2.700	2.731		50.6	50.0	1.1	30.0
1,2,4-Trimethylbenzene	Ave	3.258	3.482		53.4	50.0	6.9	30.0
sec-Butylbenzene	Ave	4.336	4.427		51.1	50.0	2.1	30.0
4-Isopropyltoluene	Ave	3.446	3.583		52.0	50.0	4.0	30.0
1,3-Dichlorobenzene	Ave	1.564	1.504		48.1	50.0	-3.9	30.0
1,4-Dichlorobenzene	Ave	1.665	1.549		46.5	50.0	-7.0	30.0
n-Butylbenzene	Ave	3.687	3.665		49.7	50.0	-0.6	30.0
1,2-Dichlorobenzene	Ave	1.616	1.383		42.8	50.0	-14.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2035	0.1583		38.9	50.0	-22.2	30.0
1,2,4-Trichlorobenzene	Ave	0.8194	0.6968		42.5	50.0	-15.0	30.0
Hexachlorobutadiene	Ave	0.3707	0.3019		40.7	50.0	-18.5	30.0
Naphthalene	Ave	2.771	2.183		39.4	50.0	-21.2	30.0
1,2,3-Trichlorobenzene	Ave	0.7670	0.5937		38.7	50.0	-22.6	30.0
4-Bromofluorobenzene	Ave	0.4011	0.4177		10.4	10.0	4.1	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9907	0.9140		9.23	10.0	-7.7	30.0

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1604.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 16-Jun-2020 11:45:30 ALS Bottle#: 5 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-004
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:47:53 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:47:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.181	4.181	0.000	96	456920	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.590	6.590	0.000	80	285719	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.737	8.737	0.000	96	157773	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.642	7.642	0.000	82	190843	10.0	10.4	
\$ 5 1,2-Dichlorobenzene-d4	152	9.108	9.108	0.000	89	144197	10.0	9.23	
7 Dichlorodifluoromethane	85	1.303	1.303	0.000	99	917404	50.0	55.8	
8 Chloromethane	50	1.455	1.455	0.000	100	1190529	50.0	57.4	
9 Vinyl chloride	62	1.510	1.510	0.000	98	959222	50.0	53.4	
10 Bromomethane	94	1.741	1.741	0.000	97	156278	50.0	43.8	
11 Chloroethane	64	1.802	1.802	0.000	100	542547	50.0	61.0	
12 Trichlorofluoromethane	101	1.954	1.954	0.000	98	896860	50.0	54.7	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.271	2.271	0.000	92	359576	50.0	50.9	
13 1,1-Dichloroethene	96	2.295	2.295	0.000	94	543132	50.0	53.7	
15 Acetone	58	2.344	2.344	0.000	86	276861	250.0	187.1	
16 Methylene Chloride	84	2.605	2.605	0.000	99	716559	50.0	55.2	
17 2-Methyl-2-propanol	59	2.654	2.654	0.000	97	516334	500.0	352.8	
18 Methyl tert-butyl ether	73	2.739	2.739	0.000	98	1938640	50.0	45.8	
19 trans-1,2-Dichloroethene	96	2.763	2.763	0.000	94	559595	50.0	53.0	
20 1,1-Dichloroethane	63	3.037	3.037	0.000	99	1301562	50.0	53.2	
22 Tert-butyl ethyl ether	59	3.250	3.250	0.000	89	1776241	40.0	41.4	
25 2,2-Dichloropropane	77	3.402	3.402	0.000	95	1133618	50.0	62.0	
24 cis-1,2-Dichloroethene	61	3.414	3.414	0.000	83	1232987	50.0	55.6	
23 2-Butanone (MEK)	72	3.414	3.414	0.000	99	379161	250.0	220.8	
26 Chlorobromomethane	130	3.585	3.585	0.000	95	323925	50.0	47.5	
27 Chloroform	83	3.621	3.621	0.000	97	1187647	50.0	52.9	
28 1,1,1-Trichloroethane	97	3.731	3.731	0.000	95	1023240	50.0	59.1	
30 1,1-Dichloropropene	75	3.846	3.846	0.000	89	953070	50.0	56.0	
29 Carbon tetrachloride	117	3.846	3.846	0.000	85	804240	50.0	60.1	
31 Benzene	78	3.998	3.998	0.000	97	3042425	50.0	59.1	
33 Tert-amyl methyl ether	73	4.029	4.029	0.000	97	1557136	40.0	39.9	
32 1,2-Dichloroethane	62	4.029	4.029	0.000	98	1078951	50.0	57.7	

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1604.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.442	4.442	0.000	94	514846	50.0	55.9	
35 1,2-Dichloropropane	63	4.625	4.625	0.000	88	810366	50.0	61.9	
36 Dibromomethane	93	4.734	4.734	0.000	83	409226	50.0	58.7	
37 Dichlorobromomethane	83	4.832	4.832	0.000	98	958995	50.0	61.9	
38 cis-1,3-Dichloropropene	75	5.166	5.166	0.000	98	1194878	50.0	62.9	
39 4-Methyl-2-pentanone (MIBK)	43	5.258	5.258	0.000	99	3846973	250.0	252.1	E
40 Toluene	92	5.416	5.416	0.000	92	1645061	50.0	55.8	
41 trans-1,3-Dichloropropene	75	5.610	5.610	0.000	95	998213	50.0	53.2	
42 1,1,2-Trichloroethane	83	5.769	5.769	0.000	93	521260	50.0	55.1	
43 Tetrachloroethene	164	5.854	5.854	0.000	83	392693	50.0	48.8	
44 1,3-Dichloropropane	76	5.915	5.915	0.000	96	1114500	50.0	53.1	
45 2-Hexanone	43	5.945	5.945	0.000	99	2815177	250.0	222.8	
46 Chlorodibromomethane	129	6.109	6.109	0.000	96	562130	50.0	49.5	
47 Ethylene Dibromide	107	6.213	6.213	0.000	99	530283	50.0	53.1	
48 Chlorobenzene	112	6.608	6.608	0.000	88	1633768	50.0	56.1	
50 Ethylbenzene	91	6.675	6.675	0.000	99	3272845	50.0	50.6	
49 1,1,1,2-Tetrachloroethane	131	6.681	6.681	0.000	89	509885	50.0	45.5	
51 m-Xylene & p-Xylene	91	6.772	6.772	0.000	97	2662594	50.0	52.8	
52 o-Xylene	91	7.143	7.143	0.000	95	2723439	50.0	52.7	
53 Styrene	104	7.162	7.162	0.000	93	1865929	50.0	52.0	
54 Bromoform	173	7.381	7.381	0.000	91	334590	50.0	52.6	
55 Isopropylbenzene	105	7.466	7.466	0.000	97	3202420	50.0	53.3	
56 Bromobenzene	156	7.788	7.788	0.000	89	568174	50.0	46.1	
57 1,1,2,2-Tetrachloroethane	83	7.800	7.800	0.000	97	768252	50.0	41.3	
58 1,2,3-Trichloropropane	110	7.843	7.843	0.000	89	235248	50.0	45.7	
59 N-Propylbenzene	91	7.849	7.849	0.000	98	4066755	50.0	50.6	
60 2-Chlorotoluene	91	7.952	7.952	0.000	96	2390047	50.0	51.1	
61 1,3,5-Trimethylbenzene	105	8.007	8.007	0.000	93	2833498	50.0	54.9	
62 4-Chlorotoluene	91	8.056	8.056	0.000	98	2653189	50.0	52.5	
63 tert-Butylbenzene	119	8.317	8.317	0.000	89	2154739	50.0	50.6	
64 1,2,4-Trimethylbenzene	105	8.372	8.372	0.000	97	2746796	50.0	53.4	
65 sec-Butylbenzene	105	8.524	8.524	0.000	98	3492466	50.0	51.1	
67 4-Isopropyltoluene	119	8.664	8.664	0.000	96	2826441	50.0	52.0	
66 1,3-Dichlorobenzene	146	8.670	8.670	0.000	91	1186150	50.0	48.1	
68 1,4-Dichlorobenzene	146	8.762	8.762	0.000	89	1221751	50.0	46.5	
70 n-Butylbenzene	91	9.060	9.060	0.000	97	2891104	50.0	49.7	
69 1,2-Dichlorobenzene	146	9.127	9.127	0.000	88	1091308	50.0	42.8	
71 1,2-Dibromo-3-Chloropropane	157	9.954	9.954	0.000	89	124903	50.0	38.9	
72 1,2,4-Trichlorobenzene	180	10.897	10.897	0.000	90	549675	50.0	42.5	
73 Hexachlorobutadiene	225	11.049	11.049	0.000	87	238179	50.0	40.7	
74 Naphthalene	128	11.171	11.171	0.000	98	1722147	50.0	39.4	
75 1,2,3-Trichlorobenzene	180	11.426	11.426	0.000	90	468327	50.0	38.7	
S 76 Xylenes, Total	1				0		100.0	105.5	
S 78 1,3-Dichloropropene, Total	1				0		100.0	116.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Reagents:

524MMix_00173

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1604.D

Injection Date: 16-Jun-2020 11:45:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ccvis

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

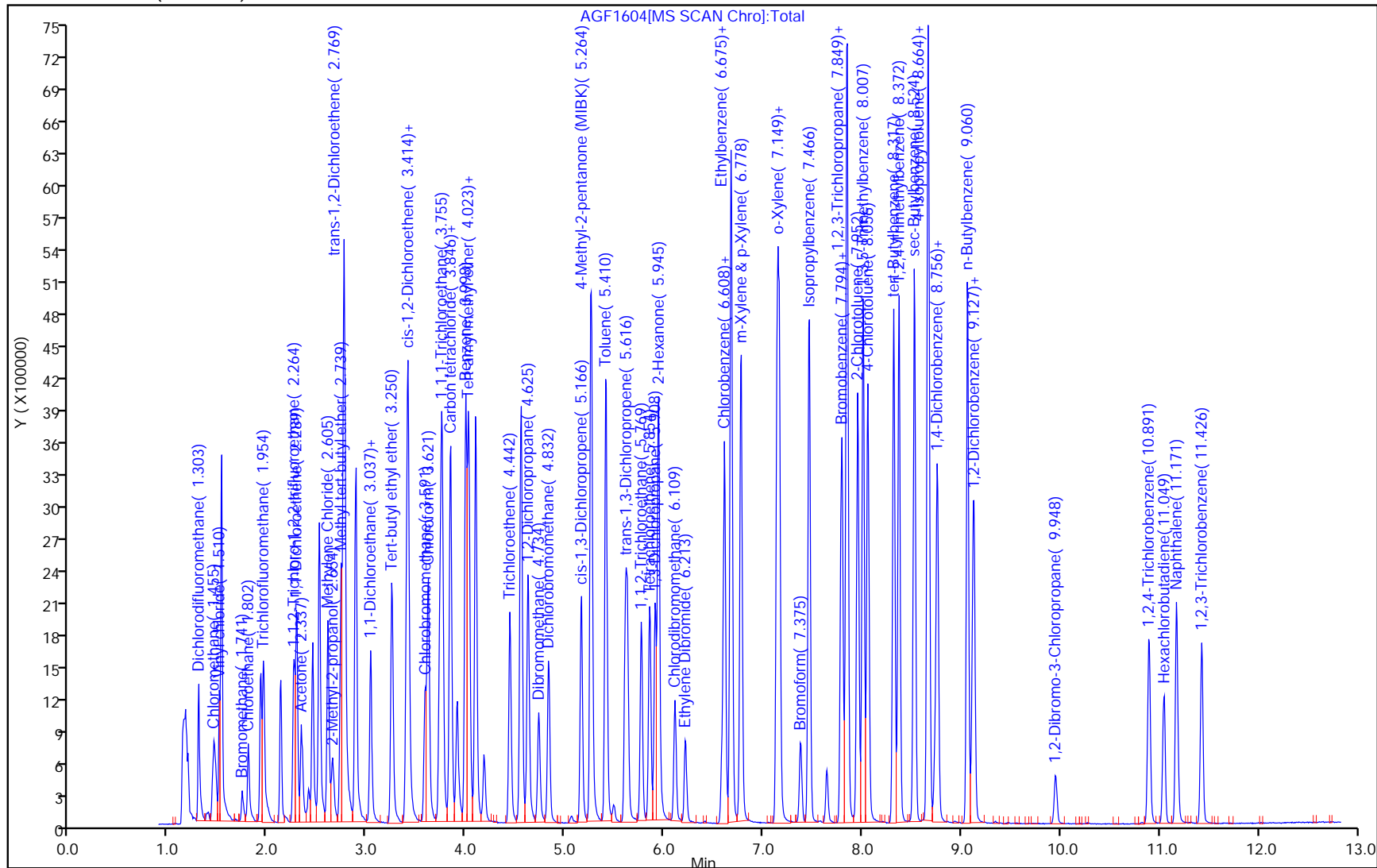
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-621036/18 Calibration Date: 06/03/2020 17:42
 Instrument ID: CMSU Calib Start Date: 06/03/2020 14:39
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:01
 Lab File ID: UF0316.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3232	0.3084		19.1	20.0	-4.6	30.0
Vinyl chloride	Ave	0.3367	0.3124		18.6	20.0	-7.2	30.0
Chloromethane	Ave	0.3207	0.3382		21.1	20.0	5.5	30.0
Bromomethane	Ave	0.1545	0.1706		22.1	20.0	10.4	30.0
Chloroethane	Ave	0.1645	0.1543		18.8	20.0	-6.2	30.0
Trichlorofluoromethane	Ave	0.2728	0.2472		18.1	20.0	-9.4	30.0
Freon 113	Ave	0.2265	0.2089		18.5	20.0	-7.7	30.0
1,1-Dichloroethene	Ave	0.2062	0.2079		20.2	20.0	0.8	30.0
Acetone	Ave	0.0238	0.0235		99.0	100	-1.0	30.0
Methylene Chloride	Lin1		0.3202		22.0	20.0	10.1	30.0
tert-Butyl alcohol	Ave	0.0277	0.0290		209	200	4.5	30.0
Methyl tert-butyl ether	Ave	0.7608	0.7540		19.8	20.0	-0.9	30.0
trans-1,2-Dichloroethene	Ave	0.2621	0.2520		19.2	20.0	-3.8	30.0
1,1-Dichloroethane	Ave	0.4372	0.4239		19.4	20.0	-3.0	30.0
2-Butanone (MEK)	Ave	0.0339	0.0355		105	100	4.8	30.0
cis-1,2-Dichloroethene	Ave	0.3836	0.3707		19.3	20.0	-3.3	30.0
2,2-Dichloropropane	Ave	0.3504	0.3188		18.2	20.0	-9.0	30.0
Chlorobromomethane	Ave	0.1826	0.2018		22.1	20.0	10.5	30.0
Chloroform	Ave	0.4603	0.4326		18.8	20.0	-6.0	30.0
1,1,1-Trichloroethane	Ave	0.4861	0.4536		18.7	20.0	-6.7	30.0
Carbon tetrachloride	Ave	0.4414	0.4058		18.4	20.0	-8.1	30.0
1,1-Dichloropropene	Ave	0.4501	0.4157		18.5	20.0	-7.6	30.0
Benzene	Ave	1.387	1.320		19.0	20.0	-4.9	30.0
1,2-Dichloroethane	Ave	0.3961	0.3945		19.9	20.0	-0.4	30.0
Trichloroethene	Ave	0.3713	0.3492		18.8	20.0	-5.9	30.0
1,2-Dichloropropane	Ave	0.3342	0.3237		19.4	20.0	-3.1	30.0
Dibromomethane	Ave	0.2144	0.2116		19.7	20.0	-1.3	30.0
Dichlorobromomethane	Ave	0.4244	0.4165		19.6	20.0	-1.9	30.0
cis-1,3-Dichloropropene	Ave	0.5193	0.5300		20.4	20.0	2.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3074	0.3312		108	100	7.7	30.0
Toluene	Ave	0.8715	0.8581		19.7	20.0	-1.5	30.0
trans-1,3-Dichloropropene	Ave	0.4747	0.4846		20.4	20.0	2.1	30.0
1,1,2-Trichloroethane	Ave	0.2762	0.2750		19.9	20.0	-0.5	30.0
Tetrachloroethene	Ave	0.6223	0.5766		18.5	20.0	-7.3	30.0
1,3-Dichloropropane	Ave	0.5285	0.5291		20.0	20.0	0.1	30.0
2-Hexanone	Ave	0.3846	0.4467		116	100	16.1	30.0
Chlorodibromomethane	Ave	0.6909	0.6856		19.8	20.0	-0.8	30.0
Ethylene Dibromide	Ave	0.3469	0.3514		20.3	20.0	1.3	30.0
Chlorobenzene	Ave	1.018	0.9938		19.5	20.0	-2.4	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6827	0.6626		19.4	20.0	-3.0	30.0
Ethylbenzene	Ave	3.079	3.037		19.7	20.0	-1.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-621036/18 Calibration Date: 06/03/2020 17:42
 Instrument ID: CMSU Calib Start Date: 06/03/2020 14:39
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:01
 Lab File ID: UF0316.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
m-Xylene & p-Xylene	Ave	2.403	2.379		19.8	20.0	-1.0	30.0
o-Xylene	Ave	2.483	2.472		19.9	20.0	-0.4	30.0
Styrene	Ave	1.992	2.033		20.4	20.0	2.1	30.0
Bromoform	Ave	0.5316	0.5364		20.2	20.0	0.9	30.0
Isopropylbenzene	Ave	3.082	3.015		19.6	20.0	-2.2	30.0
Bromobenzene	Ave	0.8876	0.8934		20.1	20.0	0.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8516	0.8848		20.8	20.0	3.9	30.0
1,2,3-Trichloropropane	Ave	0.2586	0.2623		20.3	20.0	1.4	30.0
N-Propylbenzene	Ave	3.563	3.502		19.7	20.0	-1.7	30.0
2-Chlorotoluene	Ave	2.150	2.098		19.5	20.0	-2.4	30.0
1,3,5-Trimethylbenzene	Ave	2.266	2.223		19.6	20.0	-1.9	30.0
4-Chlorotoluene	Ave	2.415	2.383		19.7	20.0	-1.3	30.0
tert-Butylbenzene	Ave	2.213	2.145		19.4	20.0	-3.1	30.0
1,2,4-Trimethylbenzene	Ave	2.147	2.100		19.6	20.0	-2.2	30.0
sec-Butylbenzene	Ave	3.135	3.053		19.5	20.0	-2.6	30.0
1,3-Dichlorobenzene	Ave	1.582	1.562		19.7	20.0	-1.3	30.0
4-Isopropyltoluene	Ave	2.525	2.423		19.2	20.0	-4.0	30.0
1,4-Dichlorobenzene	Ave	1.620	1.570		19.4	20.0	-3.1	30.0
1,2-Dichlorobenzene	Ave	1.551	1.528		19.7	20.0	-1.5	30.0
n-Butylbenzene	Ave	1.834	1.799		19.6	20.0	-1.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2171	0.2271		20.9	20.0	4.6	30.0
1,2,4-Trichlorobenzene	Ave	0.6881	0.7006		20.4	20.0	1.8	30.0
Hexachlorobutadiene	Ave	0.4630	0.4278		18.5	20.0	-7.6	30.0
Naphthalene	Ave	1.988	2.137		21.5	20.0	7.5	30.0
1,2,3-Trichlorobenzene	Ave	0.6696	0.6619		19.8	20.0	-1.2	30.0
4-Bromofluorobenzene	Ave	0.3794	0.3833		10.1	10.0	1.0	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9749	0.9706		9.96	10.0	-0.4	30.0

Report Date: 04-Jun-2020 10:42:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0316.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 03-Jun-2020 17:42:30 ALS Bottle#: 16 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-018
 Operator ID: SMP Instrument ID: CMSU
 Sublist:
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:23 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 04-Jun-2020 10:27:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	550011	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	83	448190	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	90	240455	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	210840	10.0	10.1	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	85	233389	10.0	9.96	
7 Dichlorodifluoromethane	85	1.085	1.086	-0.001	99	339222	20.0	19.1	
9 Vinyl chloride	62	1.232	1.232	0.000	98	343604	20.0	18.6	
8 Chloromethane	50	1.253	1.253	0.000	84	372044	20.0	21.1	
10 Bromomethane	94	1.404	1.405	-0.001	100	187629	20.0	22.1	
11 Chloroethane	64	1.457	1.457	0.000	99	169738	20.0	18.8	
12 Trichlorofluoromethane	101	1.587	1.588	-0.001	98	271922	20.0	18.1	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	97	229830	20.0	18.5	
13 1,1-Dichloroethene	96	1.880	1.881	-0.001	97	228736	20.0	20.2	
15 Acetone	58	1.901	1.901	0.000	89	129384	100.0	99.0	
16 Methylene Chloride	84	2.194	2.194	0.000	87	352272	20.0	22.0	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	318528	200.0	209.0	
18 Methyl tert-butyl ether	73	2.361	2.362	-0.001	97	829452	20.0	19.8	
19 trans-1,2-Dichloroethene	96	2.372	2.372	0.000	92	277250	20.0	19.2	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	466266	20.0	19.4	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	195440	100.0	104.8	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	407788	20.0	19.3	
25 2,2-Dichloropropane	77	3.062	3.063	-0.001	92	350632	20.0	18.2	
26 Chlorobromomethane	130	3.224	3.225	-0.001	84	222009	20.0	22.1	
27 Chloroform	83	3.292	3.287	0.005	100	475902	20.0	18.8	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	406603	20.0	18.7	
29 Carbon tetrachloride	117	3.517	3.518	-0.001	97	363721	20.0	18.4	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	372647	20.0	18.5	
31 Benzene	78	3.664	3.664	0.000	94	1182810	20.0	19.0	
32 1,2-Dichloroethane	62	3.700	3.701	-0.001	97	353627	20.0	19.9	
34 Trichloroethene	132	4.135	4.135	0.000	97	313028	20.0	18.8	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	93	290151	20.0	19.4	

Report Date: 04-Jun-2020 10:42:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0316.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.386	4.386	0.000	94	189656	20.0	19.7	
37 Dichlorobromomethane	83	4.516	4.517	-0.001	99	373295	20.0	19.6	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	90	475088	20.0	20.4	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.951	-0.001	95	1484190	100.0	107.7	
40 Toluene	92	5.092	5.092	0.000	92	769145	20.0	19.7	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	95	434368	20.0	20.4	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	97	246458	20.0	19.9	
43 Tetrachloroethene	164	5.484	5.484	0.000	97	277289	20.0	18.5	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	92	474281	20.0	20.0	
45 2-Hexanone	43	5.594	5.589	0.005	94	1074022	100.0	116.1	
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	329718	20.0	19.8	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	314949	20.0	20.3	
48 Chlorobenzene	112	6.190	6.190	0.000	97	890850	20.0	19.5	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	96	318644	20.0	19.4	
50 Ethylbenzene	91	6.268	6.269	-0.001	98	1460537	20.0	19.7	
51 m-Xylene & p-Xylene	91	6.373	6.373	0.000	100	1144004	20.0	19.8	
52 o-Xylene	91	6.682	6.682	0.000	94	1189024	20.0	19.9	
53 Styrene	104	6.697	6.698	-0.001	97	977758	20.0	20.4	
54 Bromoform	173	6.844	6.844	0.000	99	257950	20.0	20.2	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1449769	20.0	19.6	
56 Bromobenzene	156	7.231	7.231	0.000	94	429628	20.0	20.1	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	99	425528	20.0	20.8	
58 1,2,3-Trichloropropane	110	7.278	7.283	-0.005	98	126144	20.0	20.3	
59 N-Propylbenzene	91	7.320	7.320	0.000	99	1684171	20.0	19.7	
60 2-Chlorotoluene	91	7.388	7.388	0.000	97	1008908	20.0	19.5	
61 1,3,5-Trimethylbenzene	105	7.471	7.472	-0.001	93	1069192	20.0	19.6	
62 4-Chlorotoluene	91	7.492	7.493	-0.001	98	1146036	20.0	19.7	
63 tert-Butylbenzene	119	7.728	7.728	0.000	95	1031540	20.0	19.4	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	97	1009827	20.0	19.6	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1468119	20.0	19.5	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	98	751071	20.0	19.7	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1165247	20.0	19.2	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	755234	20.0	19.4	
69 1,2-Dichlorobenzene	146	8.381	8.382	-0.001	93	734929	20.0	19.7	
70 n-Butylbenzene	91	8.381	8.382	-0.001	97	865392	20.0	19.6	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.041	-0.006	91	109235	20.0	20.9	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	336920	20.0	20.4	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	205721	20.0	18.5	
74 Naphthalene	128	9.930	9.930	0.000	100	1027708	20.0	21.5	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	318304	20.0	19.8	
S 76 Xylenes, Total	1				0		40.0	39.7	
S 78 1,3-Dichloropropene, Total	1				0		40.0	40.8	

Reagents:

VM_MMIX SEC_00126

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 10:42:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0316.D

Injection Date: 03-Jun-2020 17:42:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: icv

Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL

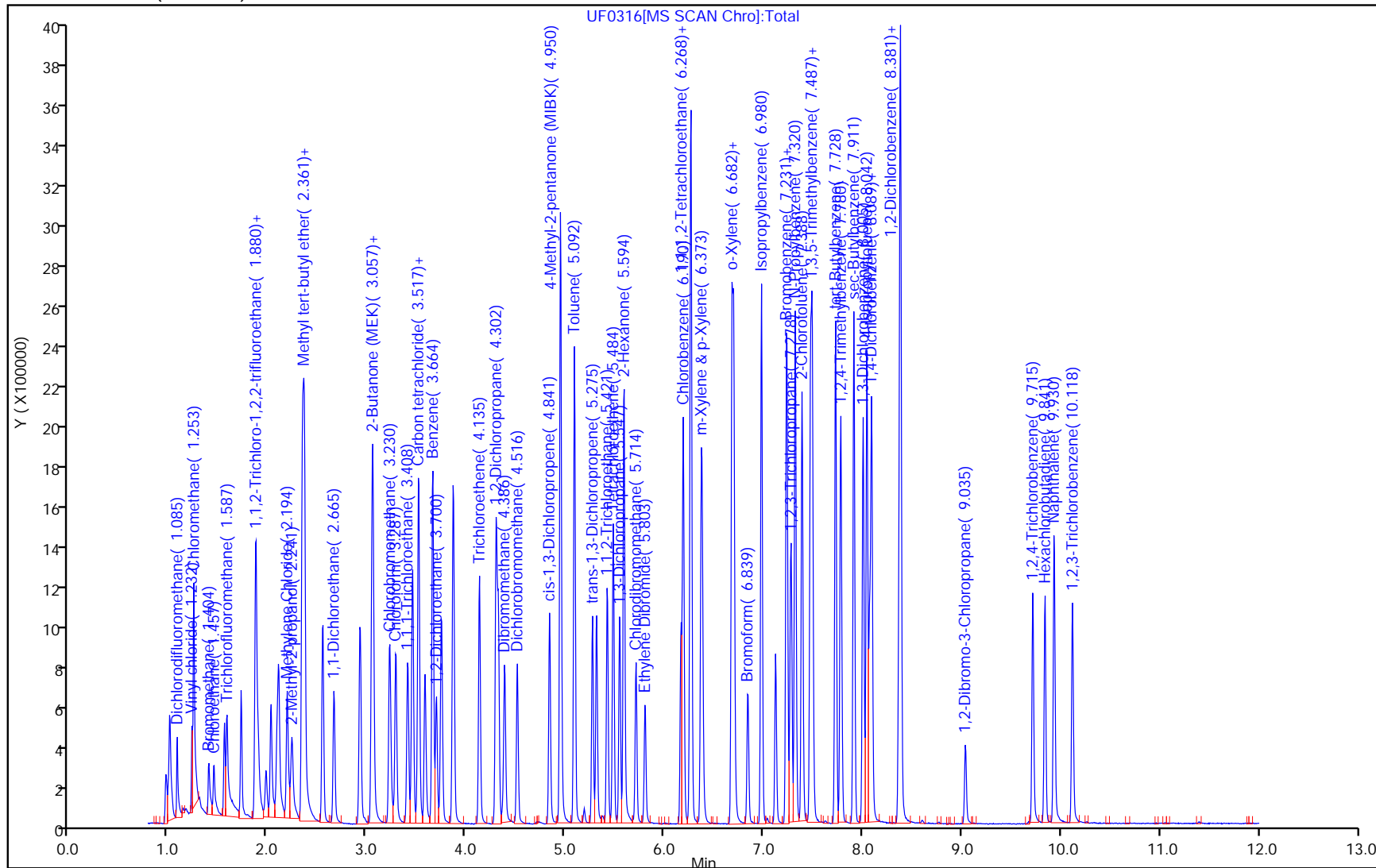
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-622508/2 Calibration Date: 06/15/2020 14:23
 Instrument ID: CMSU Calib Start Date: 06/03/2020 14:39
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:01
 Lab File ID: UF1502.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3232	0.2130		13.2	20.0	-34.1*	30.0
Vinyl chloride	Ave	0.3367	0.2446		14.5	20.0	-27.3	30.0
Chloromethane	Ave	0.3207	0.2747		17.1	20.0	-14.4	30.0
Bromomethane	Ave	0.1545	0.1390		18.0	20.0	-10.1	30.0
Chloroethane	Ave	0.1645	0.1237		15.0	20.0	-24.8	30.0
Trichlorofluoromethane	Ave	0.2728	0.2093		15.3	20.0	-23.3	30.0
Freon 113	Ave	0.2265	0.2033		18.0	20.0	-10.2	30.0
1,1-Dichloroethene	Ave	0.2062	0.1755		17.0	20.0	-14.9	30.0
Acetone	Ave	0.0238	0.0160		67.5	100	-32.5*	30.0
Methylene Chloride	Lin1		0.2699		18.3	20.0	-8.4	30.0
tert-Butyl alcohol	Ave	0.0277	0.0241		174	200	-13.0	30.0
Methyl tert-butyl ether	Ave	0.7608	0.6208		16.3	20.0	-18.4	30.0
trans-1,2-Dichloroethene	Ave	0.2621	0.2358		18.0	20.0	-10.0	30.0
1,1-Dichloroethane	Ave	0.4372	0.3799		17.4	20.0	-13.1	30.0
Tert-butyl ethyl ether	Ave	0.7354	0.6684		14.5	16.0	-9.1	30.0
2-Butanone (MEK)	Ave	0.0339	0.0305		89.9	100	-10.1	30.0
cis-1,2-Dichloroethene	Ave	0.3836	0.3343		17.4	20.0	-12.8	30.0
2,2-Dichloropropane	Ave	0.3504	0.3124		17.8	20.0	-10.9	30.0
Chlorobromomethane	Ave	0.1826	0.1611		17.6	20.0	-11.8	30.0
Chloroform	Ave	0.4603	0.4109		17.9	20.0	-10.7	30.0
1,1,1-Trichloroethane	Ave	0.4861	0.4036		16.6	20.0	-17.0	30.0
Carbon tetrachloride	Ave	0.4414	0.3764		17.1	20.0	-14.7	30.0
1,1-Dichloropropene	Ave	0.4501	0.3894		17.3	20.0	-13.5	30.0
Benzene	Ave	1.387	1.239		17.9	20.0	-10.6	30.0
1,2-Dichloroethane	Ave	0.3961	0.3162		16.0	20.0	-20.2	30.0
Tert-amyl methyl ether	Ave	0.7119	0.6644		14.9	16.0	-6.7	30.0
Trichloroethene	Ave	0.3713	0.3536		19.0	20.0	-4.8	30.0
1,2-Dichloropropane	Ave	0.3342	0.3124		18.7	20.0	-6.5	30.0
Dibromomethane	Ave	0.2144	0.1916		17.9	20.0	-10.6	30.0
Dichlorobromomethane	Ave	0.4244	0.3915		18.4	20.0	-7.8	30.0
cis-1,3-Dichloropropene	Ave	0.5193	0.5140		19.8	20.0	-1.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3074	0.2781		90.4	100	-9.6	30.0
Toluene	Ave	0.8715	0.8499		19.5	20.0	-2.5	30.0
trans-1,3-Dichloropropene	Ave	0.4747	0.4695		19.8	20.0	-1.1	30.0
1,1,2-Trichloroethane	Ave	0.2762	0.2603		18.8	20.0	-5.8	30.0
Tetrachloroethene	Ave	0.6223	0.6291		20.2	20.0	1.1	30.0
1,3-Dichloropropane	Ave	0.5285	0.5096		19.3	20.0	-3.6	30.0
2-Hexanone	Ave	0.3846	0.3747		97.4	100	-2.6	30.0
Chlorodibromomethane	Ave	0.6909	0.6902		20.0	20.0	-0.1	30.0
Ethylene Dibromide	Ave	0.3469	0.3327		19.2	20.0	-4.1	30.0
Chlorobenzene	Ave	1.018	1.000		19.7	20.0	-1.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-622508/2 Calibration Date: 06/15/2020 14:23
 Instrument ID: CMSU Calib Start Date: 06/03/2020 14:39
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:01
 Lab File ID: UF1502.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1,1,2-Tetrachloroethane	Ave	0.6827	0.6926		20.3	20.0	1.4	30.0
Ethylbenzene	Ave	3.079	3.122		20.3	20.0	1.4	30.0
m-Xylene & p-Xylene	Ave	2.403	2.414		20.1	20.0	0.4	30.0
o-Xylene	Ave	2.483	2.462		19.8	20.0	-0.9	30.0
Styrene	Ave	1.992	2.096		21.0	20.0	5.2	30.0
Bromoform	Ave	0.5316	0.5275		19.8	20.0	-0.8	30.0
Isopropylbenzene	Ave	3.082	3.181		20.6	20.0	3.2	30.0
Bromobenzene	Ave	0.8876	0.8992		20.3	20.0	1.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8516	0.8098		19.0	20.0	-4.9	30.0
1,2,3-Trichloropropane	Ave	0.2586	0.2318		17.9	20.0	-10.4	30.0
N-Propylbenzene	Ave	3.563	3.670		20.6	20.0	3.0	30.0
2-Chlorotoluene	Ave	2.150	2.124		19.8	20.0	-1.2	30.0
1,3,5-Trimethylbenzene	Ave	2.266	2.307		20.4	20.0	1.8	30.0
4-Chlorotoluene	Ave	2.415	2.392		19.8	20.0	-1.0	30.0
tert-Butylbenzene	Ave	2.213	2.260		20.4	20.0	2.1	30.0
1,2,4-Trimethylbenzene	Ave	2.147	2.180		20.3	20.0	1.6	30.0
sec-Butylbenzene	Ave	3.135	3.243		20.7	20.0	3.5	30.0
1,3-Dichlorobenzene	Ave	1.582	1.600		20.2	20.0	1.1	30.0
4-Isopropyltoluene	Ave	2.525	2.616		20.7	20.0	3.6	30.0
1,4-Dichlorobenzene	Ave	1.620	1.594		19.7	20.0	-1.6	30.0
1,2-Dichlorobenzene	Ave	1.551	1.544		19.9	20.0	-0.4	30.0
n-Butylbenzene	Ave	1.834	1.922		21.0	20.0	4.8	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2171	0.2080		19.2	20.0	-4.2	30.0
1,2,4-Trichlorobenzene	Ave	0.6881	0.7455		21.7	20.0	8.3	30.0
Hexachlorobutadiene	Ave	0.4630	0.4800		20.7	20.0	3.7	30.0
Naphthalene	Ave	1.988	1.957		19.7	20.0	-1.6	30.0
1,2,3-Trichlorobenzene	Ave	0.6696	0.6726		20.1	20.0	0.4	30.0
4-Bromofluorobenzene	Ave	0.3794	0.3896		10.3	10.0	2.7	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9749	0.9699		9.95	10.0	-0.5	30.0

Report Date: 16-Jun-2020 10:33:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1502.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 15-Jun-2020 14:23:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-002
 Operator ID: SMP Instrument ID: CMSU
 Sublist: chrom-U524.2*sub15
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:33:52 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:33:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	495090	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	412514	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.073	0.000	89	216125	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	192882	10.0	10.3	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	84	209624	10.0	9.95	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	210918	20.0	13.2	
9 Vinyl chloride	62	1.232	1.232	0.000	96	242234	20.0	14.5	
8 Chloromethane	50	1.253	1.253	0.000	84	271980	20.0	17.1	
10 Bromomethane	94	1.404	1.404	0.000	98	137587	20.0	18.0	
11 Chloroethane	64	1.457	1.457	0.000	98	122440	20.0	15.0	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	97	207229	20.0	15.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	99	201306	20.0	18.0	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	93	173756	20.0	17.0	
15 Acetone	58	1.896	1.896	0.000	90	79409	100.0	67.5	
16 Methylene Chloride	84	2.194	2.194	0.000	85	267217	20.0	18.3	
17 2-Methyl-2-propanol	59	2.236	2.236	0.000	99	238600	200.0	173.9	
18 Methyl tert-butyl ether	73	2.356	2.356	0.000	97	614708	20.0	16.3	
19 trans-1,2-Dichloroethene	96	2.367	2.367	0.000	91	233485	20.0	18.0	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	376119	20.0	17.4	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	90	529475	16.0	14.5	
23 2-Butanone (MEK)	72	3.041	3.041	0.000	99	150898	100.0	89.9	
24 cis-1,2-Dichloroethene	61	3.052	3.052	0.000	99	331020	20.0	17.4	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	92	309283	20.0	17.8	
26 Chlorobromomethane	130	3.225	3.225	0.000	80	159528	20.0	17.6	
27 Chloroform	83	3.287	3.287	0.000	100	406836	20.0	17.9	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	332939	20.0	16.6	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	310536	20.0	17.1	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	321228	20.0	17.3	
31 Benzene	78	3.664	3.664	0.000	93	1022558	20.0	17.9	
32 1,2-Dichloroethane	62	3.695	3.695	0.000	96	260900	20.0	16.0	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	98	526328	16.0	14.9	

Report Date: 16-Jun-2020 10:33:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1502.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.135	4.135	0.000	95	291692	20.0	19.0	
35 1,2-Dichloropropane	63	4.323	4.323	0.000	96	257753	20.0	18.7	
36 Dibromomethane	93	4.386	4.386	0.000	91	158105	20.0	17.9	
37 Dichlorobromomethane	83	4.511	4.511	0.000	98	323016	20.0	18.4	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	88	424041	20.0	19.8	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.951	0.000	94	1147030	100.0	90.4	
40 Toluene	92	5.092	5.092	0.000	93	701153	20.0	19.5	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	94	387367	20.0	19.8	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	96	214747	20.0	18.8	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	271938	20.0	20.2	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	90	420412	20.0	19.3	
45 2-Hexanone	43	5.589	5.589	0.000	93	809892	100.0	97.4	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	298341	20.0	20.0	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	274505	20.0	19.2	
48 Chlorobenzene	112	6.190	6.190	0.000	98	825265	20.0	19.7	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	299356	20.0	20.3	
50 Ethylbenzene	91	6.269	6.269	0.000	97	1349512	20.0	20.3	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	98	1043328	20.0	20.1	
52 o-Xylene	91	6.682	6.682	0.000	94	1064005	20.0	19.8	
53 Styrene	104	6.697	6.697	0.000	98	905952	20.0	21.0	
54 Bromoform	173	6.844	6.844	0.000	99	227996	20.0	19.8	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	1374897	20.0	20.6	
56 Bromobenzene	156	7.231	7.231	0.000	94	388671	20.0	20.3	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	98	350026	20.0	19.0	
58 1,2,3-Trichloropropane	110	7.278	7.278	0.000	97	100180	20.0	17.9	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1586567	20.0	20.6	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	918189	20.0	19.8	
61 1,3,5-Trimethylbenzene	105	7.471	7.471	0.000	93	997269	20.0	20.4	
62 4-Chlorotoluene	91	7.492	7.492	0.000	95	1033749	20.0	19.8	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	976979	20.0	20.4	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	942383	20.0	20.3	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1401840	20.0	20.7	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	691398	20.0	20.2	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1130745	20.0	20.7	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	97	689009	20.0	19.7	
69 1,2-Dichlorobenzene	146	8.382	8.382	0.000	97	667377	20.0	19.9	
70 n-Butylbenzene	91	8.382	8.382	0.000	98	830841	20.0	21.0	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.035	0.000	89	89888	20.0	19.2	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	322227	20.0	21.7	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	96	207488	20.0	20.7	
74 Naphthalene	128	9.935	9.935	0.000	100	845801	20.0	19.7	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	290711	20.0	20.1	
S 76 Xylenes, Total	1				0		40.0	39.9	
S 78 1,3-Dichloropropene, Total	1				0		40.0	39.6	

Reagents:

524MMix_00172

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 16-Jun-2020 10:33:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1502.D

Injection Date: 15-Jun-2020 14:23:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: ccvis

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

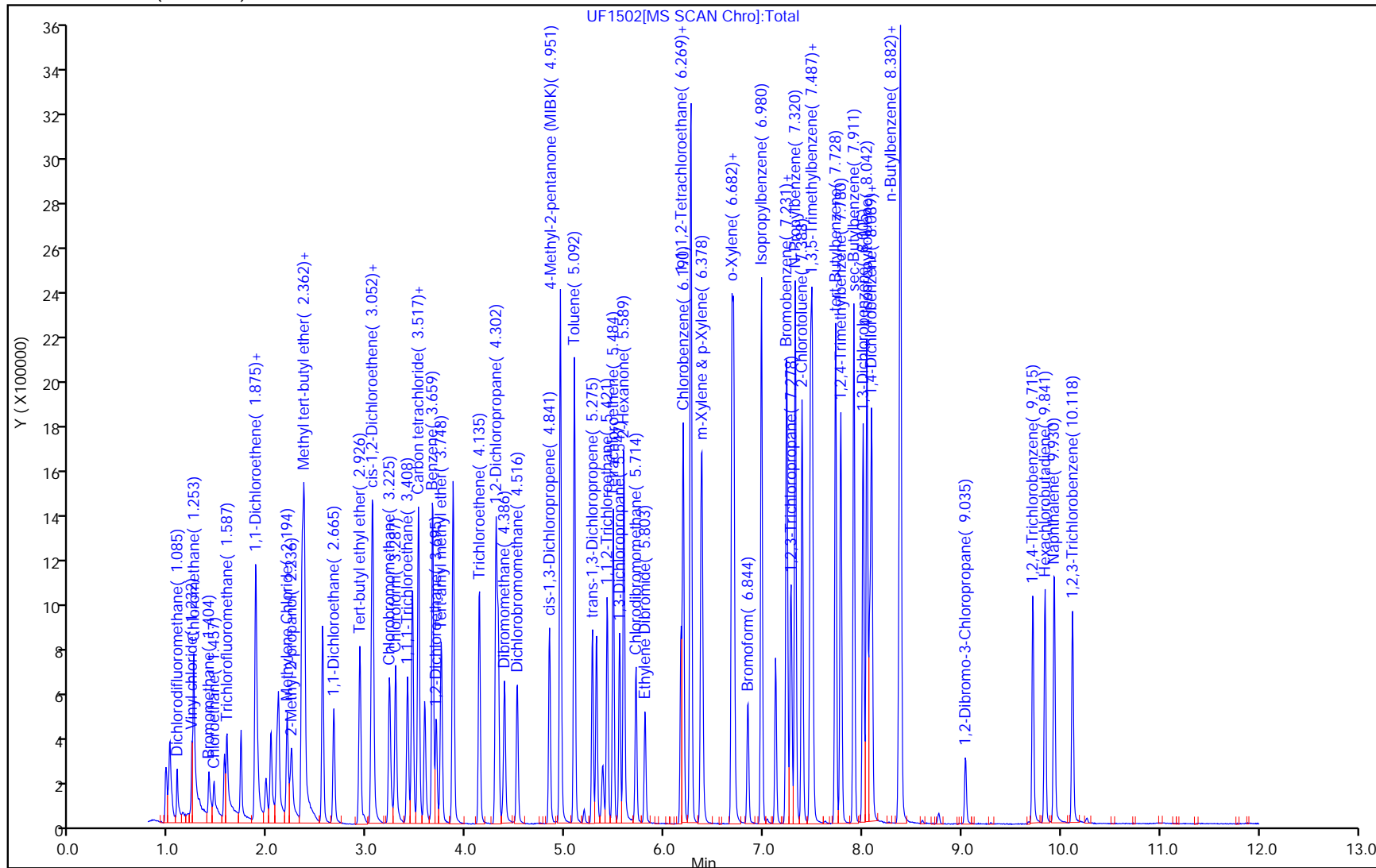
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 03-Jun-2020 12:40:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-004
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:49 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: proctors

Date: 03-Jun-2020 13:02:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VM_bfb_00218

Amount Added: 1.00

Units: uL

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D

Injection Date: 03-Jun-2020 12:40:30

Instrument ID: CMSAG

Lims ID: bfb

Client ID:

Operator ID: rd

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 5.0 mL

Dil. Factor:

1.0000

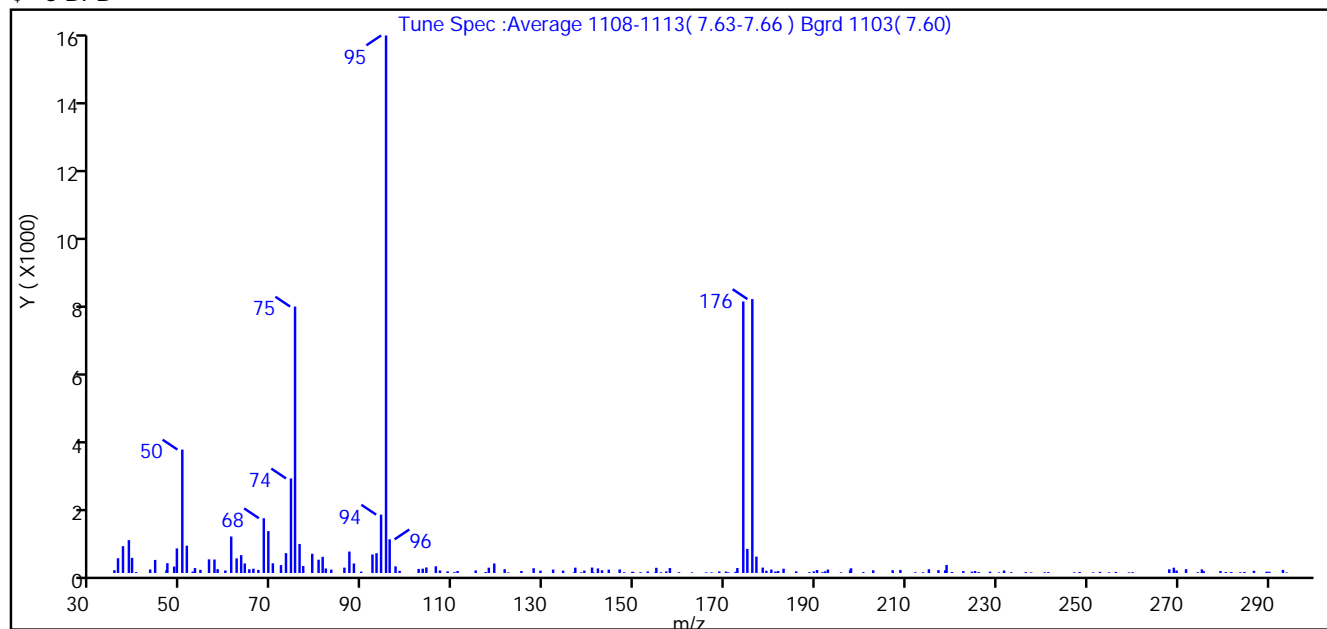
Method: CMSAG_524New

Limit Group:

524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	23.0
75	30-80% of mass 95	49.6
96	5-9% of mass 95	6.3
173	<2% of mass 174	0.9 (1.8)
174	>50% of mass 95	50.5
175	5-9% of mass 174	4.5 (8.9)
176	>95% but <101% of mass 174	51.0 (100.9)
177	5-9% of mass 176	3.0 (6.0)

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D\CMSAG_524New.rsl\spectra.d
 Injection Date: 03-Jun-2020 12:40:30
 Spectrum: Tune Spec :Average 1108-1113(7.63-7.66) Bgrd 1103(7.60)
 Base Peak: 95.15
 Minimum % Base Peak: 0
 Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	78	87.00	599	153.00	43	219.00	75
36.00	412	88.00	266	155.00	17	219.00	224
37.00	749	90.00	39	155.00	145	220.00	29
38.00	917	92.00	517	156.00	19	223.00	52
39.00	422	93.00	553	157.00	44	225.00	38
40.00	25	94.00	1629	158.00	138	225.00	56
43.00	98	95.00	15008	160.00	23	226.00	25
44.00	365	96.00	940	163.00	18	229.00	38
47.00	80	97.00	185	166.00	18	231.00	16
47.00	275	98.00	61	167.00	18	232.00	69
48.00	180	102.00	114	169.00	43	233.00	22
49.00	687	103.00	121	170.00	40	236.00	25
50.00	3446	104.00	154	171.00	17	238.00	16
51.00	763	106.00	187	172.00	35	241.00	21
52.00	39	107.00	71	173.00	138	241.00	26
53.00	137	109.00	47	174.00	7581	247.00	19
54.00	89	110.00	24	175.00	673	248.00	30
56.00	381	111.00	56	176.00	7648	251.00	18
57.00	376	115.00	71	177.00	457	253.00	32
58.00	107	117.00	28	178.00	151	255.00	18
60.00	71	118.00	149	179.00	63	256.00	30
61.00	1019	119.00	265	180.00	96	259.00	18
62.00	408	121.00	107	181.00	41	260.00	23
63.00	499	122.00	17	182.00	55	268.00	103
64.00	266	125.00	56	183.00	119	269.00	148
65.00	104	128.00	132	186.00	46	270.00	70
66.00	119	129.00	66	189.00	21	272.00	106
67.00	86	132.00	96	190.00	43	274.00	21
68.00	1529	134.00	67	190.00	83	275.00	101
69.00	1169	137.00	17	192.00	23	276.00	50
70.00	271	137.00	149	192.00	46	279.00	56
72.00	220	138.00	19	193.00	97	281.00	26
73.00	554	139.00	67	196.00	19	282.00	27

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D\CMSAG_524New.rsl\spectra.d

Injection Date: 03-Jun-2020 12:40:30

Spectrum: Tune Spec :Average 1108-1113(7.63-7.66) Bgrd 1103(7.60)

Base Peak: 95.15

Minimum % Base Peak: 0

Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	2640	141.00	151	198.00	75	284.00	21
75.00	7439	141.00	23	198.00	132	285.00	30
76.00	811	142.00	127	201.00	24	287.00	63
77.00	194	143.00	75	203.00	75	290.00	38
79.00	537	144.00	94	207.00	78	290.00	34
80.00	371	147.00	100	209.00	85	293.00	87
81.00	450	148.00	21	212.00	20	294.00	17
82.00	126	150.00	36	214.00	21		
83.00	95	150.00	23	215.00	104		
86.00	149	151.00	22	217.00	80		

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D

Injection Date: 03-Jun-2020 12:40:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

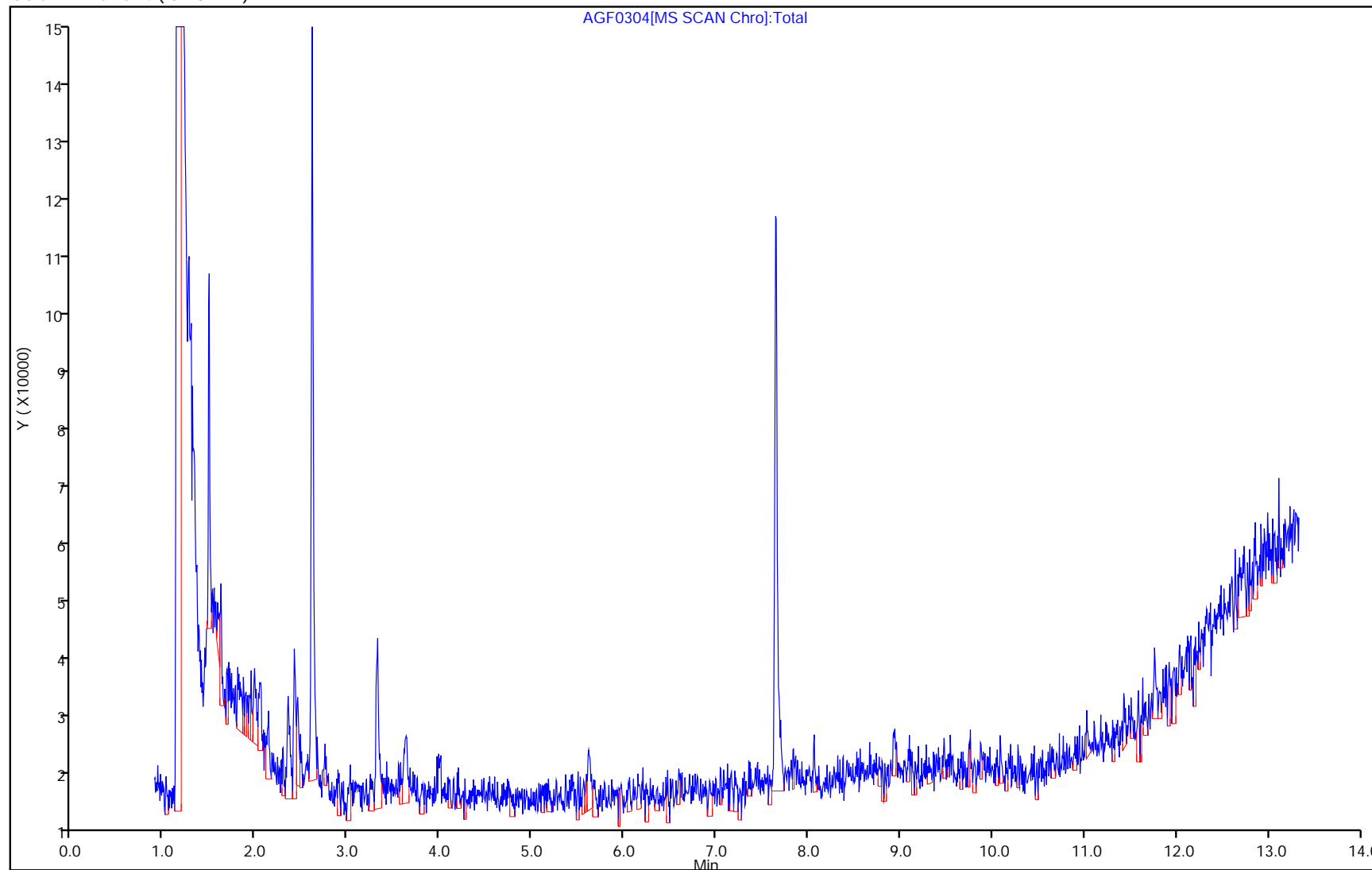
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 16-Jun-2020 10:10:30 ALS Bottle#: 2 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-001
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:35:19 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: proctors

Date: 16-Jun-2020 10:26:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 4 4-Bromofluorobenzene	95	7.634	7.634	0.000	84	69010	NR	NR	
\$ 6 BFB									

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

VM_bfb_00219

Amount Added: 1.00

Units: uL

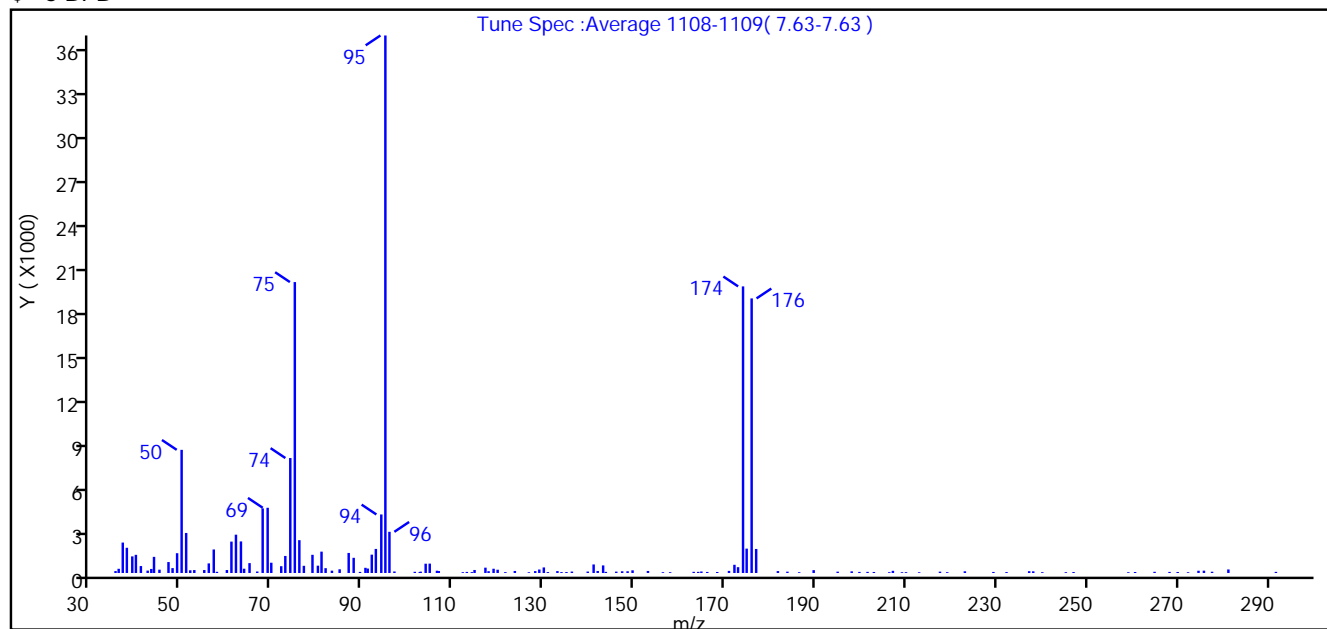
Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D
 Injection Date: 16-Jun-2020 10:10:30 Instrument ID: CMSAG
 Lims ID: bfb
 Client ID:
 Operator ID: rd ALS Bottle#: 2 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	22.9
75	30-80% of mass 95	54.1
96	5-9% of mass 95	7.7
173	<2% of mass 174	1.1 (2.0)
174	>50% of mass 95	53.3
175	5-9% of mass 174	4.5 (8.5)
176	>95% but <101% of mass 174	51.1 (95.8)
177	5-9% of mass 176	4.5 (8.7)

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D\CMSAG_524New.rsl\spectra.d
 Injection Date: 16-Jun-2020 10:10:30
 Spectrum: Tune Spec :Average 1108-1109(7.63-7.63)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	131	75.00	19952	122.00	59	182.00	131
36.00	288	76.00	2251	124.00	139	184.00	91
37.00	2086	77.00	492	127.00	50	186.00	52
38.00	1728	79.00	1247	128.00	130	190.00	196
39.00	1139	80.00	501	129.00	237	195.00	91
40.00	1245	81.00	1464	130.00	381	198.00	113
41.00	476	82.00	330	131.00	63	200.00	73
42.00	163	83.00	159	133.00	131	202.00	77
43.00	277	85.00	253	134.00	62	203.00	69
44.00	1106	87.00	1375	135.00	65	206.00	53
45.00	227	88.00	1041	136.00	98	207.00	149
47.00	750	89.00	74	140.00	98	209.00	52
48.00	335	91.00	355	141.00	586	210.00	55
49.00	1357	91.00	303	142.00	138	213.00	50
50.00	8446	92.00	1257	143.00	519	218.00	91
51.00	2745	93.00	1650	144.00	77	219.00	55
52.00	185	94.00	4014	146.00	94	223.00	116
53.00	201	95.00	36864	147.00	117	229.00	71
55.00	202	96.00	2824	148.00	118	232.00	62
56.00	658	97.00	104	150.00	183	237.00	123
57.00	1613	102.00	82	153.00	140	238.00	114
58.00	81	103.00	67	156.00	53	240.00	55
60.00	203	103.00	92	158.00	54	245.00	54
61.00	2152	104.00	637	163.00	80	247.00	65
62.00	2627	105.00	643	164.00	77	259.00	52
63.00	2164	106.00	156	165.00	103	261.00	68
64.00	293	107.00	131	166.00	71	265.00	82
65.00	677	112.00	54	168.00	69	268.00	74
67.00	101	113.00	74	171.00	144	270.00	68
68.00	4429	114.00	59	172.00	562	272.00	51
69.00	4472	115.00	207	173.00	398	275.00	155
70.00	704	117.00	365	174.00	19656	276.00	160
72.00	465	118.00	123	175.00	1670	278.00	85

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D\CMSAG_524New.rsl\spectra.d

Injection Date: 16-Jun-2020 10:10:30

Spectrum: Tune Spec :Average 1108-1109(7.63-7.63)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1168	119.00	291	176.00	18832	281.00	242
74.00	7884	120.00	223	177.00	1647	292.00	77

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D

Injection Date: 16-Jun-2020 10:10:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

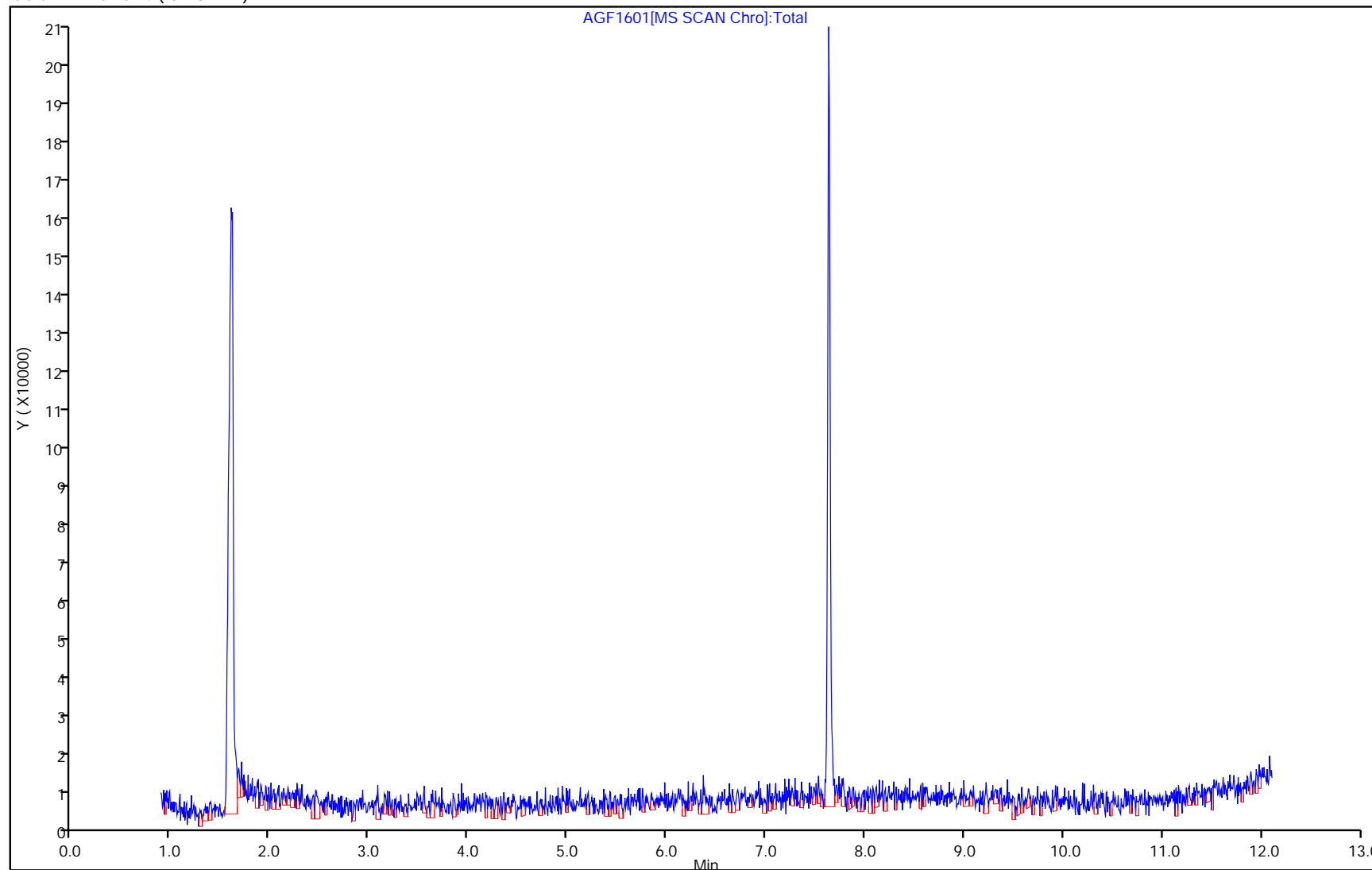
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 10:42:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0304A.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 03-Jun-2020 13:04:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0064069-004
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\U524.2.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 10:42:22 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1029

First Level Reviewer: proctors

Date: 03-Jun-2020 13:45:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VM_bfb_00218

Amount Added: 1.00

Units: uL

Report Date: 04-Jun-2020 10:42:22

Chrom Revision: 2.3 05-May-2020 17:48:18
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0304A.D

Injection Date: 03-Jun-2020 13:04:30

Instrument ID: CMSU

Lims ID: bfb

Client ID:

Operator ID: SMP

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 5.0 mL

Dil. Factor:

1.0000

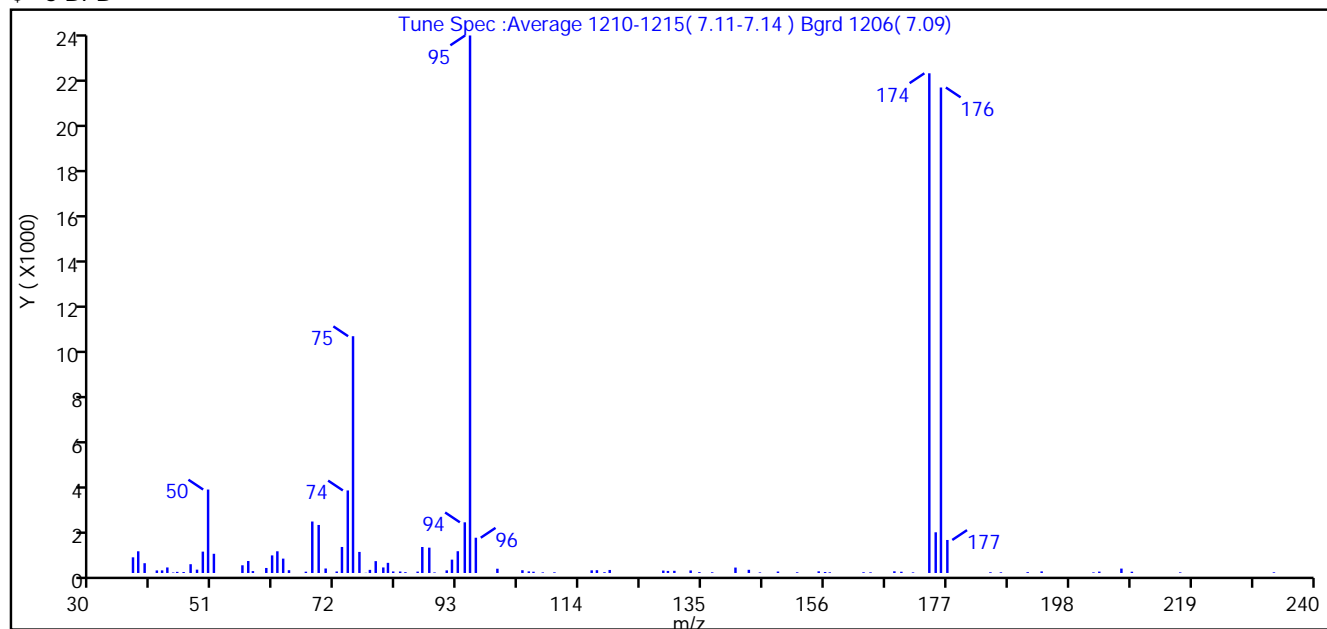
Method: U524.2

Limit Group:

524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	15.5
75	30-80% of mass 95	44.1
96	5-9% of mass 95	6.6
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	93.0
175	5-9% of mass 174	7.6 (8.1)
176	>95% but <101% of mass 174	90.3 (97.2)
177	5-9% of mass 176	6.1 (6.8)

Report Date: 04-Jun-2020 10:42:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0304A.D\U524.2.rslt\spectra.d

Injection Date: 03-Jun-2020 13:04:30

Spectrum: Tune Spec :Average 1210-1215(7.11-7.14) Bgrd 1206(7.09)

Base Peak: 95.10

Minimum % Base Peak: 0

Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	679	68.00	2232	94.00	2198	151.00	30
38.00	941	69.00	2083	95.00	23312	155.00	72
39.00	424	70.00	195	96.00	1529	156.00	42
41.00	111	72.00	65	100.00	185	157.00	30
42.00	113	73.00	1128	104.00	120	163.00	32
43.00	240	74.00	3580	105.00	69	164.00	29
44.00	20	75.00	10269	106.00	55	168.00	73
45.00	49	76.00	914	108.00	26	169.00	54
46.00	42	77.00	9	110.00	29	171.00	26
47.00	381	78.00	135	116.00	115	174.00	21672
48.00	145	79.00	514	117.00	121	175.00	1765
49.00	927	80.00	240	118.00	34	176.00	21056
50.00	3619	81.00	440	119.00	131	177.00	1432
51.00	833	82.00	66	128.00	105	184.00	33
56.00	334	83.00	64	129.00	89	186.00	29
57.00	519	84.00	36	130.00	95	191.00	37
58.00	82	86.00	60	133.00	110	193.00	69
60.00	218	87.00	1127	134.00	38	202.00	26
61.00	763	88.00	1099	137.00	30	203.00	60
62.00	941	89.00	25	141.00	235	207.00	191
63.00	623	91.00	113	143.00	138	209.00	55
64.00	121	92.00	579	145.00	25	217.00	27
67.00	57	93.00	944	148.00	63	233.00	29

Report Date: 04-Jun-2020 10:42:22

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0304A.D

Injection Date: 03-Jun-2020 13:04:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: bfb

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

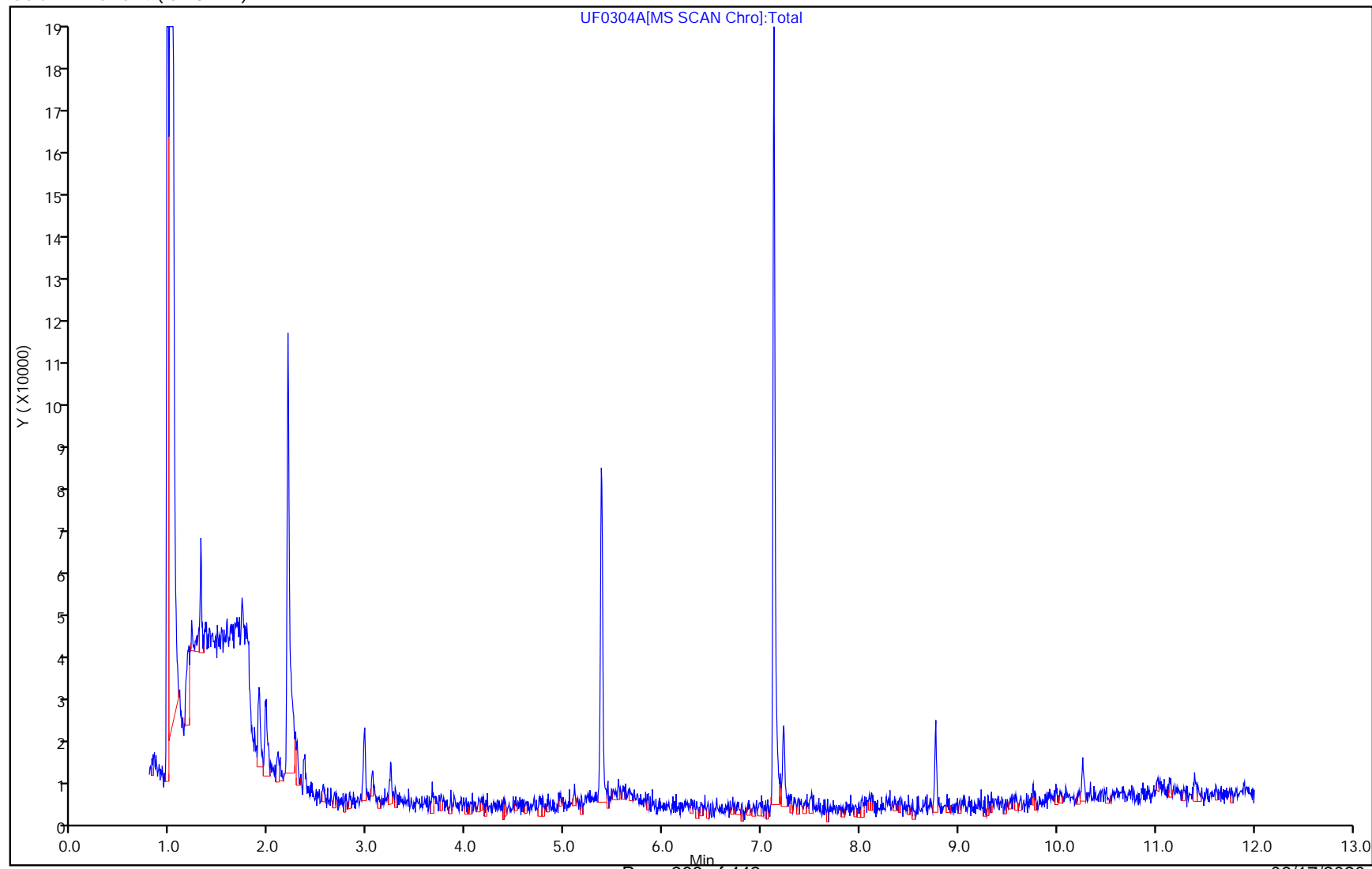
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 16-Jun-2020 10:06:05

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1501D.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 15-Jun-2020 13:01:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-001
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:06:05 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:06:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 4 4-Bromofluorobenzene	95	7.111	7.111	0.000	97	143797	NR	NR	
\$ 6 BFB									

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

VM_bfb_00219

Amount Added: 1.00

Units: uL

Report Date: 16-Jun-2020 10:06:05

Chrom Revision: 2.3 10-Jun-2020 22:46:48
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1501D.D

Injection Date: 15-Jun-2020 13:01:30

Instrument ID: CMSU

Lims ID: bfb

Client ID:

Operator ID: SMP

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 5.0 mL

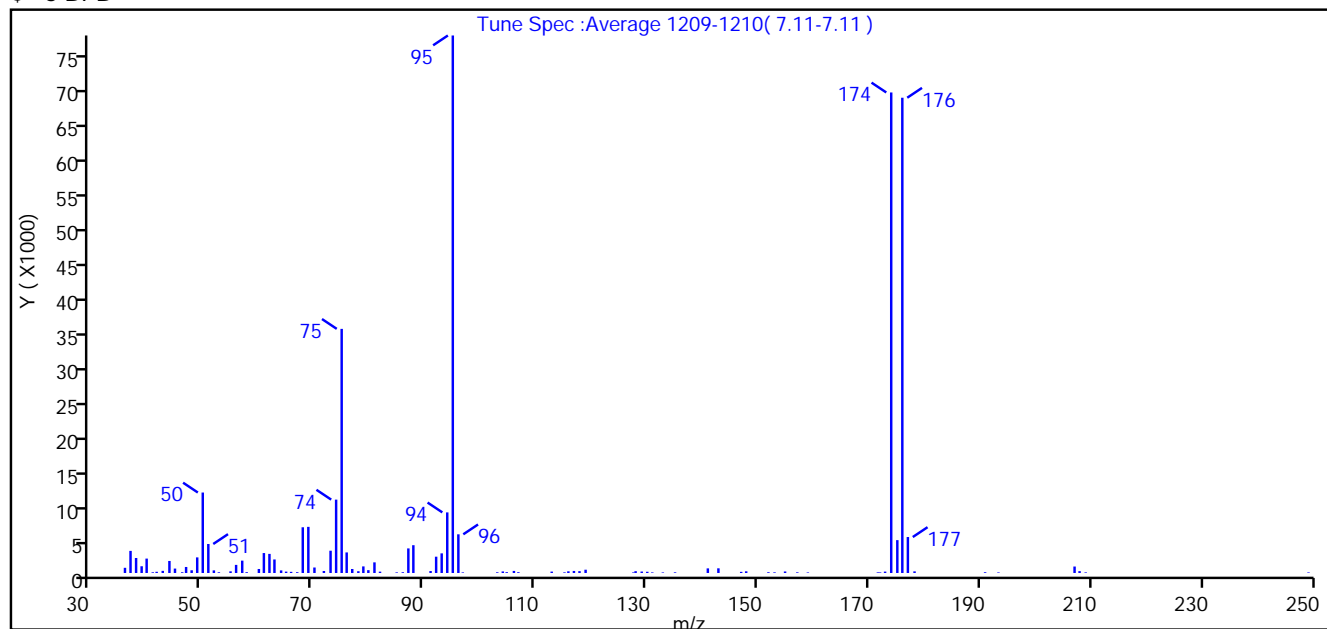
Dil. Factor: 1.0000

Method: U524.2

Limit Group: 524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	15.0
75	30-80% of mass 95	45.4
96	5-9% of mass 95	7.2
173	<2% of mass 174	0.3 (0.3)
174	>50% of mass 95	89.4
175	5-9% of mass 174	6.1 (6.8)
176	>95% but <101% of mass 174	88.4 (98.9)
177	5-9% of mass 176	6.7 (7.6)

Report Date: 16-Jun-2020 10:06:05

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1501D.D\U524.2.rsl\spectra.d

Injection Date: 15-Jun-2020 13:01:30

Spectrum: Tune Spec :Average 1209-1210(7.11-7.11)

Base Peak: 95.10

Minimum % Base Peak: 0

Number of Points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	747	62.00	2756	91.00	281	135.00	94
37.00	3190	63.00	1952	92.00	2352	141.00	665
38.00	2164	64.00	373	93.00	2833	143.00	674
39.00	973	65.00	198	94.00	8746	147.00	164
40.00	2077	66.00	166	95.00	77576	148.00	242
41.00	100	67.00	113	96.00	5582	152.00	111
42.00	175	68.00	6597	97.00	84	153.00	95
43.00	308	69.00	6658	103.00	101	155.00	219
44.00	1735	70.00	791	104.00	222	157.00	96
45.00	636	72.00	289	105.00	121	159.00	76
46.00	106	73.00	3215	106.00	298	172.00	89
47.00	868	74.00	10587	107.00	116	172.00	80
48.00	392	75.00	35232	113.00	201	173.00	201
49.00	2251	76.00	2967	115.00	91	174.00	69352
50.00	11612	77.00	576	116.00	241	175.00	4742
51.00	4185	78.00	254	117.00	294	176.00	68592
52.00	377	79.00	951	118.00	266	177.00	5190
53.00	103	80.00	408	119.00	472	178.00	234
55.00	238	81.00	1534	128.00	84	191.00	108
56.00	1168	82.00	194	128.00	261	193.00	79
57.00	1782	85.00	88	129.00	207	207.00	932
58.00	117	86.00	108	130.00	176	208.00	267
60.00	578	87.00	3547	131.00	85	209.00	88
61.00	2877	88.00	4011	133.00	78	249.00	80

Report Date: 16-Jun-2020 10:06:05

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1501D.D

Injection Date: 15-Jun-2020 13:01:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

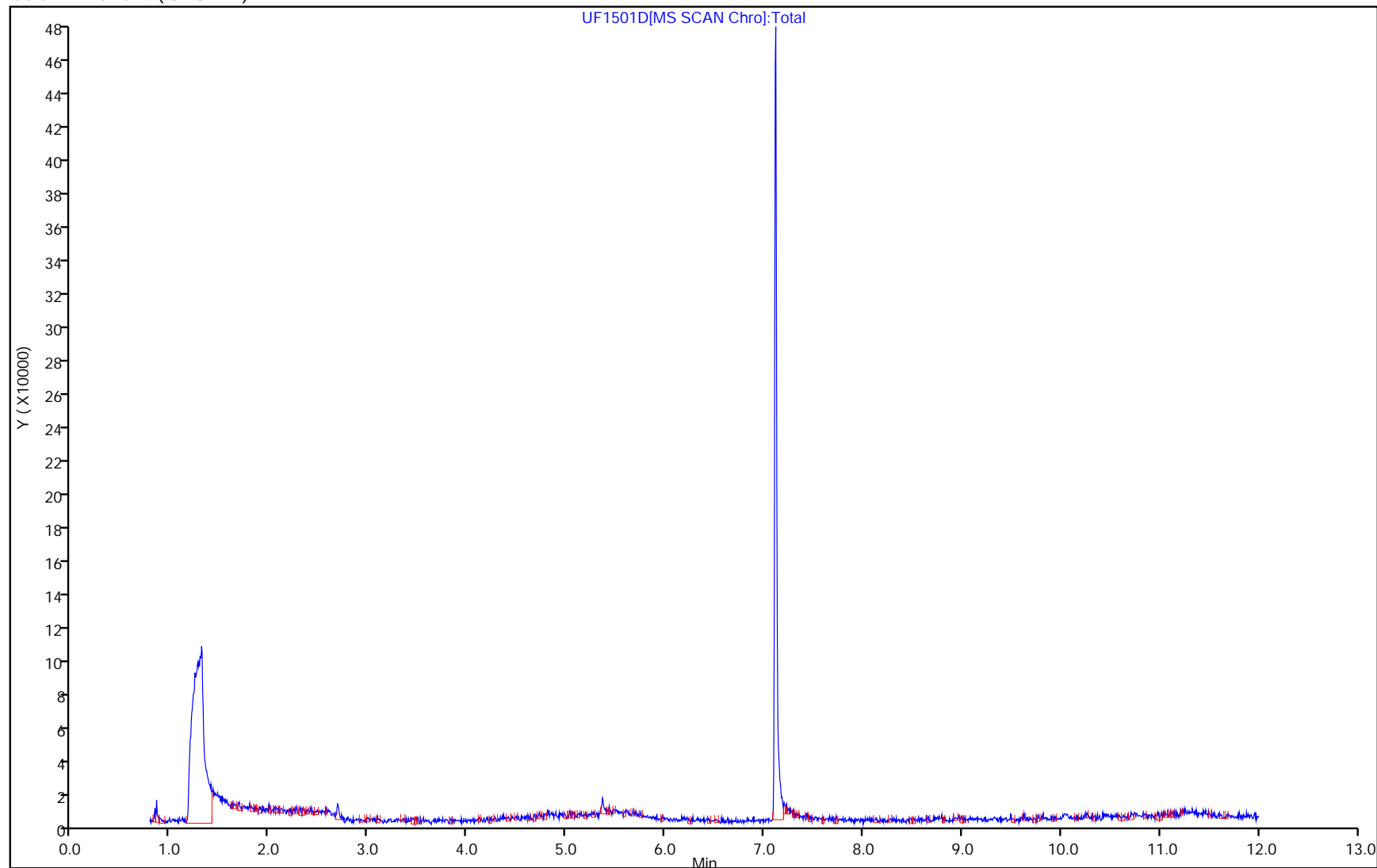
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-622508/10
 Matrix: Water Lab File ID: UF1510.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/15/2020 17:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	98		70-130
460-00-4	4-Bromofluorobenzene	92		70-130

Report Date: 16-Jun-2020 10:11:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1510.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 15-Jun-2020 17:05:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-010
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:11:06 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau Date: 16-Jun-2020 10:11:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	99	584676	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	449598	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	93	229616	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	95	203182	10.0	9.16	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	220175	10.0	9.84	
\$ 6 BFB									

Reagents:

524 ISSU/2016_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 16-Jun-2020 10:11:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1510.D

Injection Date: 15-Jun-2020 17:05:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: MB

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

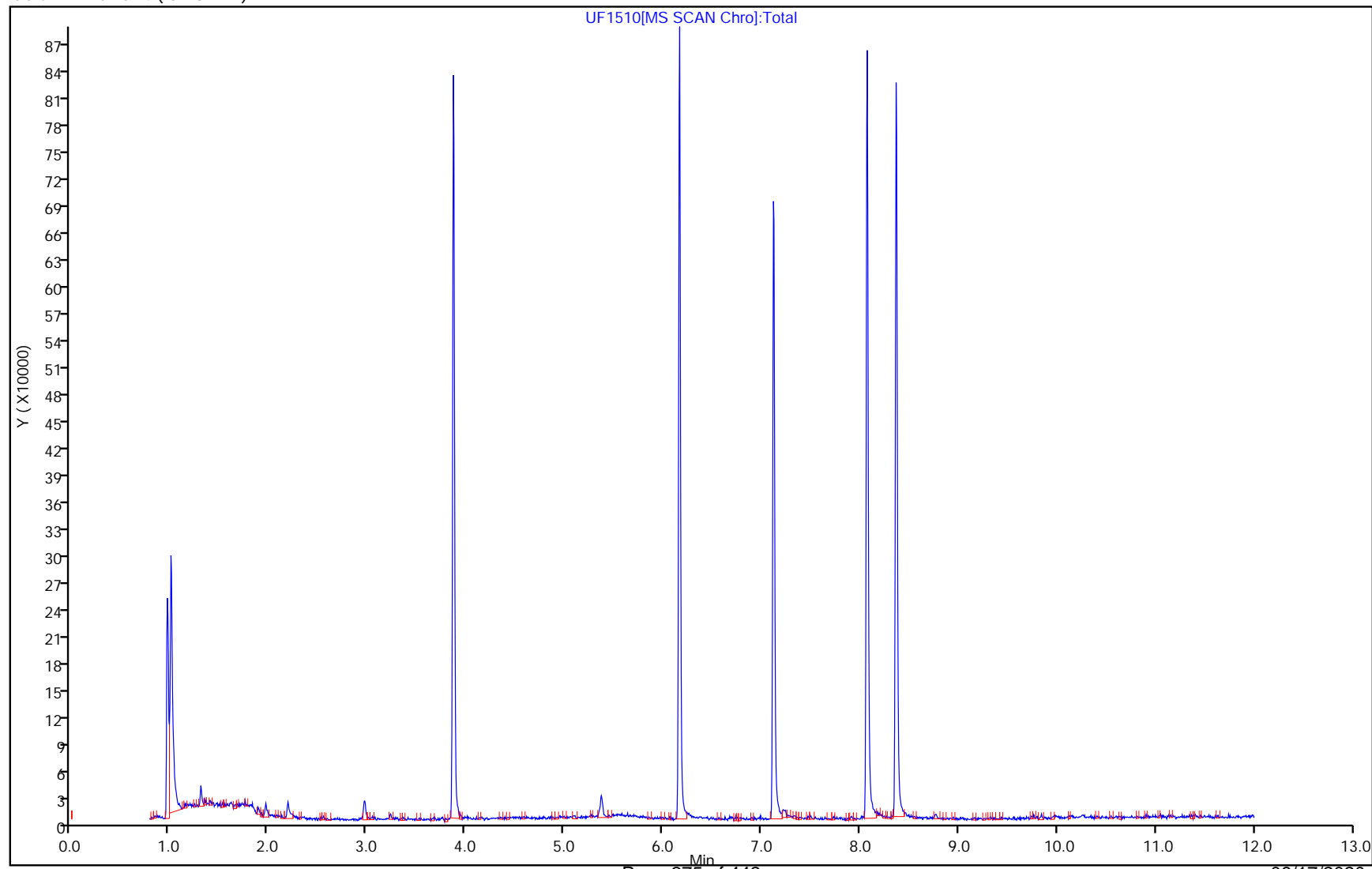
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 16-Jun-2020 10:11:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1510.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 15-Jun-2020 17:05:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-010
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:11:06 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:11:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.16	91.59
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.84	98.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-622635/11
 Matrix: Water Lab File ID: AGF1611.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 14:36
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
127-18-4	Tetrachloroethene	ND		0.50	0.18
108-88-3	Toluene	ND		0.50	0.086
79-01-6	Trichloroethene	ND		0.50	0.13
75-01-4	Vinyl chloride	ND		0.50	0.16
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	104		70-130
460-00-4	4-Bromofluorobenzene	95		70-130

Report Date: 17-Jun-2020 09:39:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1611.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 16-Jun-2020 14:36:30 ALS Bottle#: 12 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-011
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:39:03 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:39:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.181	0.003	97	426437	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.587	6.590	-0.003	92	284662	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.740	8.737	0.003	96	120400	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.645	7.634	0.011	83	163350	10.0	9.55	
\$ 5 1,2-Dichlorobenzene-d4	152	9.105	9.108	-0.003	93	124042	10.0	10.4	
\$ 6 BFB									

Reagents:

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:39:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1611.D

Injection Date: 16-Jun-2020 14:36:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: mb

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

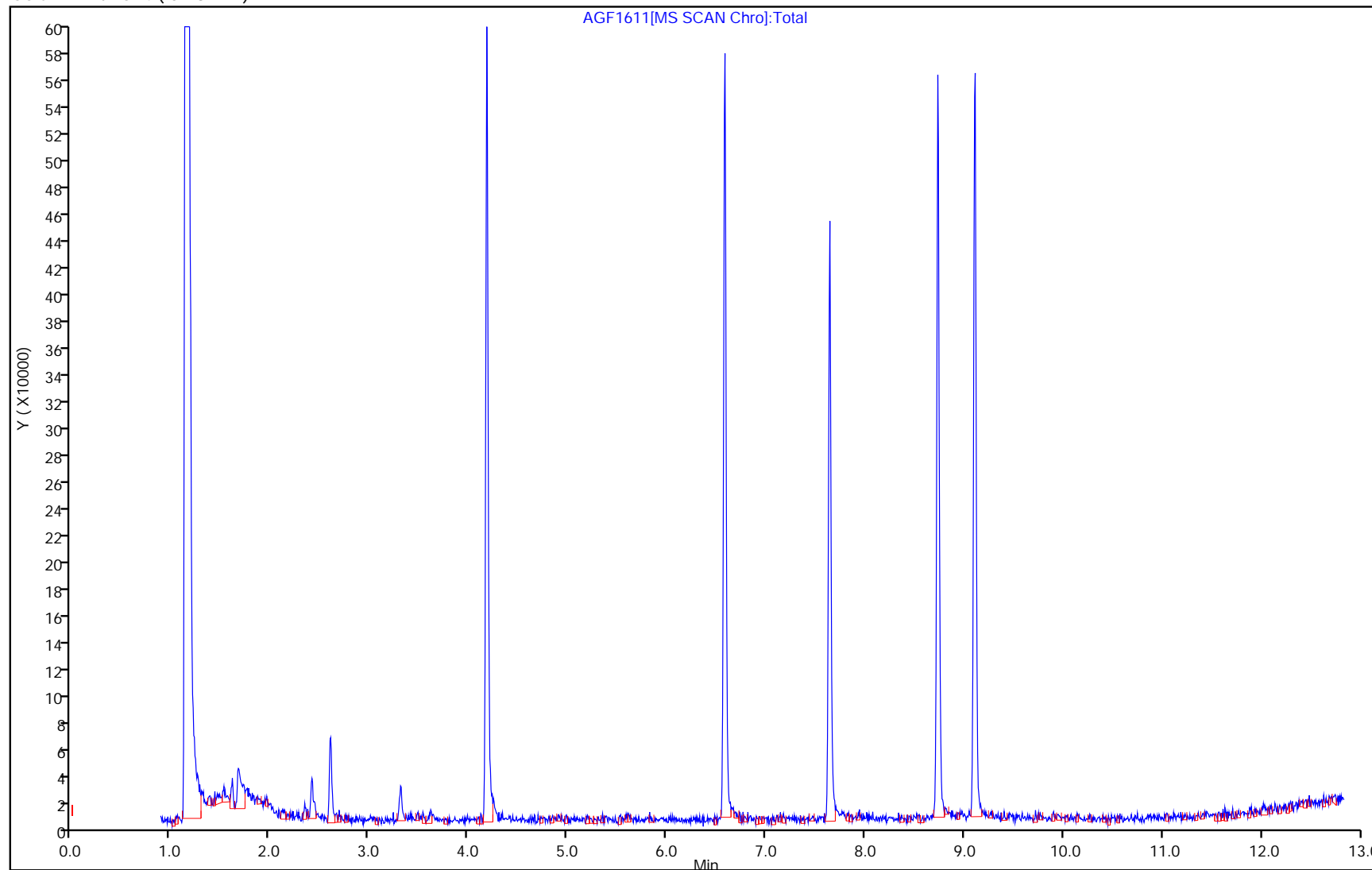
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:39:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1611.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 16-Jun-2020 14:36:30 ALS Bottle#: 12 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-011
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:39:03 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:39:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.55	95.50
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.4	103.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-622508/3
 Matrix: Water Lab File ID: UF1503.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/15/2020 14:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	17.9		0.50	0.082
100-41-4	Ethylbenzene	19.4		0.50	0.099
127-18-4	Tetrachloroethene	19.1		0.50	0.18
108-88-3	Toluene	19.2		0.50	0.086
79-01-6	Trichloroethene	18.5		0.50	0.13
75-01-4	Vinyl chloride	13.9		0.50	0.16
1330-20-7	Xylenes, Total	38.4		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	101		70-130
460-00-4	4-Bromofluorobenzene	101		70-130

Report Date: 16-Jun-2020 10:08:17

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1503.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 15-Jun-2020 14:43:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-003
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:08:17 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:08:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	491204	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	82	400698	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.068	8.068	0.000	89	214697	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	95	188151	10.0	10.1	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	83	211276	10.0	10.1	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	205126	20.0	12.9	
9 Vinyl chloride	62	1.232	1.232	0.000	97	230007	20.0	13.9	
8 Chloromethane	50	1.253	1.253	0.000	75	262094	20.0	16.6	
10 Bromomethane	94	1.404	1.404	0.000	99	134181	20.0	17.7	
11 Chloroethane	64	1.457	1.457	0.000	99	116380	20.0	14.4	
12 Trichlorofluoromethane	101	1.587	1.587	0.000	98	211374	20.0	15.8	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	98	192565	20.0	17.3	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	95	155134	20.0	15.3	
15 Acetone	58	1.896	1.896	0.000	90	74662	100.0	64.0	
16 Methylene Chloride	84	2.194	2.194	0.000	86	256561	20.0	17.7	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	226269	200.0	166.3	
18 Methyl tert-butyl ether	73	2.361	2.361	0.000	97	602851	20.0	16.1	
19 trans-1,2-Dichloroethene	96	2.367	2.367	0.000	91	229597	20.0	17.8	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	376029	20.0	17.5	
22 Tert-butyl ethyl ether	59	2.926	2.926	0.000	90	513886	16.0	14.2	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	99	142022	100.0	85.3	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	334963	20.0	17.8	
25 2,2-Dichloropropane	77	3.062	3.062	0.000	91	303138	20.0	17.6	
26 Chlorobromomethane	130	3.224	3.224	0.000	85	134998	20.0	15.0	
27 Chloroform	83	3.287	3.287	0.000	100	398702	20.0	17.6	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	333386	20.0	17.1	
29 Carbon tetrachloride	117	3.517	3.517	0.000	97	297071	20.0	16.8	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	97	319527	20.0	17.7	
31 Benzene	78	3.664	3.664	0.000	94	997230	20.0	17.9	
32 1,2-Dichloroethane	62	3.700	3.700	0.000	97	256903	20.0	16.2	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	99	522291	16.0	14.9	
34 Trichloroethene	132	4.135	4.135	0.000	95	275317	20.0	18.5	

Report Date: 16-Jun-2020 10:08:17

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1503.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.323	4.323	0.000	95	255629	20.0	19.1	
36 Dibromomethane	93	4.386	4.386	0.000	91	152593	20.0	17.8	
37 Dichlorobromomethane	83	4.516	4.516	0.000	98	313969	20.0	18.5	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	88	403934	20.0	19.4	
39 4-Methyl-2-pentanone (MIBK)	43	4.950	4.950	0.000	94	1124498	100.0	91.3	
40 Toluene	92	5.092	5.092	0.000	92	672114	20.0	19.2	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	94	367247	20.0	19.3	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	96	207459	20.0	18.7	
43 Tetrachloroethene	164	5.484	5.484	0.000	96	254911	20.0	19.1	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	90	405862	20.0	19.2	
45 2-Hexanone	43	5.589	5.589	0.000	93	787205	100.0	95.3	
46 Chlorodibromomethane	129	5.714	5.714	0.000	97	280457	20.0	18.9	
47 Ethylene Dibromide	107	5.803	5.803	0.000	98	260044	20.0	18.7	
48 Chlorobenzene	112	6.190	6.190	0.000	97	774017	20.0	19.0	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	280992	20.0	19.2	
50 Ethylbenzene	91	6.268	6.268	0.000	97	1284868	20.0	19.4	
51 m-Xylene & p-Xylene	91	6.378	6.378	0.000	99	992842	20.0	19.2	
52 o-Xylene	91	6.682	6.682	0.000	94	1023509	20.0	19.2	
53 Styrene	104	6.697	6.697	0.000	97	843406	20.0	19.7	
54 Bromoform	173	6.844	6.844	0.000	99	206963	20.0	18.1	
55 Isopropylbenzene	105	6.980	6.980	0.000	95	1297376	20.0	19.6	
56 Bromobenzene	156	7.231	7.231	0.000	92	361787	20.0	19.0	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	99	339132	20.0	18.5	
58 1,2,3-Trichloropropane	110	7.278	7.278	0.000	97	97102	20.0	17.5	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1512576	20.0	19.8	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	869819	20.0	18.8	
61 1,3,5-Trimethylbenzene	105	7.471	7.471	0.000	93	937459	20.0	19.3	
62 4-Chlorotoluene	91	7.492	7.492	0.000	98	984865	20.0	19.0	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	915610	20.0	19.3	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	887309	20.0	19.3	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1335308	20.0	19.8	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	663165	20.0	19.5	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1074057	20.0	19.8	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	652845	20.0	18.8	
69 1,2-Dichlorobenzene	146	8.381	8.381	0.000	87	626294	20.0	18.8	
70 n-Butylbenzene	91	8.381	8.381	0.000	98	795386	20.0	20.2	
71 1,2-Dibromo-3-Chloropropane	157	9.035	9.035	0.000	90	83594	20.0	17.9	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	296852	20.0	20.1	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	192356	20.0	19.4	
74 Naphthalene	128	9.930	9.930	0.000	100	799426	20.0	18.7	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	279419	20.0	19.4	
S 76 Xylenes, Total	1				0		40.0	38.4	
S 77 Trihalomethanes, Total	1				0			73.1	
S 78 1,3-Dichloropropene, Total	1				0		40.0	38.7	

Reagents:

524MMix_00172

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 16-Jun-2020 10:08:17

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1503.D

Injection Date: 15-Jun-2020 14:43:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: lcs

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

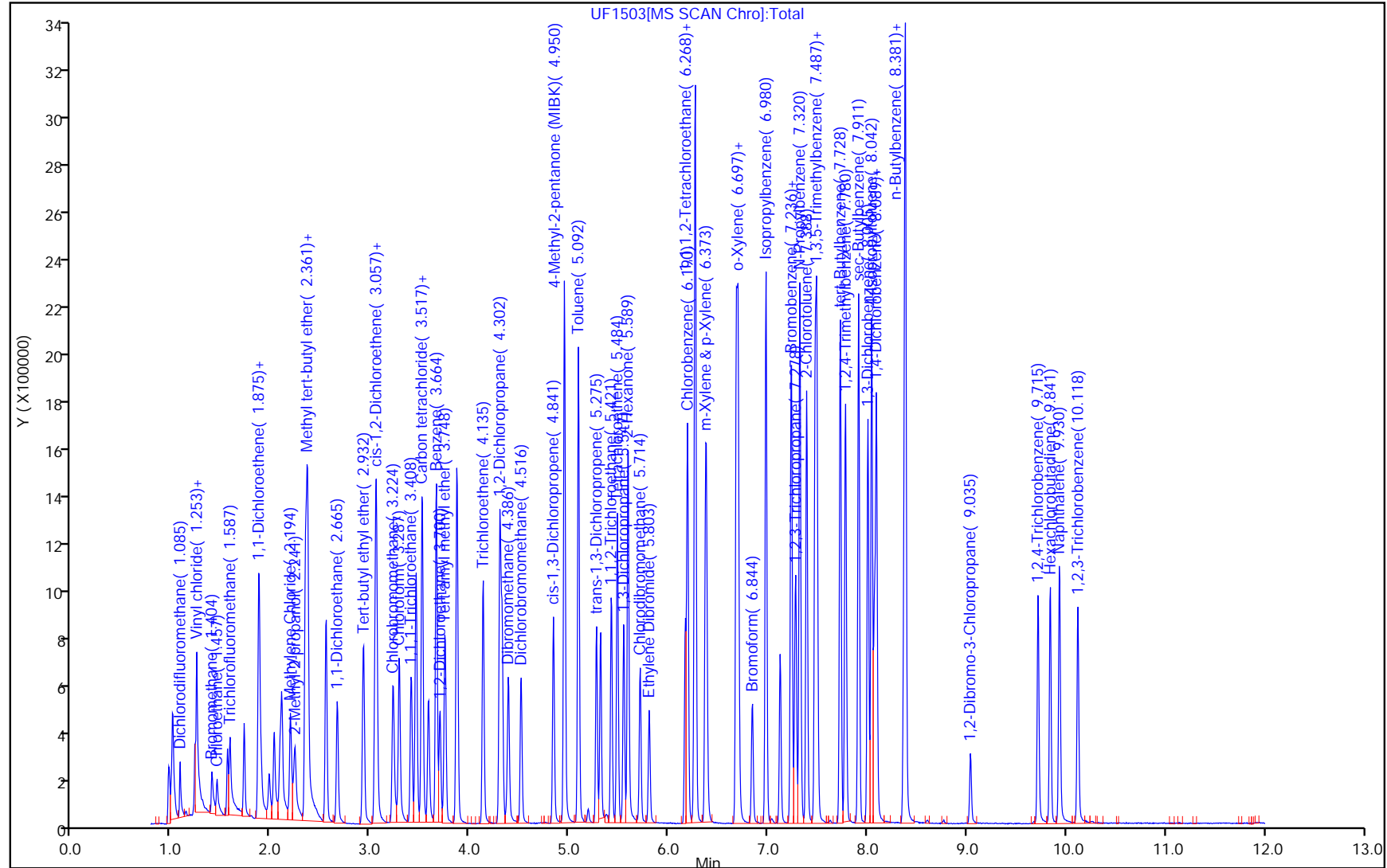
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 16-Jun-2020 10:08:17

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1503.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 15-Jun-2020 14:43:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-003
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:08:17 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:08:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.1	100.95
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.1	100.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-622635/5
 Matrix: Water Lab File ID: AGF1605.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 12:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	52.4		0.50	0.082
100-41-4	Ethylbenzene	48.7		0.50	0.099
127-18-4	Tetrachloroethene	49.6		0.50	0.18
108-88-3	Toluene	53.2		0.50	0.086
79-01-6	Trichloroethene	57.1		0.50	0.13
75-01-4	Vinyl chloride	51.9		0.50	0.16
1330-20-7	Xylenes, Total	102		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	91		70-130
460-00-4	4-Bromofluorobenzene	105		70-130

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 16-Jun-2020 12:09:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-005
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:49:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	97	445960	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.582	6.590	-0.008	91	286911	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.736	8.737	-0.001	97	153975	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.641	7.642	-0.001	85	188197	10.0	10.5	
\$ 5 1,2-Dichlorobenzene-d4	152	9.107	9.108	-0.001	87	139383	10.0	9.14	
7 Dichlorodifluoromethane	85	1.302	1.303	-0.001	99	866026	50.0	54.0	
8 Chloromethane	50	1.454	1.455	-0.001	100	1037479	50.0	51.2	
9 Vinyl chloride	62	1.509	1.510	-0.001	98	908516	50.0	51.9	
10 Bromomethane	94	1.746	1.741	0.005	97	196702	50.0	56.5	
11 Chloroethane	64	1.801	1.802	-0.001	98	527599	50.0	60.8	
12 Trichlorofluoromethane	101	1.953	1.954	-0.001	98	1064878	50.0	66.6	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.263	2.271	-0.008	92	378195	50.0	54.9	
13 1,1-Dichloroethene	96	2.293	2.295	-0.002	91	487318	50.0	49.4	
15 Acetone	58	2.342	2.344	-0.002	86	305546	250.0	211.5	
16 Methylene Chloride	84	2.604	2.605	-0.001	99	636550	50.0	49.9	
17 2-Methyl-2-propanol	59	2.658	2.654	0.004	98	622973	500.0	436.1	
18 Methyl tert-butyl ether	73	2.737	2.739	-0.002	98	1876061	50.0	45.4	
19 trans-1,2-Dichloroethene	96	2.762	2.763	-0.001	97	554674	50.0	53.8	
20 1,1-Dichloroethane	63	3.036	3.037	-0.001	99	1205973	50.0	50.5	
22 Tert-butyl ethyl ether	59	3.248	3.250	-0.002	90	1610231	40.0	38.4	
25 2,2-Dichloropropane	77	3.401	3.402	-0.001	96	1055671	50.0	59.2	
24 cis-1,2-Dichloroethene	61	3.419	3.414	0.005	91	1125509	50.0	52.0	
23 2-Butanone (MEK)	72	3.419	3.414	0.005	100	407405	250.0	243.1	
26 Chlorobromomethane	130	3.583	3.585	-0.002	96	302504	50.0	45.5	
27 Chloroform	83	3.626	3.621	0.005	97	1101774	50.0	50.2	
28 1,1,1-Trichloroethane	97	3.735	3.731	0.004	96	996780	50.0	57.3	
30 1,1-Dichloropropene	75	3.845	3.846	-0.001	94	896723	50.0	52.4	
29 Carbon tetrachloride	117	3.845	3.846	-0.001	85	830232	50.0	61.8	
31 Benzene	78	3.997	3.998	-0.001	97	2712359	50.0	52.4	
33 Tert-amyl methyl ether	73	4.027	4.029	-0.002	97	1548402	40.0	40.6	
32 1,2-Dichloroethane	62	4.027	4.029	-0.002	97	1043172	50.0	55.6	
34 Trichloroethene	132	4.447	4.442	0.005	91	527908	50.0	57.1	

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.629	4.625	0.004	90	754940	50.0	57.4	
36 Dibromomethane	93	4.733	4.734	-0.001	88	382338	50.0	54.6	
37 Dichlorobromomethane	83	4.836	4.832	0.004	99	941302	50.0	60.5	
38 cis-1,3-Dichloropropene	75	5.159	5.166	-0.007	97	1048459	50.0	55.0	
39 4-Methyl-2-pentanone (MIBK)	43	5.262	5.258	0.004	98	3966218	250.0	258.8	E
40 Toluene	92	5.414	5.416	-0.002	93	1575993	50.0	53.2	
41 trans-1,3-Dichloropropene	75	5.609	5.610	-0.001	97	1047928	50.0	55.6	
42 1,1,2-Trichloroethane	83	5.767	5.769	-0.002	92	484192	50.0	50.9	
43 Tetrachloroethene	164	5.858	5.854	0.004	87	389693	50.0	49.6	
44 1,3-Dichloropropane	76	5.913	5.915	-0.002	92	1093662	50.0	51.9	
45 2-Hexanone	43	5.950	5.945	0.005	99	2885889	250.0	234.0	
46 Chlorodibromomethane	129	6.114	6.109	0.005	97	573749	50.0	51.7	
47 Ethylene Dibromide	107	6.211	6.213	-0.002	96	542027	50.0	54.1	
48 Chlorobenzene	112	6.607	6.608	-0.001	90	1561390	50.0	53.4	
50 Ethylbenzene	91	6.673	6.675	-0.002	100	3078881	50.0	48.7	
49 1,1,1,2-Tetrachloroethane	131	6.680	6.681	-0.001	46	522365	50.0	47.8	
51 m-Xylene & p-Xylene	91	6.777	6.772	0.005	97	2581439	50.0	52.5	
52 o-Xylene	91	7.142	7.143	-0.001	92	2493582	50.0	49.4	
53 Styrene	104	7.160	7.162	-0.002	92	1884382	50.0	53.8	
54 Bromoform	173	7.379	7.381	-0.002	90	362873	50.0	58.5	
55 Isopropylbenzene	105	7.464	7.466	-0.002	97	3107005	50.0	52.9	
56 Bromobenzene	156	7.787	7.788	-0.001	88	576096	50.0	47.9	
57 1,1,2,2-Tetrachloroethane	83	7.805	7.800	0.005	96	765014	50.0	42.1	
58 1,2,3-Trichloropropane	110	7.842	7.843	-0.001	92	236824	50.0	47.1	
59 N-Propylbenzene	91	7.848	7.849	-0.001	98	3876920	50.0	49.5	
60 2-Chlorotoluene	91	7.951	7.952	-0.001	96	2271797	50.0	49.8	
61 1,3,5-Trimethylbenzene	105	8.012	8.007	0.005	90	2759598	50.0	54.7	
62 4-Chlorotoluene	91	8.061	8.056	0.004	99	2522663	50.0	51.1	
63 tert-Butylbenzene	119	8.316	8.317	-0.001	95	2132769	50.0	51.3	
64 1,2,4-Trimethylbenzene	105	8.365	8.372	-0.007	99	2693747	50.0	53.7	
65 sec-Butylbenzene	105	8.523	8.524	-0.001	98	3402332	50.0	51.0	
67 4-Isopropyltoluene	119	8.663	8.664	-0.001	96	2776782	50.0	52.3	
66 1,3-Dichlorobenzene	146	8.669	8.670	-0.001	89	1126934	50.0	46.8	
68 1,4-Dichlorobenzene	146	8.760	8.762	-0.002	92	1192475	50.0	46.5	
70 n-Butylbenzene	91	9.064	9.060	0.004	97	2692805	50.0	47.4	
69 1,2-Dichlorobenzene	146	9.125	9.127	-0.002	86	1089092	50.0	43.8	
71 1,2-Dibromo-3-Chloropropane	157	9.946	9.954	-0.008	86	128435	50.0	41.0	Ma
72 1,2,4-Trichlorobenzene	180	10.895	10.897	-0.002	92	574569	50.0	45.5	
73 Hexachlorobutadiene	225	11.047	11.049	-0.002	89	240875	50.0	42.2	
74 Naphthalene	128	11.175	11.171	0.004	99	1872481	50.0	43.9	
75 1,2,3-Trichlorobenzene	180	11.425	11.426	-0.001	93	533052	50.0	45.1	
S 76 Xylenes, Total	1				0		100.0	101.9	
S 78 1,3-Dichloropropene, Total	1				0		100.0	110.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00173

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D

Injection Date: 16-Jun-2020 12:09:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: lcs

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

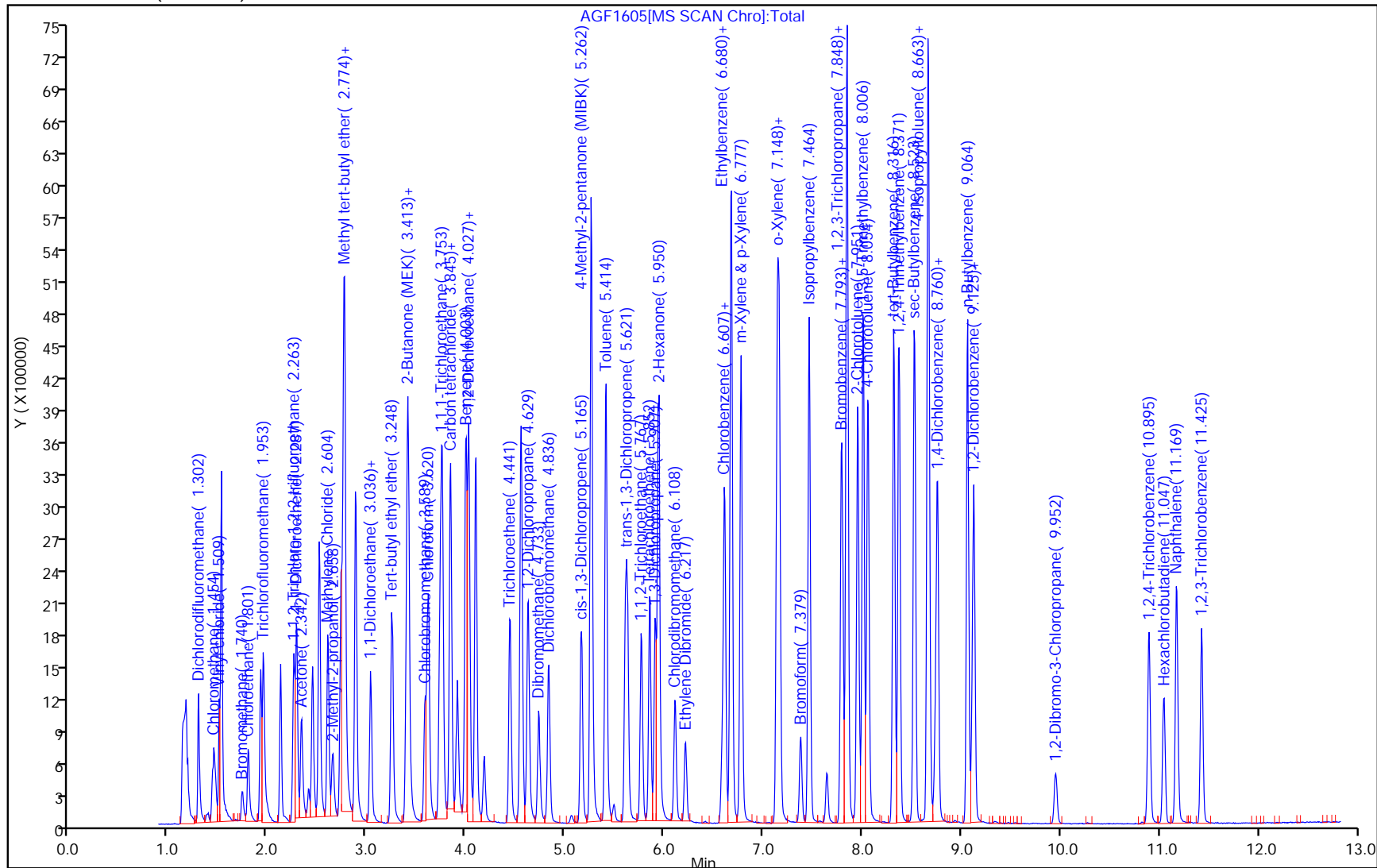
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 16-Jun-2020 12:09:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-005
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:49:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.5	105.21
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.14	91.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-622508/4
 Matrix: Water Lab File ID: UF1504.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/15/2020 15:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622508 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	18.0		0.50	0.082
100-41-4	Ethylbenzene	19.1		0.50	0.099
127-18-4	Tetrachloroethene	19.0		0.50	0.18
108-88-3	Toluene	19.4		0.50	0.086
79-01-6	Trichloroethene	19.2		0.50	0.13
75-01-4	Vinyl chloride	13.8		0.50	0.16
1330-20-7	Xylenes, Total	37.7		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	98		70-130
460-00-4	4-Bromofluorobenzene	98		70-130

Report Date: 16-Jun-2020 10:08:55

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1504.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 15-Jun-2020 15:04:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-004
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:08:17 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:08:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.873	3.873	0.000	100	520341	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.169	6.169	0.000	81	422769	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.073	8.068	0.005	89	233362	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.121	7.121	0.000	94	194036	10.0	9.83	
\$ 5 1,2-Dichlorobenzene-d4	152	8.366	8.366	0.000	82	223142	10.0	9.81	
7 Dichlorodifluoromethane	85	1.085	1.085	0.000	99	218051	20.0	13.0	
9 Vinyl chloride	62	1.232	1.232	0.000	97	241660	20.0	13.8	
8 Chloromethane	50	1.253	1.253	0.000	77	246322	20.0	14.8	
10 Bromomethane	94	1.405	1.404	0.001	99	144019	20.0	17.9	
11 Chloroethane	64	1.457	1.457	0.000	98	132869	20.0	15.5	
12 Trichlorofluoromethane	101	1.588	1.587	0.001	97	202672	20.0	14.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	1.875	1.875	0.000	97	208404	20.0	17.7	
13 1,1-Dichloroethene	96	1.880	1.880	0.000	94	165378	20.0	15.4	
15 Acetone	58	1.901	1.896	0.005	90	80506	100.0	65.1	
16 Methylene Chloride	84	2.194	2.194	0.000	86	261727	20.0	17.0	
17 2-Methyl-2-propanol	59	2.241	2.241	0.000	99	242768	200.0	168.4	
18 Methyl tert-butyl ether	73	2.362	2.361	0.001	97	642345	20.0	16.2	
19 trans-1,2-Dichloroethene	96	2.372	2.367	0.005	90	241468	20.0	17.7	
20 1,1-Dichloroethane	63	2.665	2.665	0.000	99	396384	20.0	17.4	
22 Tert-butyl ethyl ether	59	2.927	2.926	0.001	90	544204	16.0	14.2	
23 2-Butanone (MEK)	72	3.047	3.047	0.000	98	152684	100.0	86.6	
24 cis-1,2-Dichloroethene	61	3.057	3.057	0.000	99	350180	20.0	17.5	
25 2,2-Dichloropropane	77	3.063	3.062	0.001	91	317392	20.0	17.4	
26 Chlorobromomethane	130	3.225	3.224	0.001	84	150523	20.0	15.8	
27 Chloroform	83	3.287	3.287	0.000	99	421136	20.0	17.6	
28 1,1,1-Trichloroethane	97	3.408	3.408	0.000	97	351037	20.0	17.1	
29 Carbon tetrachloride	117	3.518	3.517	0.001	97	317399	20.0	17.0	
30 1,1-Dichloropropene	75	3.523	3.523	0.000	96	338374	20.0	17.8	
31 Benzene	78	3.664	3.664	0.000	94	1054901	20.0	18.0	
32 1,2-Dichloroethane	62	3.701	3.700	0.001	97	266745	20.0	15.9	
33 Tert-amyl methyl ether	73	3.748	3.748	0.000	98	550544	16.0	14.9	
34 Trichloroethene	132	4.135	4.135	0.000	95	301533	20.0	19.2	

Report Date: 16-Jun-2020 10:08:55

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1504.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.323	4.323	0.000	95	269403	20.0	19.1	
36 Dibromomethane	93	4.386	4.386	0.000	91	162724	20.0	17.9	
37 Dichlorobromomethane	83	4.517	4.516	0.001	98	333854	20.0	18.6	
38 cis-1,3-Dichloropropene	75	4.841	4.841	0.000	88	432013	20.0	19.7	
39 4-Methyl-2-pentanone (MIBK)	43	4.951	4.950	0.001	94	1160962	100.0	89.3	
40 Toluene	92	5.092	5.092	0.000	93	715635	20.0	19.4	
41 trans-1,3-Dichloropropene	75	5.275	5.275	0.000	94	393437	20.0	19.6	
42 1,1,2-Trichloroethane	83	5.421	5.421	0.000	96	216490	20.0	18.5	
43 Tetrachloroethene	164	5.484	5.484	0.000	95	276104	20.0	19.0	
44 1,3-Dichloropropane	76	5.547	5.547	0.000	89	422055	20.0	18.9	
45 2-Hexanone	43	5.589	5.589	0.000	93	812258	100.0	90.5	
46 Chlorodibromomethane	129	5.714	5.714	0.000	98	302552	20.0	18.8	
47 Ethylene Dibromide	107	5.803	5.803	0.000	99	280411	20.0	19.1	
48 Chlorobenzene	112	6.190	6.190	0.000	97	839169	20.0	19.5	
49 1,1,1,2-Tetrachloroethane	131	6.263	6.263	0.000	95	303481	20.0	19.0	
50 Ethylbenzene	91	6.269	6.268	0.001	97	1369137	20.0	19.1	
51 m-Xylene & p-Xylene	91	6.373	6.378	-0.005	99	1058290	20.0	18.9	
52 o-Xylene	91	6.682	6.682	0.000	94	1092777	20.0	18.9	
53 Styrene	104	6.698	6.697	0.001	98	916135	20.0	19.7	
54 Bromoform	173	6.844	6.844	0.000	99	231229	20.0	18.6	
55 Isopropylbenzene	105	6.980	6.980	0.000	94	1394422	20.0	19.4	
56 Bromobenzene	156	7.231	7.231	0.000	93	395025	20.0	19.1	
57 1,1,2,2-Tetrachloroethane	83	7.236	7.236	0.000	99	354450	20.0	17.8	
58 1,2,3-Trichloropropane	110	7.283	7.278	0.005	98	104877	20.0	17.4	
59 N-Propylbenzene	91	7.320	7.320	0.000	100	1611433	20.0	19.4	
60 2-Chlorotoluene	91	7.388	7.388	0.000	96	930539	20.0	18.5	
61 1,3,5-Trimethylbenzene	105	7.472	7.471	0.001	93	1015163	20.0	19.2	
62 4-Chlorotoluene	91	7.493	7.492	0.001	98	1054177	20.0	18.7	
63 tert-Butylbenzene	119	7.728	7.728	0.000	96	985474	20.0	19.1	
64 1,2,4-Trimethylbenzene	105	7.780	7.780	0.000	96	951695	20.0	19.0	
65 sec-Butylbenzene	105	7.911	7.911	0.000	99	1416279	20.0	19.4	
66 1,3-Dichlorobenzene	146	8.005	8.005	0.000	99	710999	20.0	19.3	
67 4-Isopropyltoluene	119	8.042	8.042	0.000	98	1151344	20.0	19.5	
68 1,4-Dichlorobenzene	146	8.089	8.089	0.000	96	699813	20.0	18.5	
69 1,2-Dichlorobenzene	146	8.382	8.381	0.001	90	689771	20.0	19.1	
70 n-Butylbenzene	91	8.382	8.381	0.001	97	829821	20.0	19.4	
71 1,2-Dibromo-3-Chloropropane	157	9.041	9.035	0.006	88	89178	20.0	17.6	
72 1,2,4-Trichlorobenzene	180	9.715	9.715	0.000	93	322722	20.0	20.1	
73 Hexachlorobutadiene	225	9.841	9.841	0.000	95	213726	20.0	19.8	
74 Naphthalene	128	9.935	9.930	0.005	100	868548	20.0	18.7	
75 1,2,3-Trichlorobenzene	180	10.118	10.118	0.000	96	304998	20.0	19.5	
S 76 Xylenes, Total	1				0		40.0	37.7	
S 78 1,3-Dichloropropene, Total	1				0		40.0	39.3	

Reagents:

524MMix_00172

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 16-Jun-2020 10:08:55

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1504.D

Injection Date: 15-Jun-2020 15:04:30

Instrument ID: CMSU

Operator ID: SMP

Lims ID: lcsd

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

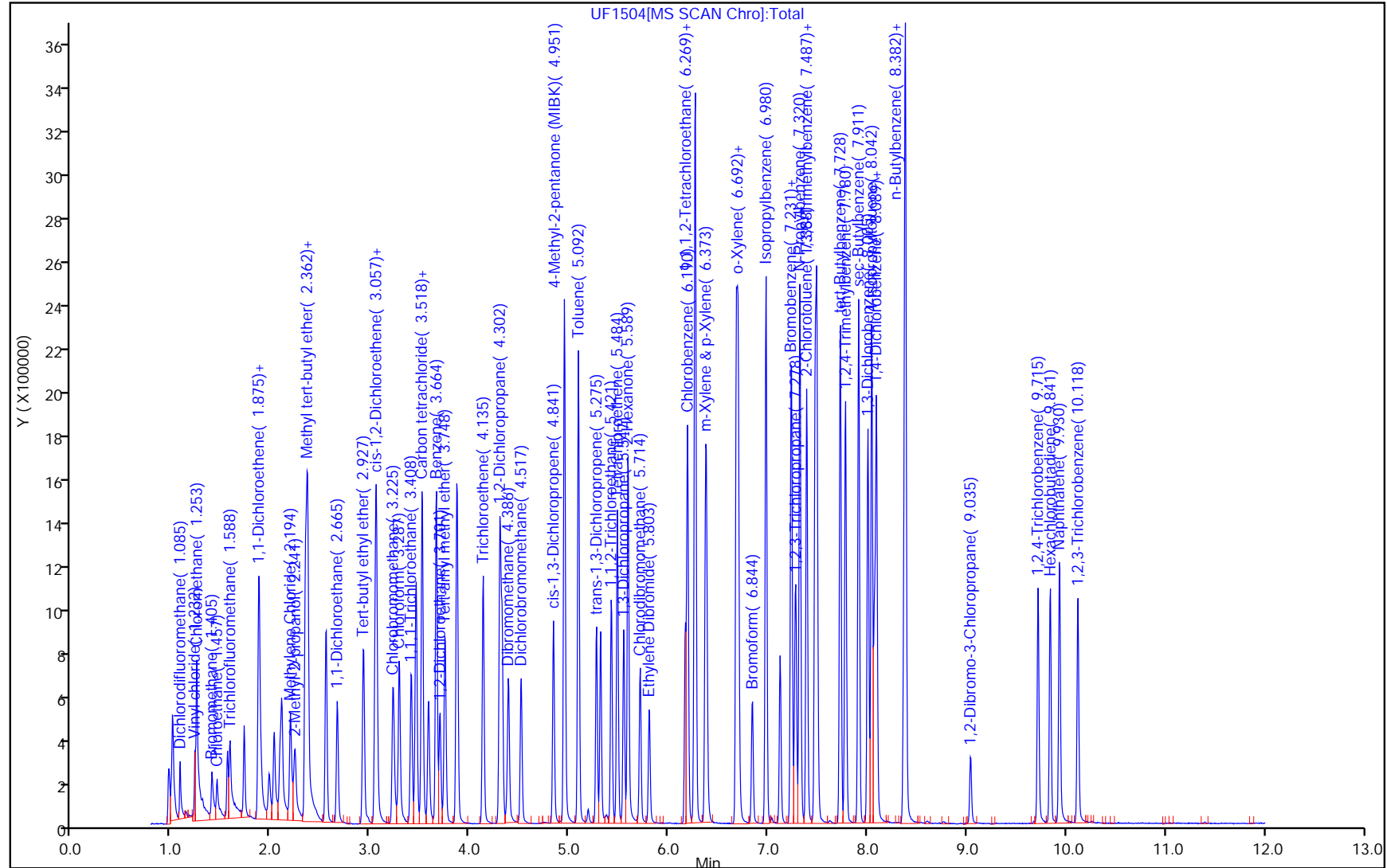
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: U524.2

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 16-Jun-2020 10:08:55

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\UF1504.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 15-Jun-2020 15:04:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064287-004
 Operator ID: SMP Instrument ID: CMSU
 Method: \\chromfs\Savannah\ChromData\CMSU\20200615-64287.b\U524.2.m
 Limit Group: 524.2
 Last Update: 16-Jun-2020 10:08:17 Calib Date: 03-Jun-2020 17:01:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSU\20200603-64069.b\UF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1023

First Level Reviewer: intarachau

Date: 16-Jun-2020 10:08:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.83	98.28
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.81	98.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-622635/6
 Matrix: Water Lab File ID: AGF1606.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 12:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	52.0		0.50	0.082
100-41-4	Ethylbenzene	52.8		0.50	0.099
127-18-4	Tetrachloroethene	51.3		0.50	0.18
108-88-3	Toluene	54.4		0.50	0.086
79-01-6	Trichloroethene	50.5		0.50	0.13
75-01-4	Vinyl chloride	46.6		0.50	0.16
1330-20-7	Xylenes, Total	108		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	103		70-130
460-00-4	4-Bromofluorobenzene	102		70-130

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 16-Jun-2020 12:33:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-006
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:50:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	97	505226	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.588	6.590	-0.002	91	311748	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.735	8.737	-0.002	97	155998	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.640	7.642	-0.002	83	206741	10.0	10.2	
\$ 5 1,2-Dichlorobenzene-d4	152	9.107	9.108	-0.001	88	159828	10.0	10.3	
7 Dichlorodifluoromethane	85	1.301	1.303	-0.002	99	943317	50.0	51.9	
8 Chloromethane	50	1.460	1.455	0.005	100	1158497	50.0	50.5	
9 Vinyl chloride	62	1.508	1.510	-0.002	98	924870	50.0	46.6	
10 Bromomethane	94	1.739	1.741	-0.002	98	172832	50.0	43.8	
11 Chloroethane	64	1.800	1.802	-0.002	98	537164	50.0	54.7	
12 Trichlorofluoromethane	101	1.958	1.954	0.004	97	1054432	50.0	58.2	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.263	2.271	-0.008	93	396051	50.0	50.7	
13 1,1-Dichloroethene	96	2.293	2.295	-0.002	97	529422	50.0	47.4	
15 Acetone	58	2.336	2.344	-0.008	85	368135	250.0	225.0	
16 Methylene Chloride	84	2.603	2.605	-0.002	96	705987	50.0	48.8	
17 2-Methyl-2-propanol	59	2.652	2.654	-0.002	98	799911	500.0	494.3	
18 Methyl tert-butyl ether	73	2.737	2.739	-0.002	98	2133626	50.0	45.6	
19 trans-1,2-Dichloroethene	96	2.768	2.763	0.005	94	573981	50.0	49.1	
20 1,1-Dichloroethane	63	3.035	3.037	-0.002	99	1367295	50.0	50.6	
22 Tert-butyl ethyl ether	59	3.254	3.250	0.004	89	1913645	40.0	40.3	
25 2,2-Dichloropropane	77	3.400	3.402	-0.002	94	1154148	50.0	57.1	
24 cis-1,2-Dichloroethene	61	3.412	3.414	-0.002	88	1241252	50.0	50.6	
23 2-Butanone (MEK)	72	3.419	3.414	0.004	99	433788	250.0	228.5	
26 Chlorobromomethane	130	3.589	3.585	0.004	94	324177	50.0	43.0	
27 Chloroform	83	3.619	3.621	-0.002	97	1213683	50.0	48.9	
28 1,1,1-Trichloroethane	97	3.741	3.731	0.010	96	1005647	50.0	53.2	
30 1,1-Dichloropropene	75	3.844	3.846	-0.002	91	984737	50.0	53.0	
29 Carbon tetrachloride	117	3.850	3.846	0.004	90	799858	50.0	54.8	
31 Benzene	78	3.996	3.998	-0.002	98	2921392	50.0	52.0	
33 Tert-amyl methyl ether	73	4.027	4.029	-0.002	98	1574232	40.0	36.5	
32 1,2-Dichloroethane	62	4.033	4.029	0.004	98	1094380	50.0	53.7	
34 Trichloroethene	132	4.447	4.442	0.005	90	507465	50.0	50.5	

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.623	4.625	-0.002	90	837755	50.0	58.7	
36 Dibromomethane	93	4.733	4.734	-0.001	83	402704	50.0	52.9	
37 Dichlorobromomethane	83	4.836	4.832	0.004	98	950196	50.0	56.2	
38 cis-1,3-Dichloropropene	75	5.164	5.166	-0.002	96	1200109	50.0	57.9	
39 4-Methyl-2-pentanone (MIBK)	43	5.268	5.258	0.010	99	4451219	250.0	267.3	E
40 Toluene	92	5.414	5.416	-0.002	93	1752617	50.0	54.4	
41 trans-1,3-Dichloropropene	75	5.609	5.610	-0.001	97	1035044	50.0	50.6	
42 1,1,2-Trichloroethane	83	5.767	5.769	-0.002	92	523388	50.0	50.7	
43 Tetrachloroethene	164	5.858	5.854	0.004	86	408615	50.0	51.3	
44 1,3-Dichloropropane	76	5.913	5.915	-0.002	93	1222851	50.0	53.4	
45 2-Hexanone	43	5.943	5.945	-0.002	99	3286594	250.0	263.1	E
46 Chlorodibromomethane	129	6.113	6.109	0.004	96	590442	50.0	52.5	
47 Ethylene Dibromide	107	6.217	6.213	0.004	97	556306	50.0	51.1	
48 Chlorobenzene	112	6.606	6.608	-0.002	88	1708942	50.0	53.8	
50 Ethylbenzene	91	6.679	6.675	0.004	99	3380637	50.0	52.8	
49 1,1,1,2-Tetrachloroethane	131	6.673	6.681	-0.008	93	529868	50.0	47.8	
51 m-Xylene & p-Xylene	91	6.777	6.772	0.005	98	2658729	50.0	53.3	
52 o-Xylene	91	7.142	7.143	-0.001	90	2773578	50.0	54.3	
53 Styrene	104	7.160	7.162	-0.002	92	2003096	50.0	56.4	
54 Bromoform	173	7.379	7.381	-0.002	91	356420	50.0	56.7	
55 Isopropylbenzene	105	7.464	7.466	-0.002	97	3285511	50.0	55.3	
56 Bromobenzene	156	7.793	7.788	0.004	89	587931	50.0	48.2	
57 1,1,2,2-Tetrachloroethane	83	7.799	7.800	-0.001	98	905370	50.0	49.2	
58 1,2,3-Trichloropropane	110	7.841	7.843	-0.002	91	246592	50.0	48.4	
59 N-Propylbenzene	91	7.847	7.849	-0.002	97	4297038	50.0	54.1	
60 2-Chlorotoluene	91	7.957	7.952	0.005	95	2460648	50.0	53.2	
61 1,3,5-Trimethylbenzene	105	8.005	8.007	-0.002	91	2727639	50.0	53.4	
62 4-Chlorotoluene	91	8.054	8.056	-0.002	99	2734187	50.0	54.7	
63 tert-Butylbenzene	119	8.316	8.317	-0.001	89	2212004	50.0	52.5	
64 1,2,4-Trimethylbenzene	105	8.370	8.372	-0.002	96	2780077	50.0	54.7	
65 sec-Butylbenzene	105	8.529	8.524	0.005	98	3564068	50.0	52.7	
67 4-Isopropyltoluene	119	8.662	8.664	-0.002	96	2865956	50.0	53.3	
66 1,3-Dichlorobenzene	146	8.675	8.670	0.005	90	1168825	50.0	47.9	
68 1,4-Dichlorobenzene	146	8.760	8.762	-0.002	86	1234838	50.0	47.5	
70 n-Butylbenzene	91	9.064	9.060	0.004	97	2935441	50.0	51.0	
69 1,2-Dichlorobenzene	146	9.125	9.127	-0.002	88	1148348	50.0	45.6	
71 1,2-Dibromo-3-Chloropropane	157	9.946	9.954	-0.008	87	77860	50.0	24.5	
72 1,2,4-Trichlorobenzene	180	10.889	10.897	-0.008	91	577239	50.0	45.2	
73 Hexachlorobutadiene	225	11.047	11.049	-0.002	87	240465	50.0	41.6	
74 Naphthalene	128	11.175	11.171	0.004	98	1942220	50.0	44.9	
75 1,2,3-Trichlorobenzene	180	11.430	11.426	0.004	94	531573	50.0	44.4	
S 76 Xylenes, Total	1				0		100.0	107.6	
S 78 1,3-Dichloropropene, Total	1				0		100.0	108.5	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Reagents:

524MMix_00173

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D

Injection Date: 16-Jun-2020 12:33:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: lcsd

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

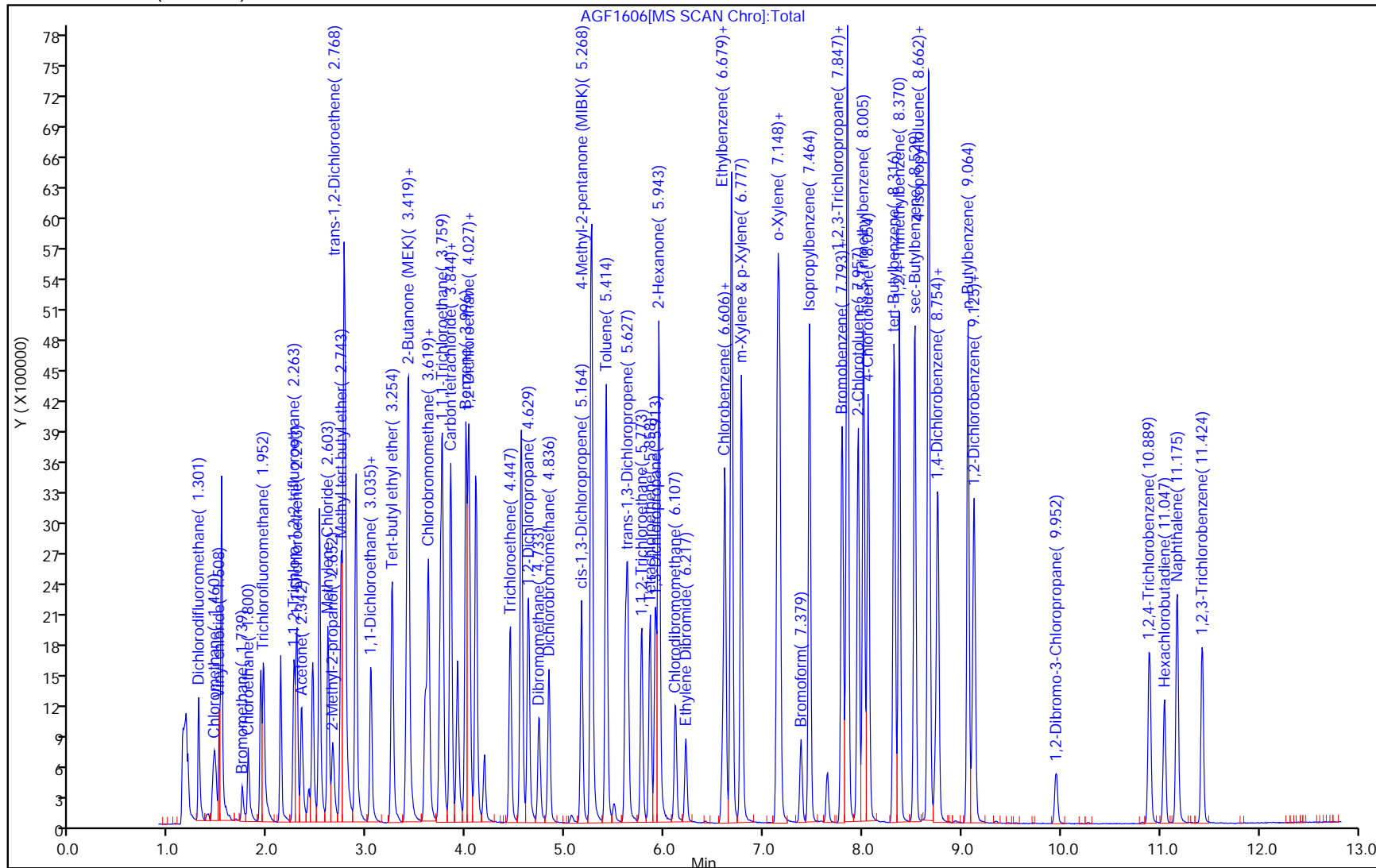
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 16-Jun-2020 12:33:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-006
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:50:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.2	102.02
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.3	103.42

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 06/03/2020 13:04
 Analysis Batch Number: 621036 End Date: 06/03/2020 23:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-621036/4		06/03/2020 13:04	1	UF0304A.D	Rtx-624 0.18 (mm)
IC 680-621036/9		06/03/2020 14:39	1	UF0307.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 14:39	1		Rtx-624 0.18 (mm)
IC 680-621036/10		06/03/2020 14:59	1	UF0308.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 14:59	1		Rtx-624 0.18 (mm)
IC 680-621036/11		06/03/2020 15:19	1	UF0309.D	Rtx-624 0.18 (mm)
IC 680-621036/12		06/03/2020 15:40	1	UF0310.D	Rtx-624 0.18 (mm)
IC 680-621036/13		06/03/2020 16:00	1	UF0311.D	Rtx-624 0.18 (mm)
ICIS 680-621036/14		06/03/2020 16:20	1	UF0312.D	Rtx-624 0.18 (mm)
IC 680-621036/15		06/03/2020 16:41	1	UF0313.D	Rtx-624 0.18 (mm)
IC 680-621036/16		06/03/2020 17:01	1	UF0314.D	Rtx-624 0.18 (mm)
ICV 680-621036/18		06/03/2020 17:42	1	UF0316.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 17:42	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 18:02	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 18:22	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 19:23	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 19:43	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:03	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:24	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:44	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:04	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:25	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:45	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:05	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:25	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:46	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 23:06	1		Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Instrument ID: CMSAG Start Date: 06/03/2020 12:40
 Analysis Batch Number: 621037 End Date: 06/04/2020 00:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-621037/4		06/03/2020 12:40	1	AGF0304.D	Rtx-624 0.18 (mm)
IC 680-621037/7		06/03/2020 14:08	1	AGF0307.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 14:08	1		Rtx-624 0.18 (mm)
IC 680-621037/8		06/03/2020 14:33	1	AGF0308.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 14:33	1		Rtx-624 0.18 (mm)
IC 680-621037/9		06/03/2020 14:58	1	AGF0309.D	Rtx-624 0.18 (mm)
IC 680-621037/10		06/03/2020 15:23	1	AGF0310.D	Rtx-624 0.18 (mm)
IC 680-621037/11		06/03/2020 15:48	1	AGF0311.D	Rtx-624 0.18 (mm)
ICIS 680-621037/12		06/03/2020 16:12	1	AGF0312.D	Rtx-624 0.18 (mm)
IC 680-621037/13		06/03/2020 16:37	1	AGF0313.D	Rtx-624 0.18 (mm)
IC 680-621037/14		06/03/2020 17:02	1	AGF0314.D	Rtx-624 0.18 (mm)
ICV 680-621037/16		06/03/2020 17:52	1	AGF0316.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 17:52	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 18:17	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 18:41	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 19:56	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:21	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:46	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:11	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:36	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:00	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:25	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:50	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 23:15	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 23:40	1		Rtx-624 0.18 (mm)
ZZZZZ		06/04/2020 00:04	1		Rtx-624 0.18 (mm)
ZZZZZ		06/04/2020 00:29	1		Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Instrument ID: CMSU Start Date: 06/15/2020 13:01
 Analysis Batch Number: 622508 End Date: 06/15/2020 22:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-622508/1		06/15/2020 13:01	1	UF1501D.D	Rtx-624 0.18 (mm)
CCVIS 680-622508/2		06/15/2020 14:23	1	UF1502.D	Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 14:23	1		Rtx-624 0.18 (mm)
LCS 680-622508/3		06/15/2020 14:43	1	UF1503.D	Rtx-624 0.18 (mm)
LCSD 680-622508/4		06/15/2020 15:04	1	UF1504.D	Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 15:04	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 16:04	1		Rtx-624 0.18 (mm)
MB 680-622508/10		06/15/2020 17:05	1	UF1510.D	Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 17:25	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 17:45	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 18:05	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 18:26	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 18:46	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 19:06	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 19:26	1		Rtx-624 0.18 (mm)
680-184595-2		06/15/2020 19:47	1	UF1518.D	Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 20:07	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 20:27	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 20:47	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 21:07	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 21:28	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 21:48	1		Rtx-624 0.18 (mm)
ZZZZZ		06/15/2020 22:08	1		Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Instrument ID: CMSAG Start Date: 06/16/2020 10:10
 Analysis Batch Number: 622635 End Date: 06/16/2020 21:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-622635/1		06/16/2020 10:10	1	AGF1601.D	Rtx-624 0.18 (mm)
CCVIS 680-622635/4		06/16/2020 11:45	1	AGF1604.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 11:45	1		Rtx-624 0.18 (mm)
LCS 680-622635/5		06/16/2020 12:09	1	AGF1605.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 12:09	1		Rtx-624 0.18 (mm)
LCSD 680-622635/6		06/16/2020 12:33	1	AGF1606.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 13:22	1		Rtx-624 0.18 (mm)
MB 680-622635/11		06/16/2020 14:36	1	AGF1611.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 15:00	5		Rtx-624 0.18 (mm)
680-184595-3		06/16/2020 15:25	1	AGF1613.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 15:49	1		Rtx-624 0.18 (mm)
680-184595-1		06/16/2020 16:14	1	AGF1615.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 16:39	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 17:03	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 17:28	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 17:53	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 18:18	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 18:42	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 19:07	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 19:31	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 19:56	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 20:21	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 20:45	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 21:10	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 21:35	1		Rtx-624 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Batch Number: 622508 Batch Start Date: 06/15/20 13:01 Batch Analyst: Intaracha, Unchaleeya

Batch Method: 524.2 Batch End Date: 06/15/20 14:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	ChlorineCheck	FinalAmount	524 ISSU/2016 00092	524MMix 00172
BFB 680-622508/1		524.2			5 mL		5 mL		
CCVIS 680-622508/2		524.2			5 mL		5 mL	5 uL	2 uL
LCS 680-622508/3		524.2			5 mL		5 mL	5 uL	2 uL
LCSD 680-622508/4		524.2			5 mL		5 mL	5 uL	2 uL
MB 680-622508/10		524.2			5 mL		5 mL	5 uL	
680-184595-E-2	GWK015-2023	524.2	T	<2	5 mL	N	5 mL	5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_bfb 00219					
BFB 680-622508/1		524.2		1 uL					
CCVIS 680-622508/2		524.2							
LCS 680-622508/3		524.2							
LCSD 680-622508/4		524.2							
MB 680-622508/10		524.2							
680-184595-E-2	GWK015-2023	524.2	T						

Batch Notes	
pH Indicator ID	pHPaper 1-2.5_00062
Residual Chlorine Indicator ID	KIStarchPaper_00005

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Batch Number: 622635 Batch Start Date: 06/16/20 10:10 Batch Analyst: Chimsud, Prapatsorn 1

Batch Method: 524.2 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	ChlorineCheck	FinalAmount	524 ISSU/2016 00092	524MMix 00173
BFB 680-622635/1		524.2			5 mL		5 mL		
CCVIS 680-622635/4		524.2			5 mL		5 mL	5 uL	2 uL
LCS 680-622635/5		524.2			5 mL		5 mL	5 uL	2 uL
LCSD 680-622635/6		524.2			5 mL		5 mL	5 uL	2 uL
MB 680-622635/11		524.2			5 mL		5 mL	5 uL	
680-184595-C-3	TB2023-1	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-184595-D-1	GWVA2-2023	524.2	T	<2	5 mL	N	5 mL	5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_bfb 00219					
BFB 680-622635/1		524.2		1 uL					
CCVIS 680-622635/4		524.2							
LCS 680-622635/5		524.2							
LCSD 680-622635/6		524.2							
MB 680-622635/11		524.2							
680-184595-C-3	TB2023-1	524.2	T						
680-184595-D-1	GWVA2-2023	524.2	T						

Batch Notes	
pH Indicator ID	pHPaper1-2.5_00062
Pipette/Syringe/Dispenser ID	KlstarchPaper_00005

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

Method 504.1

**EDB, DBCP, and 1,2,3-TCP (GC) by
Method 504.1**

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): CLP I 0.25 ID: 0.25 (mm) GC Column (2): CLP II 0.25 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	PCA1 #	PCA2 #
GWVA2-2023	680-184595-1		99
GWK015-2023	680-184595-2		100
TB2023-1	680-184595-3		99
	MB 680-621423/3-A	101	
	LCS 680-621423/4-A		102
	LCS 680-621423/5-A		98

PCA = Pentachloroethane

QC LIMITS
70-130

Column to be used to flag recovery values

FORM II 504.1

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XF05009.D
 Lab ID: LCS 680-621423/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylene Dibromide	0.100	0.102	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM III

GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: XF05010.DLab ID: LCSD 680-621423/5-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Ethylene Dibromide	0.100	0.0972	97	4	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: MB 680-621423/3-A
 Matrix: Water Date Extracted: 06/05/2020 13:32
 Lab File ID: (1) XF05008.D Lab File ID: (2) XF05008.D
 Date Analyzed: (1) 06/05/2020 15:54 Date Analyzed: (2) 06/05/2020 15:54
 Instrument ID: (1) CSGX Instrument ID: (2) CSGX
 GC Column: (1) CLP I 0.25 ID: 0.25(mm) GC Column: (2) CLP II 0.25 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1		DATE ANALYZED 2	
	LCS 680-621423/4-A	06/05/2020	16:04	06/05/2020	16:04
	LCSD 680-621423/5-A	06/05/2020	16:13	06/05/2020	16:13
GWVA2-2023	680-184595-1	06/05/2020	18:31	06/05/2020	18:31
GWK015-2023	680-184595-2	06/05/2020	18:41	06/05/2020	18:41
TB2023-1	680-184595-3	06/05/2020	18:50	06/05/2020	18:50

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-621423/4-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 06/05/2020 16:04 Date Analyzed (2): 06/05/2020 16:04
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0986		3.1
	2		1.59	1.56	1.62	0.102		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-621423/5-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 06/05/2020 16:13 Date Analyzed (2): 06/05/2020 16:13
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0923		5.2
	2		1.59	1.56	1.62	0.0972		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: GWVA2-2023 Lab Sample ID: 680-184595-1
 Matrix: Water Lab File ID: XF05024.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 11:30
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 36(mL) Date Analyzed: 06/05/2020 18:31
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0024

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05024.D
 Lims ID: 680-184595-A-1-A
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:31:18 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-024
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	398055	0.3696
2	2.552	2.553	-0.001	370639	0.4347

RPD = 16.17

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05024.D

Injection Date: 05-Jun-2020 18:31:18

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184595-A-1-A

Lab Sample ID: 680-184595-1

Worklist Smp#: 24

Client ID: GWVA2-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

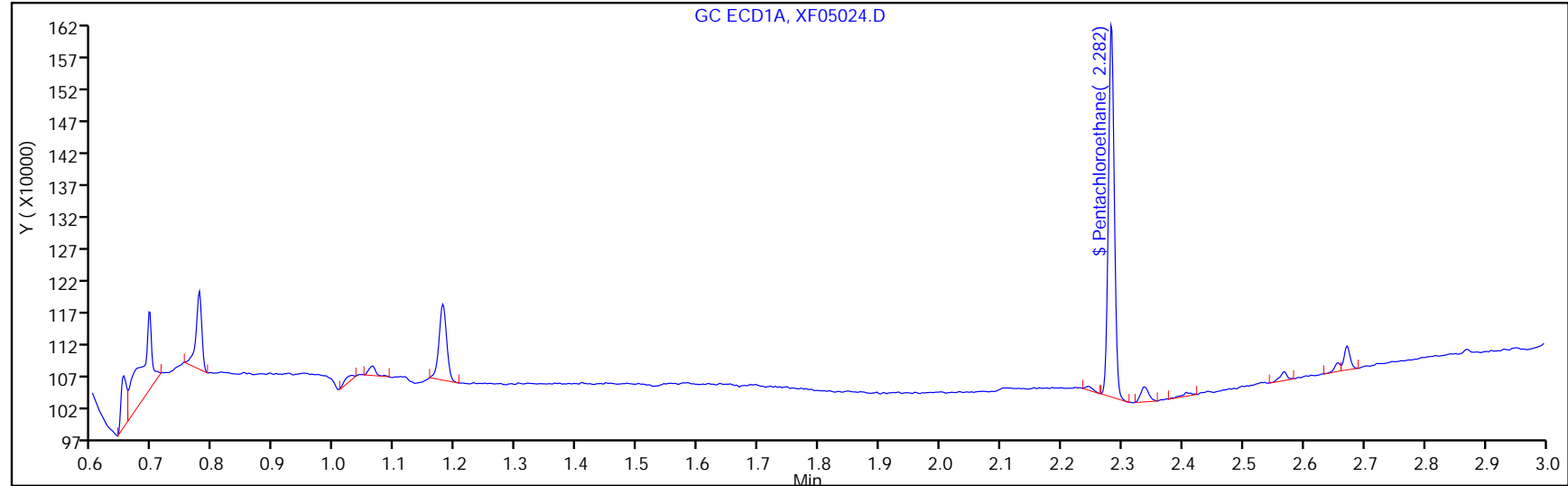
ALS Bottle#: 24

Method: EDBDBCP_CSGX

Limit Group: 504.1

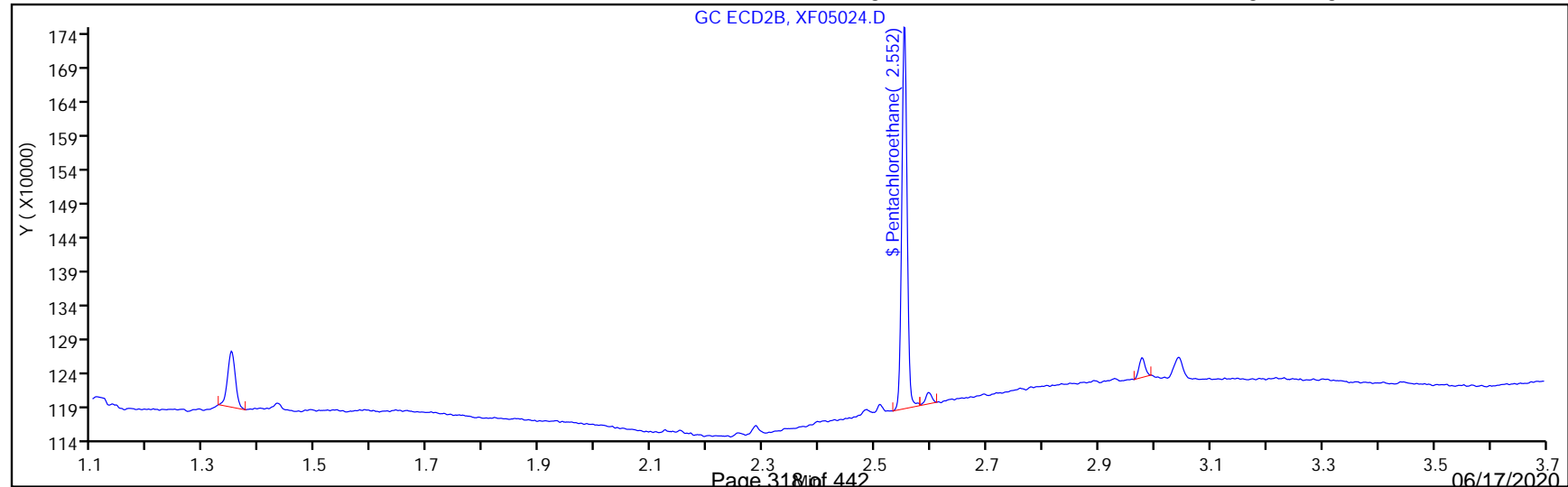
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05024.D
 Lims ID: 680-184595-A-1-A
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:31:18 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-024
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3696	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4347	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: GWVA2-2023 Lab Sample ID: 680-184595-1
 Matrix: Water Lab File ID: XF05024.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 11:30
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 36(mL) Date Analyzed: 06/05/2020 18:31
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	99		70-130

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05024.D
 Lims ID: 680-184595-A-1-A
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:31:18 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-024
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	398055	0.3696
2	2.552	2.553	-0.001	370639	0.4347

RPD = 16.17

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05024.D

Injection Date: 05-Jun-2020 18:31:18

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184595-A-1-A

Lab Sample ID: 680-184595-1

Worklist Smp#: 24

Client ID: GWVA2-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

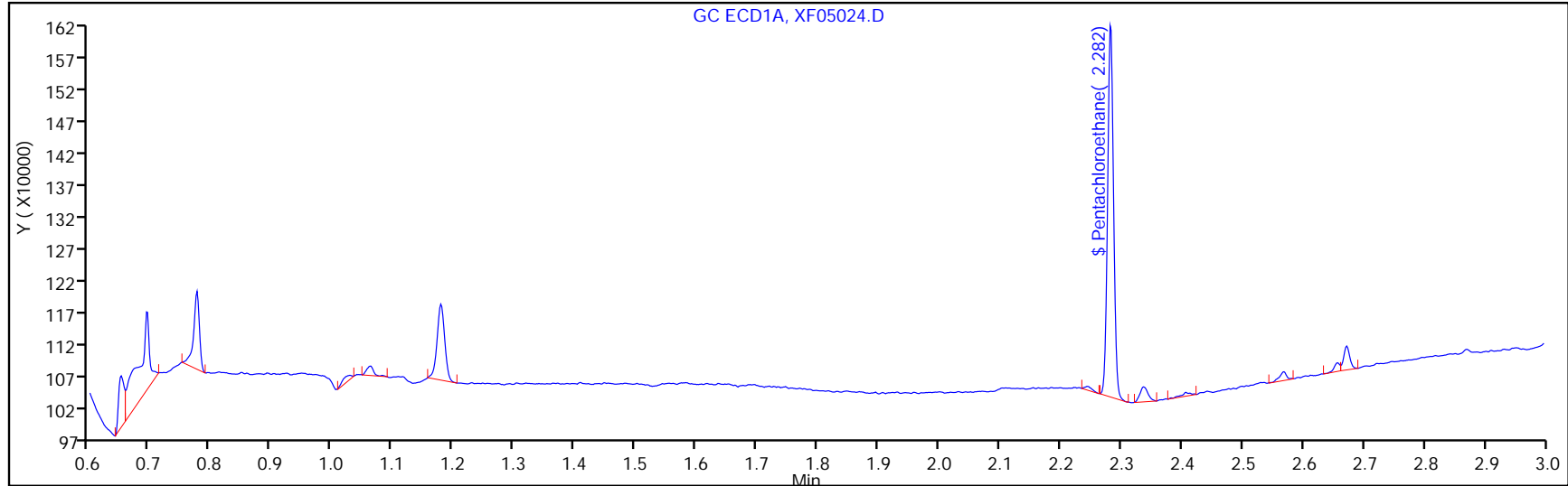
ALS Bottle#: 24

Method: EDBDBCP_CSGX

Limit Group: 504.1

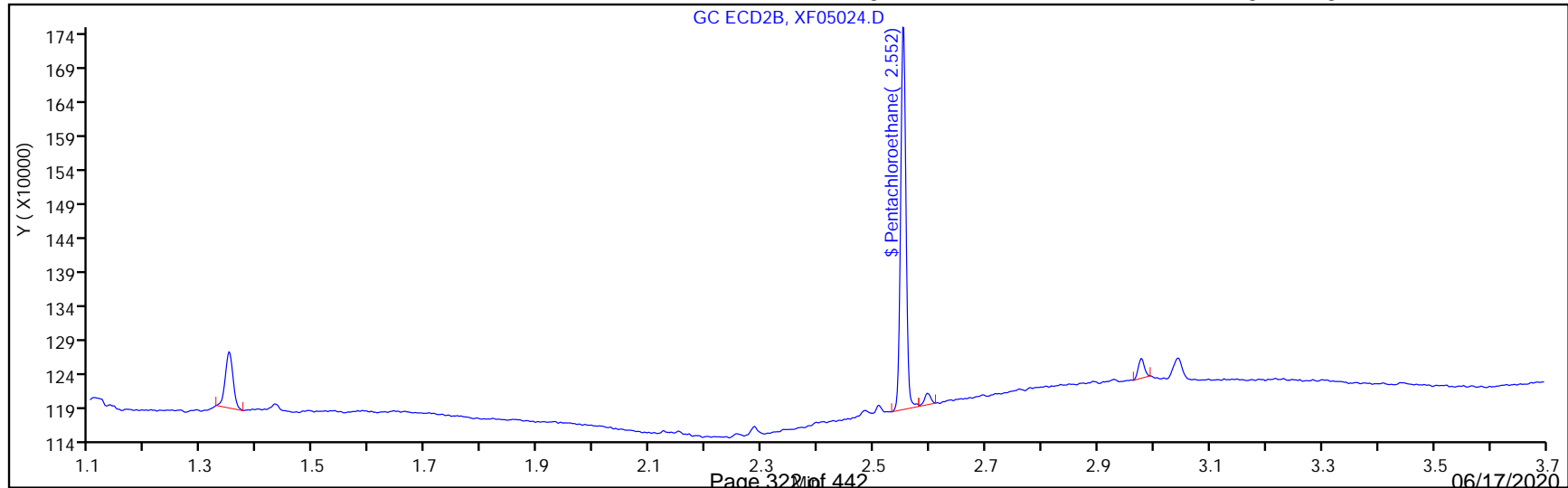
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05024.D
 Lims ID: 680-184595-A-1-A
 Client ID: GWVA2-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:31:18 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-024
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3696	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4347	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 Lab Sample ID: 680-184595-2
 Matrix: Water Lab File ID: XF05025.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 10:00
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.3 (mL) Date Analyzed: 06/05/2020 18:41
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05025.D
 Lims ID: 680-184595-C-2-A
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:41:10 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-025
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.283	2.283	0.000	400339	0.3718
2	2.553	2.553	0.000	373289	0.4378

RPD = 16.31

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05025.D

Injection Date: 05-Jun-2020 18:41:10

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184595-C-2-A

Lab Sample ID: 680-184595-2

Worklist Smp#: 25

Client ID: GWK015-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

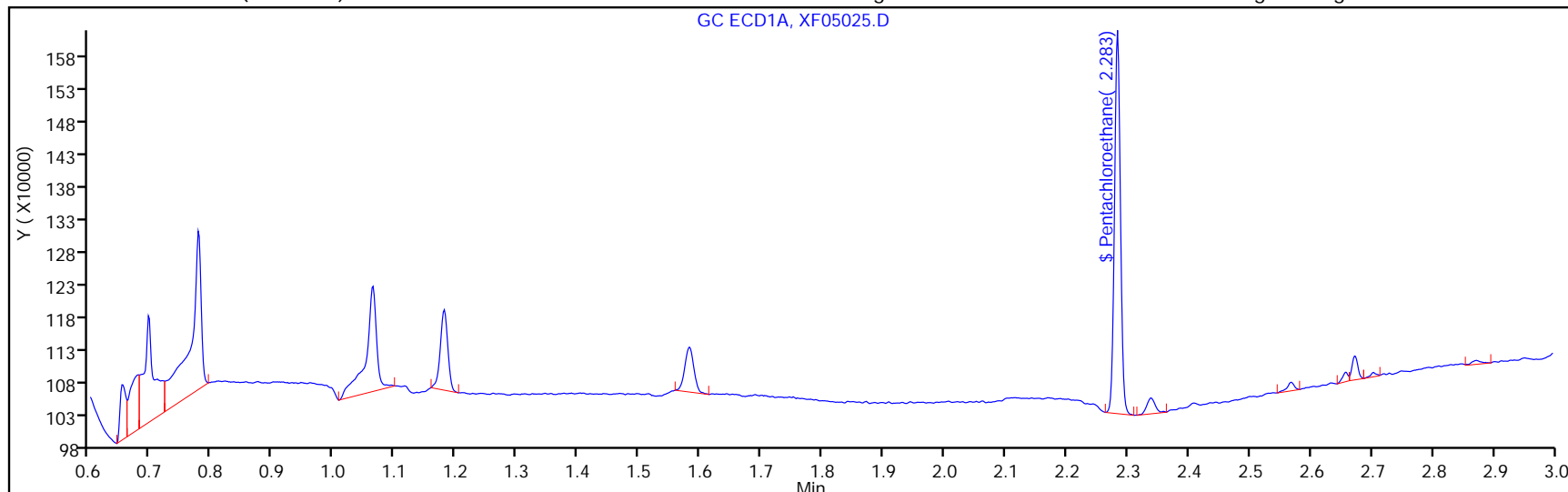
ALS Bottle#: 25

Method: EDBDBCP_CSGX

Limit Group: 504.1

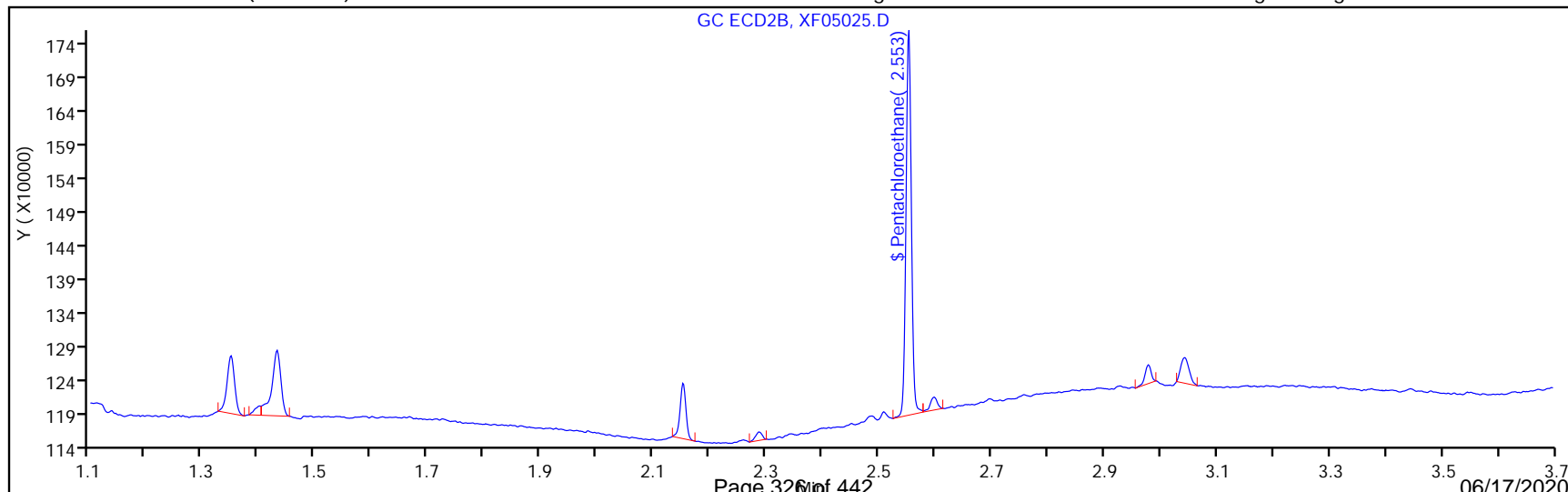
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05025.D
 Lims ID: 680-184595-C-2-A
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:41:10 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-025
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3718	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4378	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: GWK015-2023 Lab Sample ID: 680-184595-2
 Matrix: Water Lab File ID: XF05025.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 10:00
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.3 (mL) Date Analyzed: 06/05/2020 18:41
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	100		70-130

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05025.D
 Lims ID: 680-184595-C-2-A
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:41:10 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-025
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	400339	0.3718
2	2.553	2.553	0.000	373289	0.4378

RPD = 16.31

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05025.D

Injection Date: 05-Jun-2020 18:41:10

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184595-C-2-A

Lab Sample ID: 680-184595-2

Worklist Smp#: 25

Client ID: GWK015-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

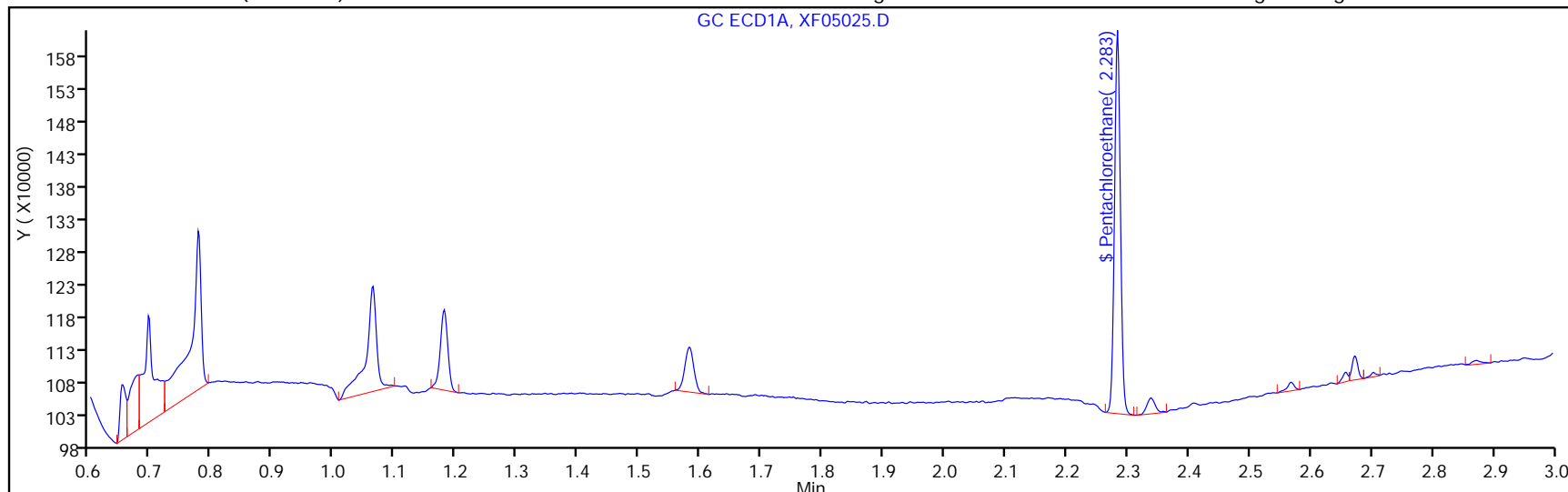
ALS Bottle#: 25

Method: EDBDBCP_CSGX

Limit Group: 504.1

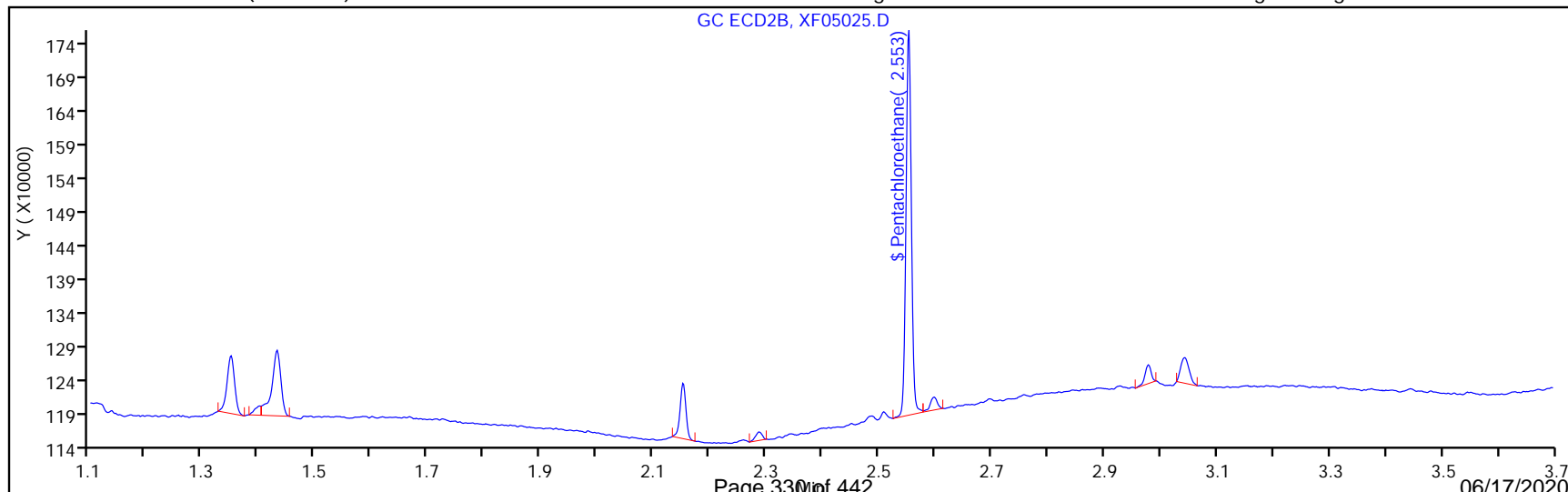
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05025.D
 Lims ID: 680-184595-C-2-A
 Client ID: GWK015-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:41:10 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-025
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3718	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4378	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: TB2023-1 Lab Sample ID: 680-184595-3
 Matrix: Water Lab File ID: XF05026.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 08:00
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.1 (mL) Date Analyzed: 06/05/2020 18:50
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 08-Jun-2020 10:57:47

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05026.D
 Lims ID: 680-184595-A-3-A
 Client ID: TB2023-1
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:50:59 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-026
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	414834	0.3852
2	2.553	2.553	0.000	370854	0.4349

RPD = 12.12

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05026.D

Injection Date: 05-Jun-2020 18:50:59

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184595-A-3-A

Lab Sample ID: 680-184595-3

Worklist Smp#: 26

Client ID: TB2023-1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

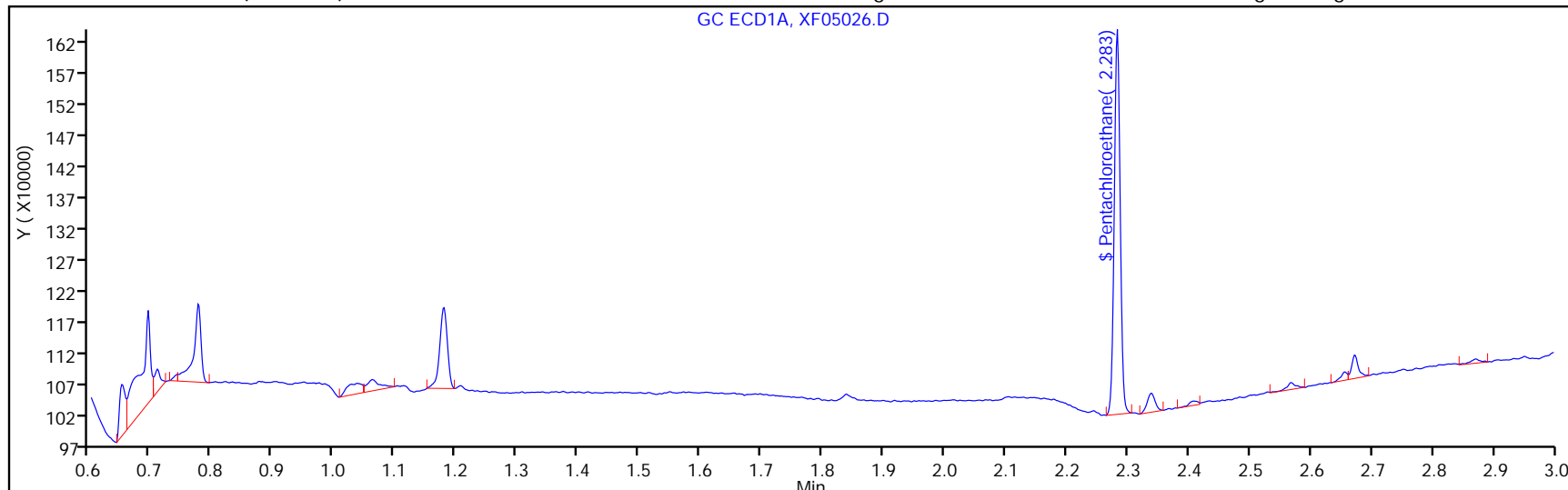
ALS Bottle#: 26

Method: EDBDBCP_CSGX

Limit Group: 504.1

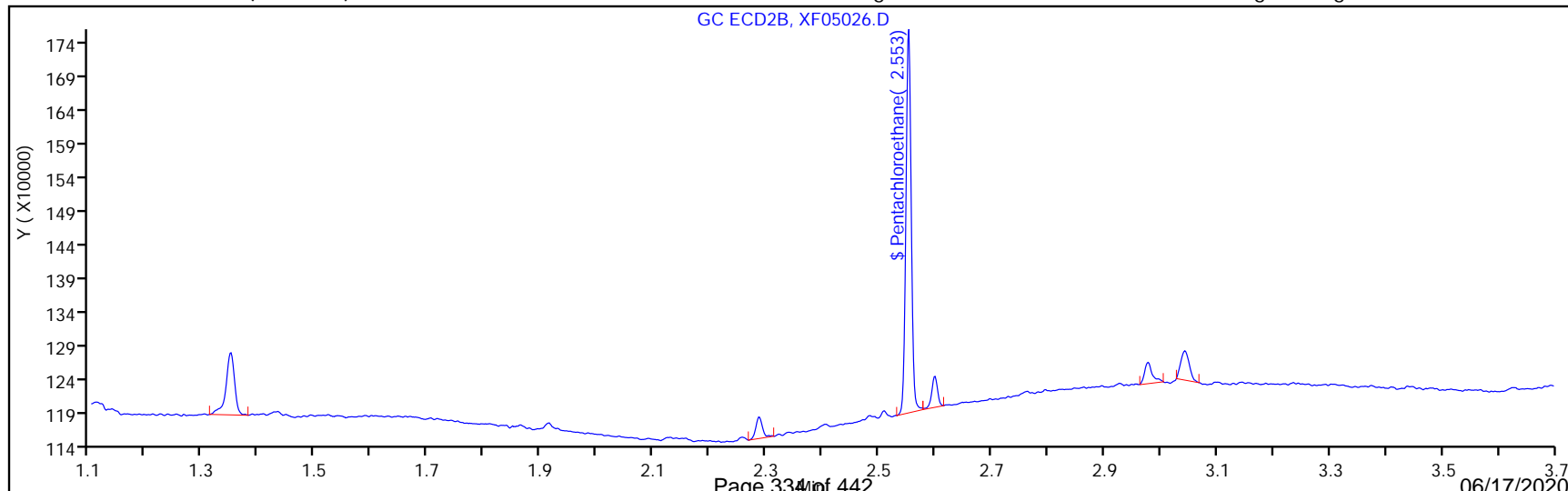
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05026.D
 Lims ID: 680-184595-A-3-A
 Client ID: TB2023-1
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:50:59 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-026
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3852	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4349	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: TB2023-1 Lab Sample ID: 680-184595-3
 Matrix: Water Lab File ID: XF05026.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 08:00
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.1 (mL) Date Analyzed: 06/05/2020 18:50
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	99		70-130

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05026.D
 Lims ID: 680-184595-A-3-A
 Client ID: TB2023-1
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:50:59 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-026
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	414834	0.3852
2	2.553	2.553	0.000	370854	0.4349

RPD = 12.12

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05026.D

Injection Date: 05-Jun-2020 18:50:59

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184595-A-3-A

Lab Sample ID: 680-184595-3

Worklist Smp#: 26

Client ID: TB2023-1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

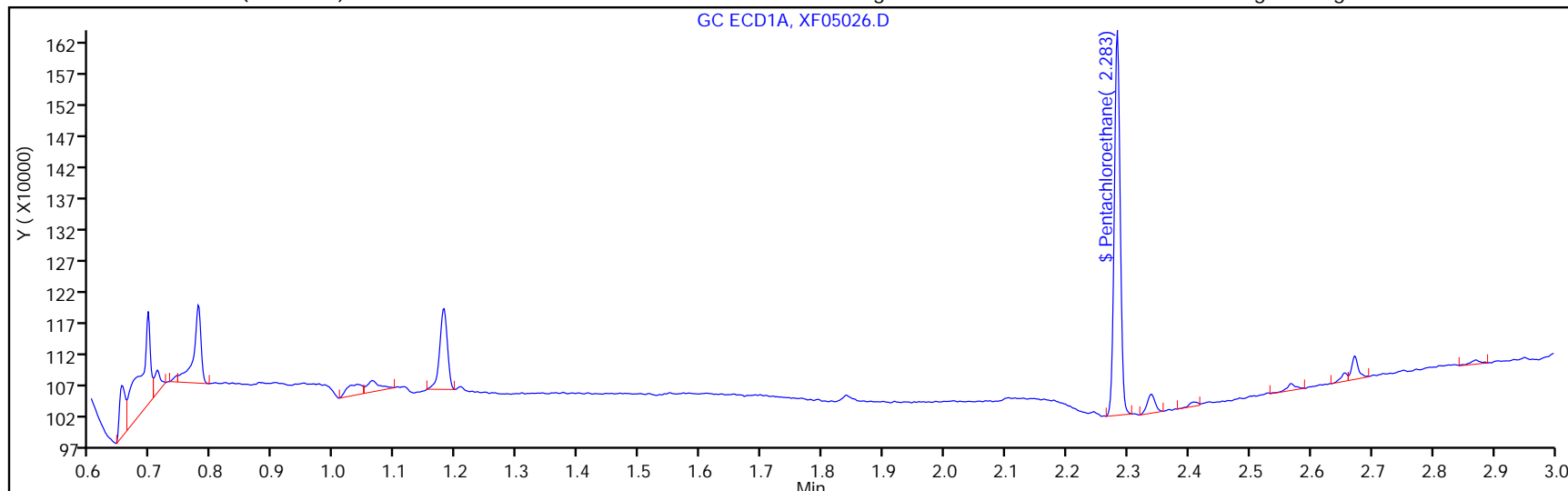
ALS Bottle#: 26

Method: EDBDBCP_CSGX

Limit Group: 504.1

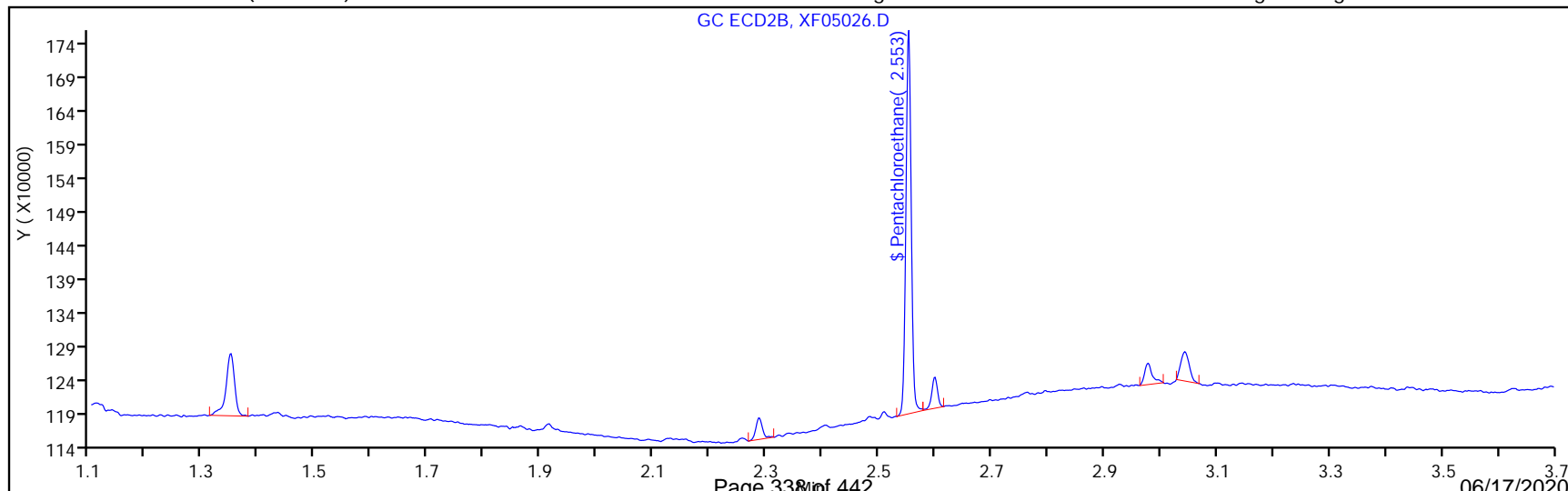
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05026.D
 Lims ID: 680-184595-A-3-A
 Client ID: TB2023-1
 Sample Type: Client
 Inject. Date: 05-Jun-2020 18:50:59 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-026
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3852	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4349	0.00

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.063						1.032 - 1.092	1.063
Ethylene Dibromide	1.241	1.243	1.242	1.241	1.241	1.240	1.243	1.242			1.211 - 1.271	1.242
1,2,3-Trichloropropane	2.169	2.169	2.171	2.169	2.169	2.170	2.169	2.169			2.139 - 2.199	2.169
1,2-Dibromo-3-Chloropropane	2.899	2.899	2.899	2.899	2.899	2.900	2.899	2.899			2.869 - 2.929	2.899
Pentachloroethane	2.284	2.283	2.284	2.282	2.283	2.283	2.283	2.284			2.252 - 2.312	2.283

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	564298				Ave		564298.143						20.0			
Ethylene Dibromide	350208 334450	330566 303747	337136 303350	315777 301593	Ave		322103.484			5.7			20.0			
1,2,3-Trichloropropane	47660 39427	43493 37669	41218 37590	39602 37929	Ave		40573.3882			8.6			20.0			
1,2-Dibromo-3-Chloropropane	570285 475129	535616 455515	507691 460266	484894 450896	Ave		492536.616			8.6			20.0			
Pentachloroethane	1252736 1045893	1128728 1059340	1016696 1018140	1051957 1041659	Ave		1076893.61			7.3			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3950087					7.00
Ethylene Dibromide	Ave	54720 616986	103302 758376	210710 942479	345381	522578	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
1,2,3-Trichloropropane	Ave	37234 382572	67958 469870	128805 592647	216575	308023	0.781 10.2	1.56 12.5	3.13 15.6	5.47	7.81
1,2-Dibromo-3-Chloropropane	Ave	89107 925265	167380 1150666	317307 1409051	530353	742389	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
Pentachloroethane	Ave	78296 860714	141091 1018140	254174 1302074	460231	653683	0.0625 0.813	0.125 1.00	0.250 1.25	0.438	0.625

Curve Type Legend:

Ave = Average

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 22-May-2020 15:18:09 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:00 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.242	1.241	0.001	942479	3.13	2.93	
2	1.589	1.587	0.002	801332	3.13	3.04	
						RPD = 3.78	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	592647	15.6	14.6	
2	2.406	2.406	0.000	472469	15.6	13.7	
						RPD = 6.15	
\$ 4 Pentachloroethane							
1	2.284	2.282	0.002	1302074	1.25	1.21	
2	2.554	2.552	0.002	1045546	1.25	1.23	
						RPD = 1.40	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1409051	3.13	2.86	
2	3.371	3.371	0.000	1241101	3.13	2.89	
						RPD = 1.02	

Reagents:

504 WS #1_00168 Amount Added: 100.00 Units: uL

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D

Injection Date: 22-May-2020 15:18:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

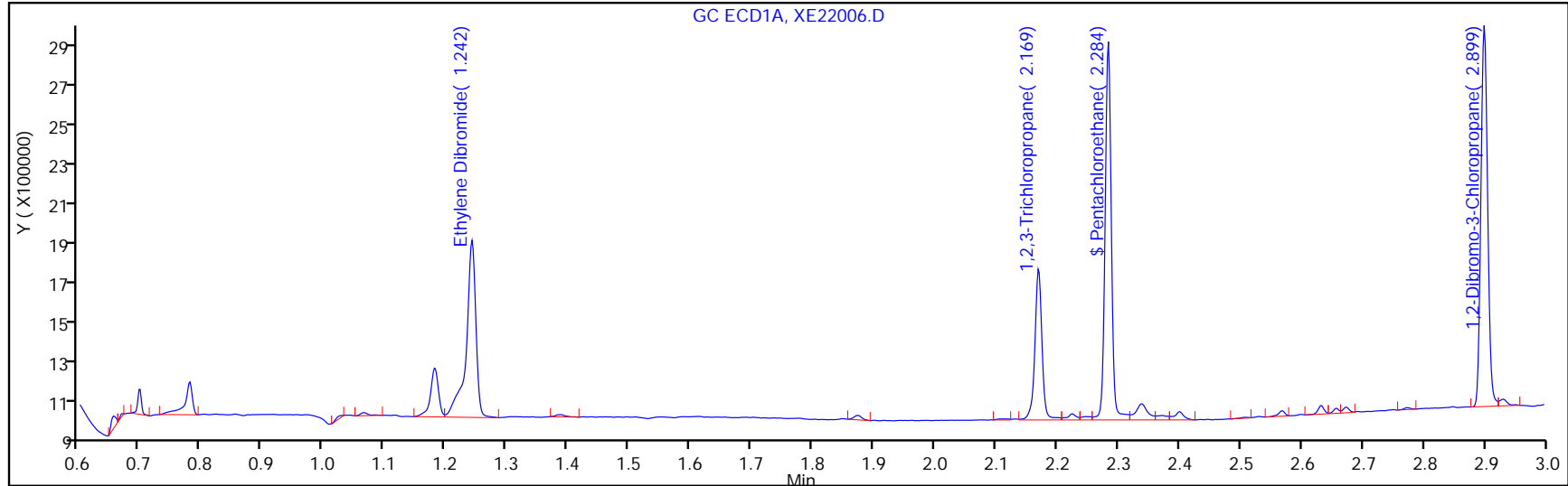
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

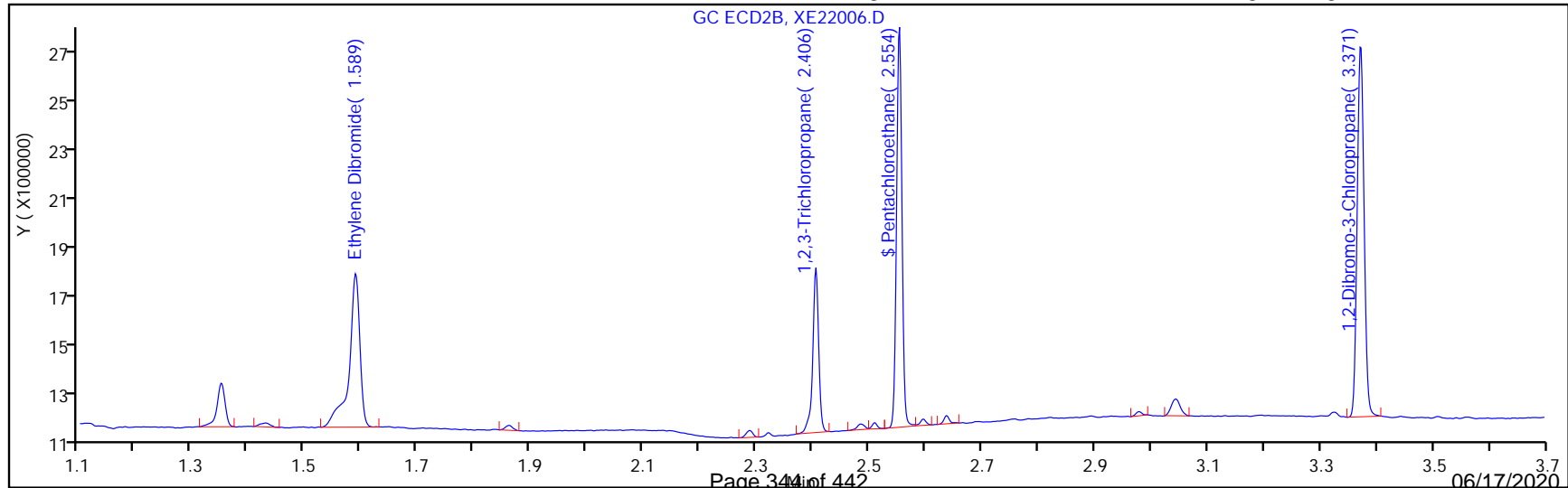
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-May-2020 15:27:51 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-007
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:04 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.243	1.241	0.002	758376	2.50	2.35	
2	1.589	1.587	0.002	648406	2.50	2.46	
						RPD = 4.33	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	469870	12.5	11.6	
2	2.406	2.406	0.000	392780	12.5	11.4	
						RPD = 1.41	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	1018140	1.00	0.9454	
2	2.553	2.552	0.001	825669	1.00	0.9683	
						RPD = 2.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1150666	2.50	2.34	
2	3.371	3.371	0.000	1011664	2.50	2.36	
						RPD = 0.84	

Reagents:

504 WS #1_00168 Amount Added: 80.00 Units: uL

Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D

Injection Date: 22-May-2020 15:27:51

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

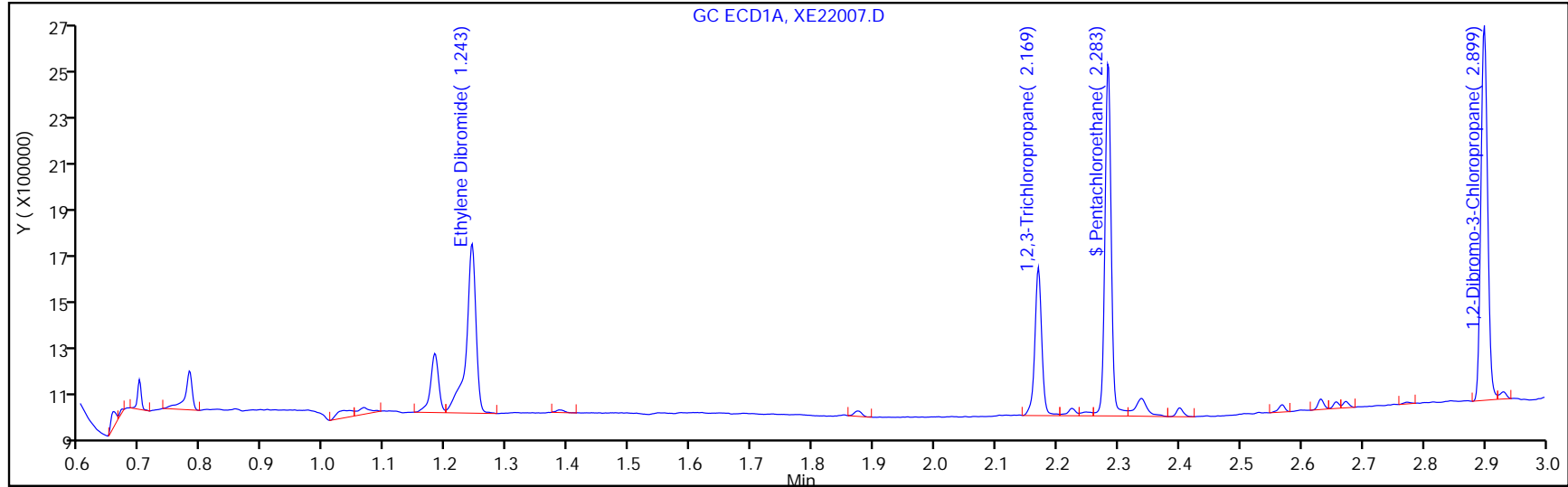
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

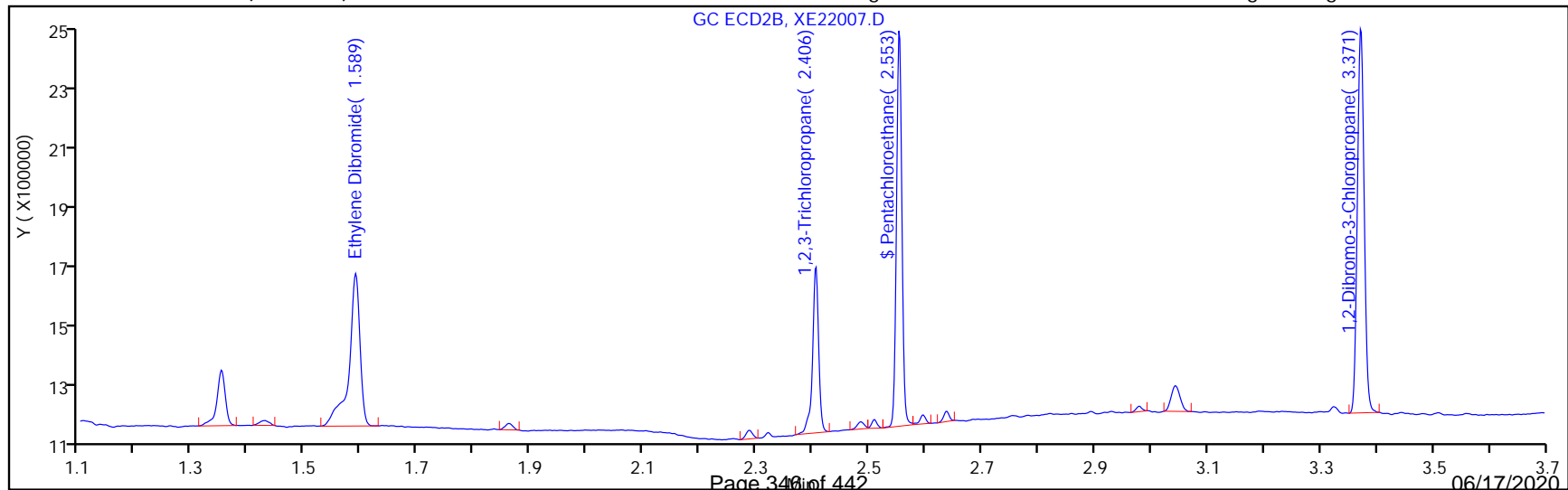
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-May-2020 15:37:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-008
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:06 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.241	-0.001	616986	2.03	1.92	
2	1.588	1.587	0.001	513788	2.03	1.95	
						RPD = 1.70	
3 1,2,3-Trichloropropane							
1	2.170	2.169	0.001	382572	10.2	9.43	
2	2.405	2.406	-0.001	326647	10.2	9.50	
						RPD = 0.71	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	860714	0.8125	0.7993	
2	2.553	2.552	0.001	693091	0.8125	0.8128	
						RPD = 1.68	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.899	0.001	925265	2.03	1.88	
2	3.371	3.371	0.000	825719	2.03	1.92	
						RPD = 2.33	

Reagents:

504 WS #1_00168 Amount Added: 65.00 Units: uL

Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D

Injection Date: 22-May-2020 15:37:38

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

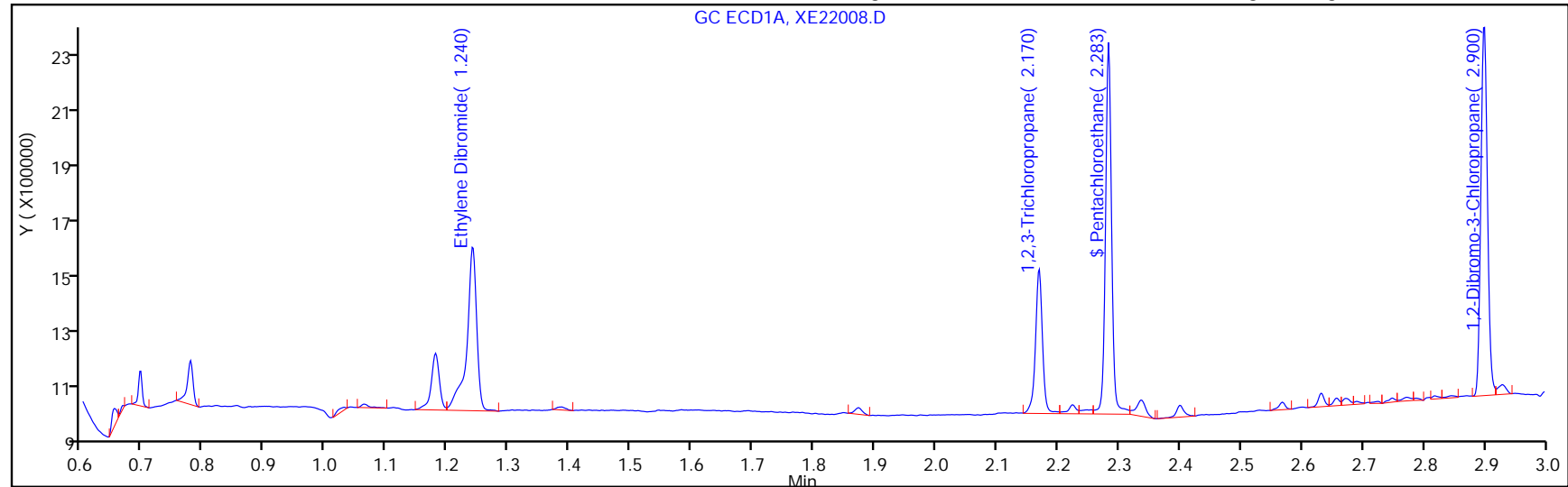
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

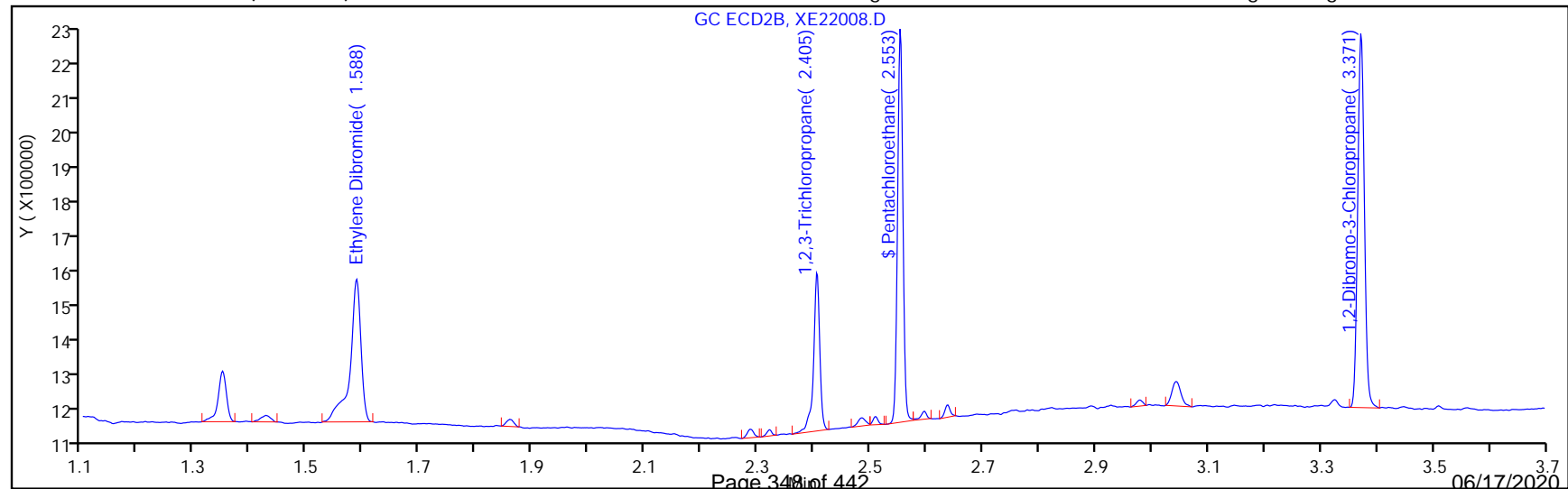
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Kirtland AFB BFF

Quarterly Report - April-June 2020

SWMUs ST-106/SS-111

H-2-2203

September 2020

Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-May-2020 15:47:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-009
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:07 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	----------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane

1	1.063	1.062	0.001	3950087	7.00	7.00	
2	1.431	1.431	0.000	3294675	7.00	7.00	
							RPD = 0.00

2 Ethylene Dibromide

1	1.241	1.241	0.000	522578	1.56	1.62	
2	1.588	1.587	0.001	410886	1.56	1.56	
							RPD = 4.04

3 1,2,3-Trichloropropane

1	2.169	2.169	0.000	308023	7.81	7.59	
2	2.404	2.406	-0.002	263838	7.81	7.67	
							RPD = 1.03

\$ 4 Pentachloroethane

1	2.283	2.282	0.001	653683	0.6250	0.6070	
2	2.553	2.552	0.001	516883	0.6250	0.6062	
							RPD = 0.14

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	742389	1.56	1.51	
2	3.371	3.371	0.000	651966	1.56	1.52	
							RPD = 0.72

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D

Injection Date: 22-May-2020 15:47:22

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv15

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

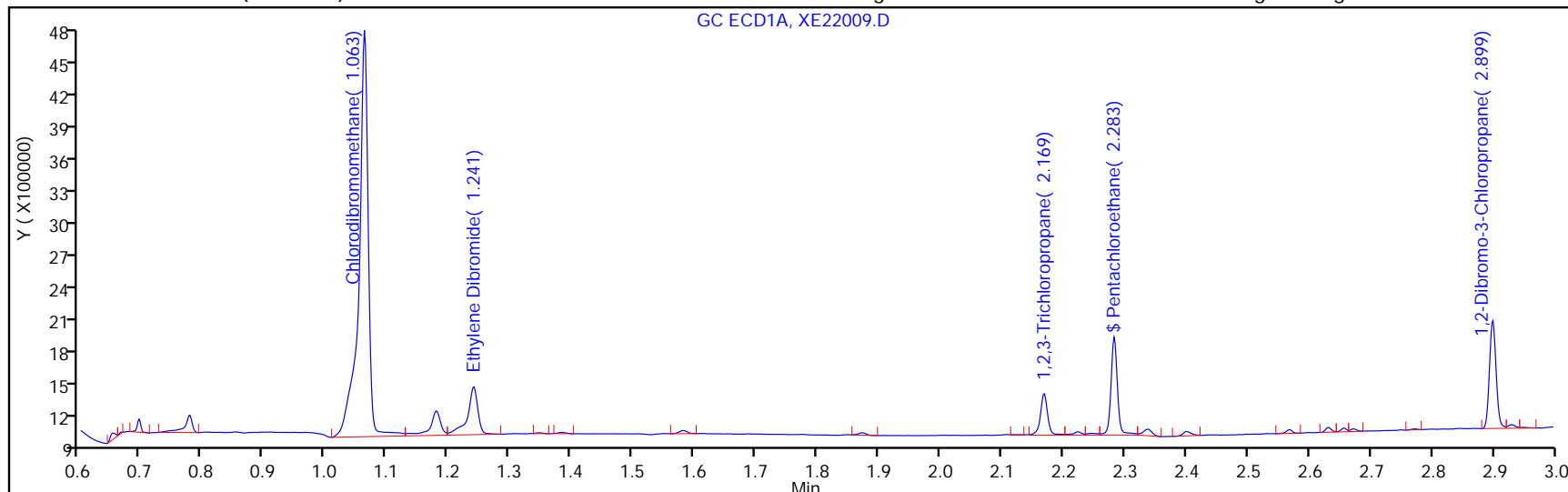
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

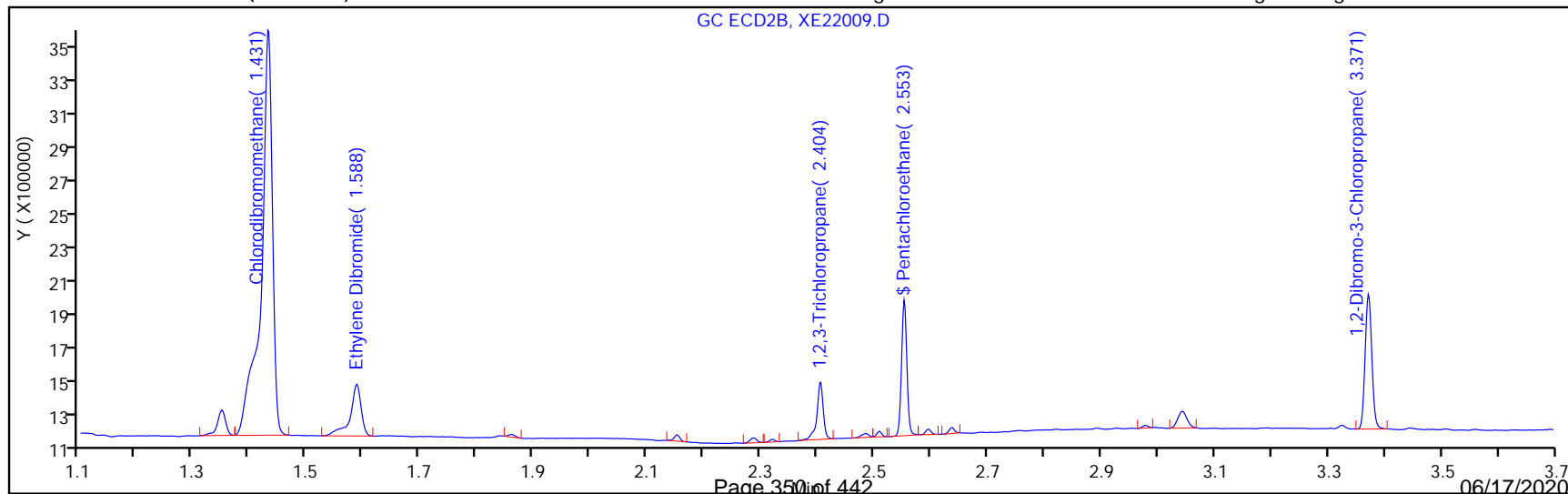
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-May-2020 15:57:09 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-010
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:08 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	345381	1.09	1.07	
2	1.587	1.587	0.000	277948	1.09	1.05	
						RPD = 1.72	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	216575	5.47	5.34	
2	2.406	2.406	0.000	190841	5.47	5.55	
						RPD = 3.86	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	460231	0.4375	0.4274	
2	2.552	2.552	0.000	362245	0.4375	0.4248	
						RPD = 0.60	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	530353	1.09	1.08	
2	3.371	3.371	0.000	467045	1.09	1.09	
						RPD = 1.00	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D

Injection Date: 22-May-2020 15:57:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

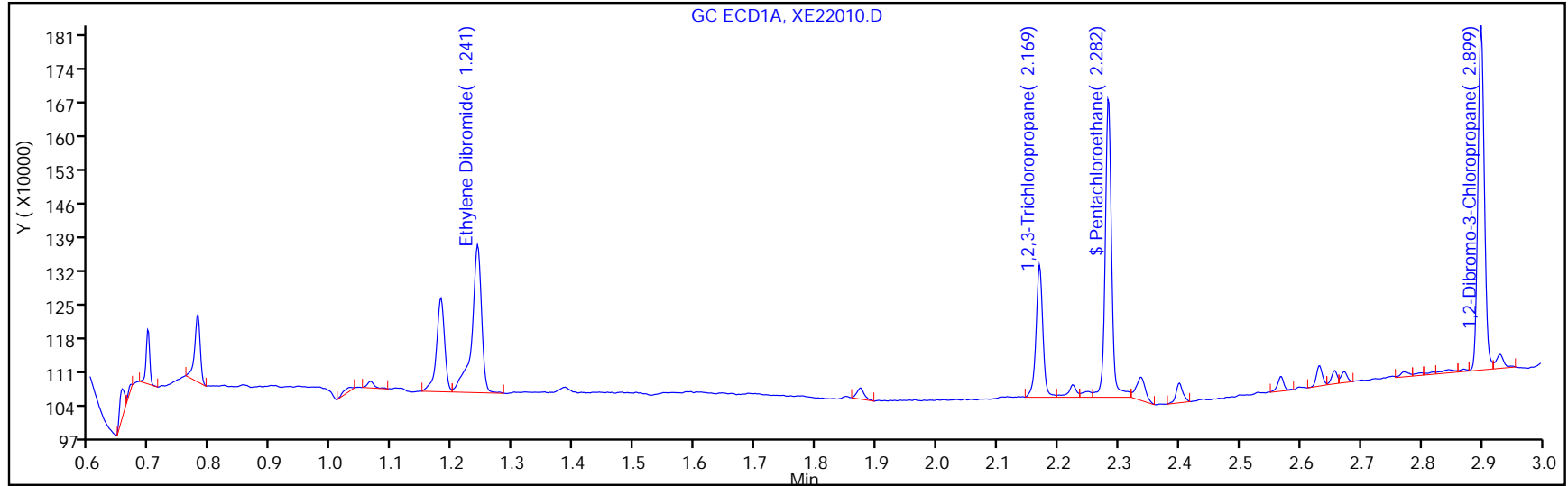
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

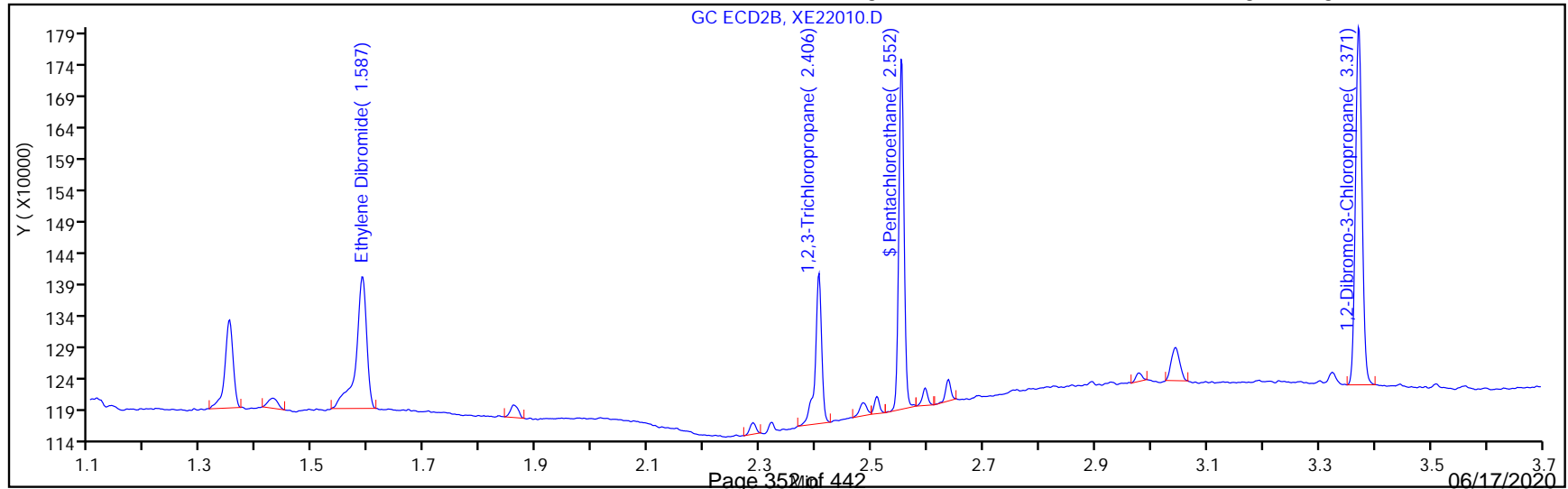
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Kirtland AFB BFF

Quarterly Report - April-June 2020

SWMUs ST-106/SS-111

H-2-2207

06/17/2020
September 2020

Report Date: 26-May-2020 09:42:09

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-May-2020 16:06:56 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:09 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.242	1.241	0.001	210710	0.6250	0.6542	
2	1.589	1.587	0.002	161561	0.6250	0.6126	
							RPD = 6.56

3 1,2,3-Trichloropropane

1	2.171	2.169	0.002	128805	3.13	3.17	
2	2.406	2.406	0.000	107999	3.13	3.14	
							RPD = 1.10

\$ 4 Pentachloroethane

1	2.284	2.282	0.002	254174	0.2500	0.2360	
2	2.554	2.552	0.002	210622	0.2500	0.2470	
							RPD = 4.54

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	317307	0.6250	0.6442	
2	3.372	3.371	0.001	277313	0.6250	0.6458	
							RPD = 0.24

Reagents:

504 WS #1_00168

Amount Added: 20.00

Units: uL

Report Date: 26-May-2020 09:42:09

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D

Injection Date: 22-May-2020 16:06:56

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

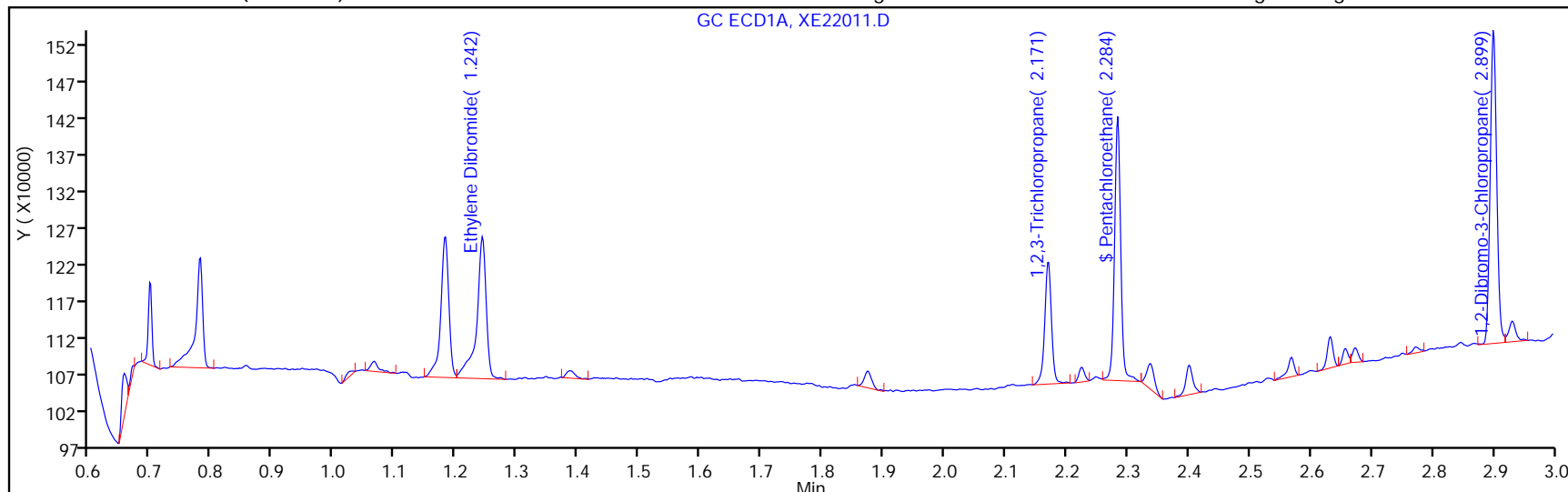
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

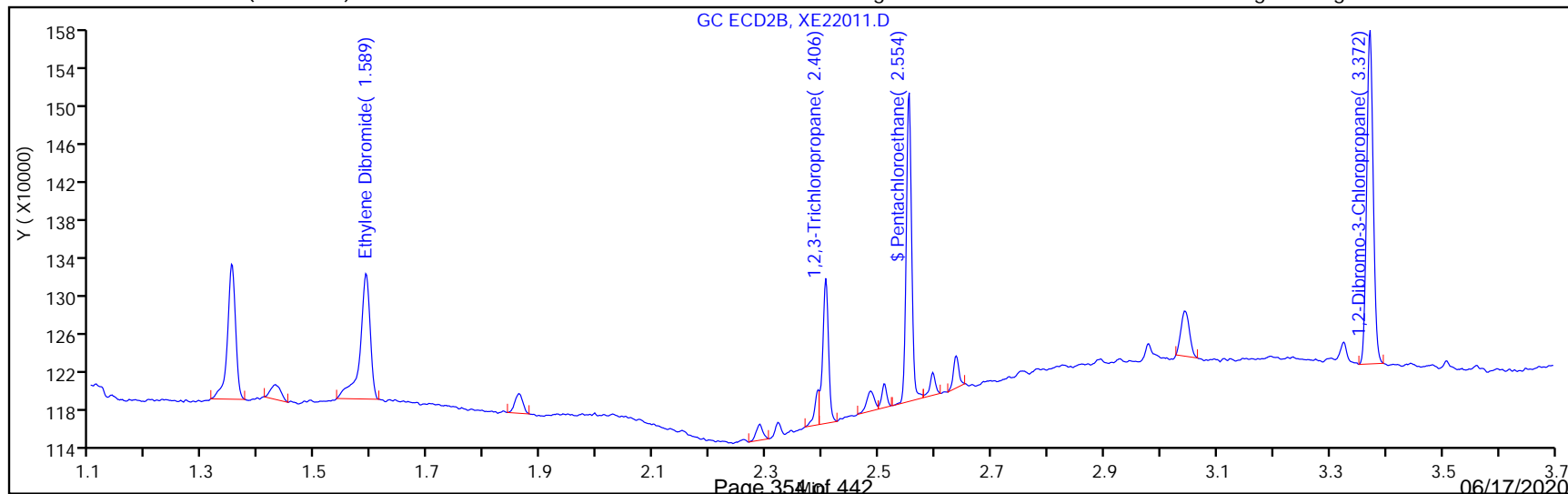
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-May-2020 16:16:45 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:11 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.243	1.241	0.002	103302	0.3125	0.3207	M
2	1.589	1.587	0.002	86794	0.3125	0.3291	M
							RPD = 2.59
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	67958	1.56	1.67	
2	2.406	2.406	0.000	60057	1.56	1.75	
							RPD = 4.15
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	141091	0.1250	0.1310	
2	2.553	2.552	0.001	105378	0.1250	0.1236	
							RPD = 5.84
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	167380	0.3125	0.3398	
2	3.371	3.371	0.000	143975	0.3125	0.3353	
							RPD = 1.35

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 10.00

Units: uL

Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D

Injection Date: 22-May-2020 16:16:45

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

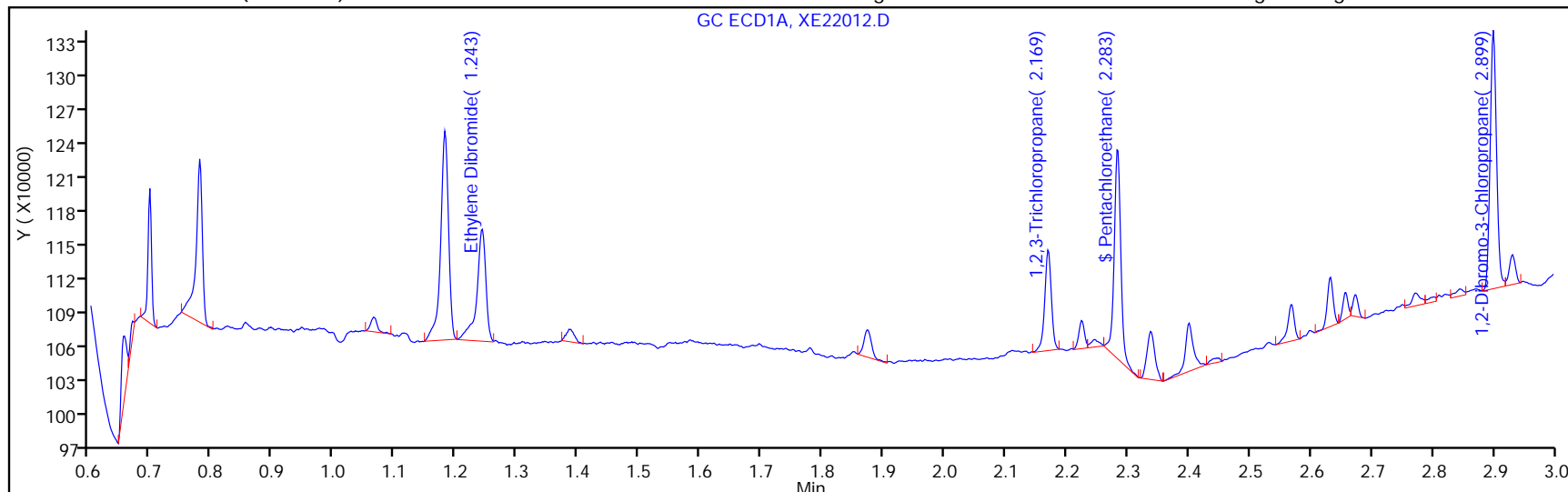
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

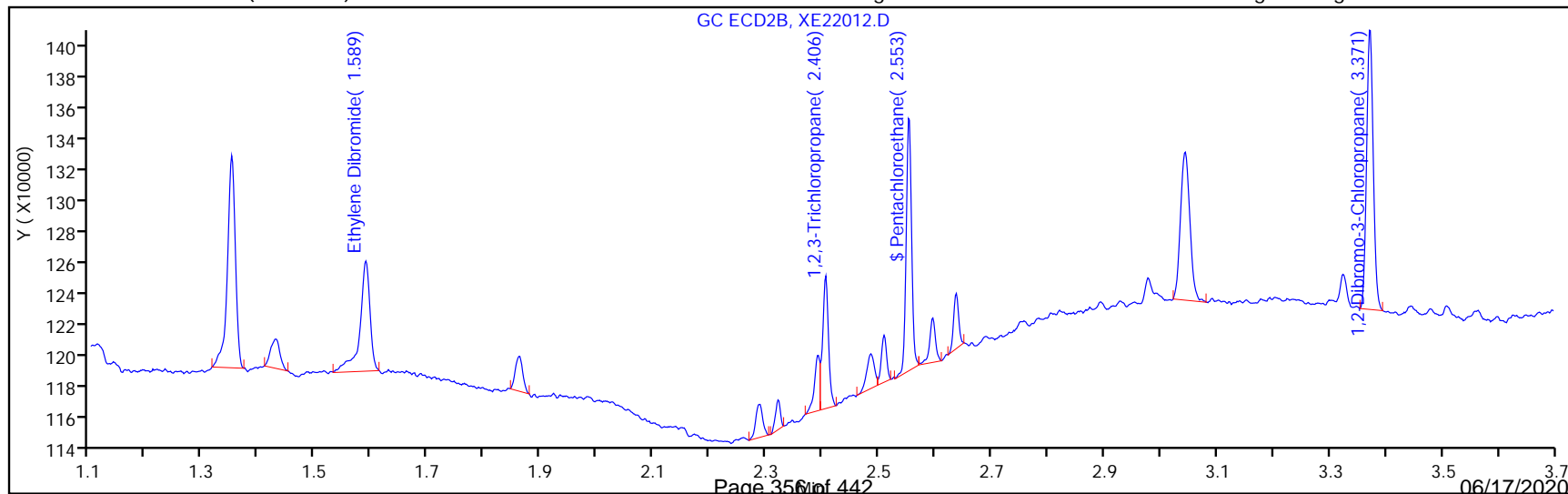
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

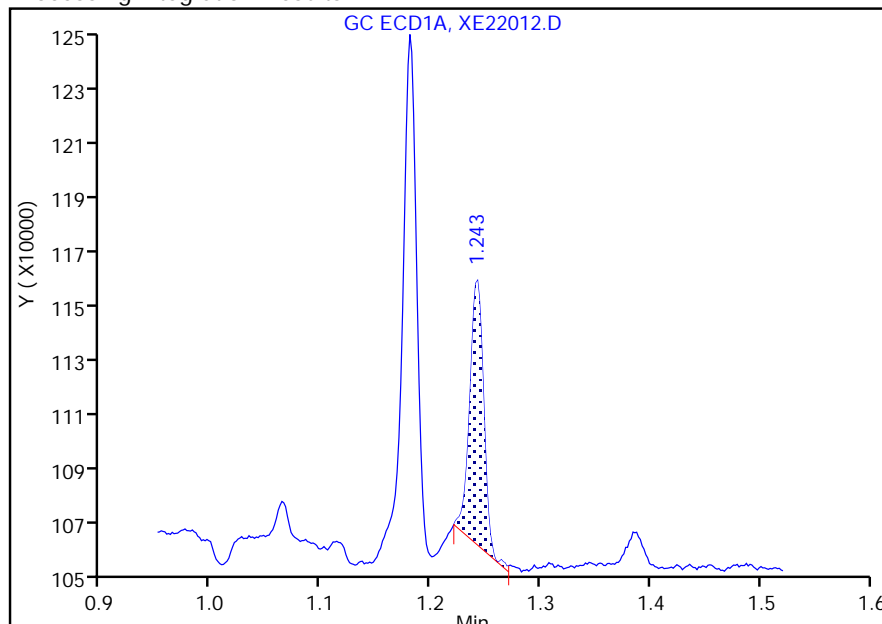
Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D
 Injection Date: 22-May-2020 16:16:45 Instrument ID: CSGX
 Lims ID: IC IV2
 Client ID:
 Operator ID: ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

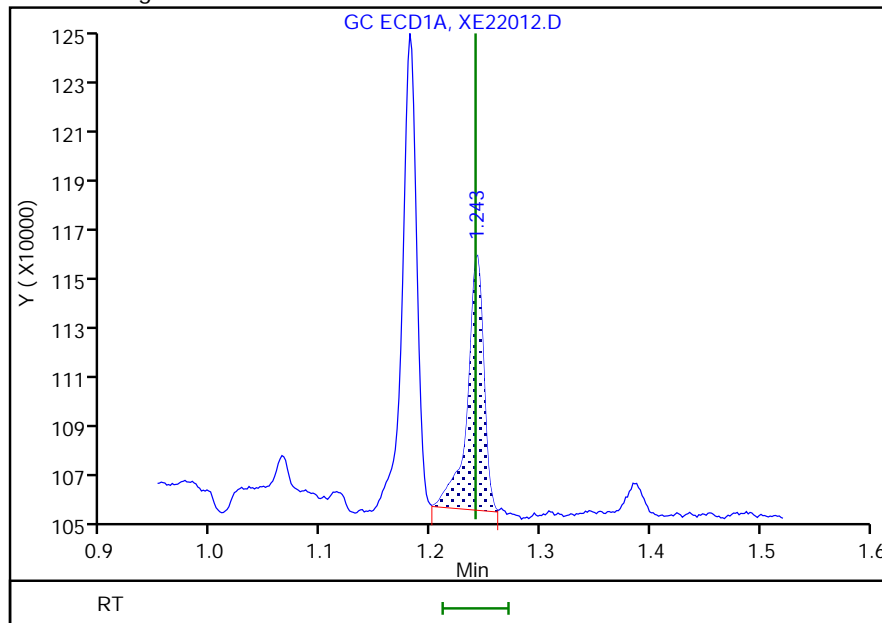
RT: 1.24
 Area: 82030
 Amount: 0.268891
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 103302
 Amount: 0.320711
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:33:52

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-May-2020 16:26:32 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:12 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:34:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.241	1.241	0.000	54720	0.1563	0.1699	M
2	1.587	1.587	0.000	44945	0.1563	0.1704	M
RPD = 0.32							
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	37234	0.7813	0.9177	
2	2.406	2.406	0.000	31009	0.7813	0.9015	
RPD = 1.78							
\$ 4 Pentachloroethane							M
1	2.284	2.282	0.002	78296	0.0625	0.0727	M
2	2.552	2.552	0.000	60380	0.0625	0.0708	
RPD = 2.64							
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	89107	0.1563	0.1809	
2	3.371	3.371	0.000	74754	0.1563	0.1741	
RPD = 3.85							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 5.00

Units: uL

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D

Injection Date: 22-May-2020 16:26:32

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 13

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

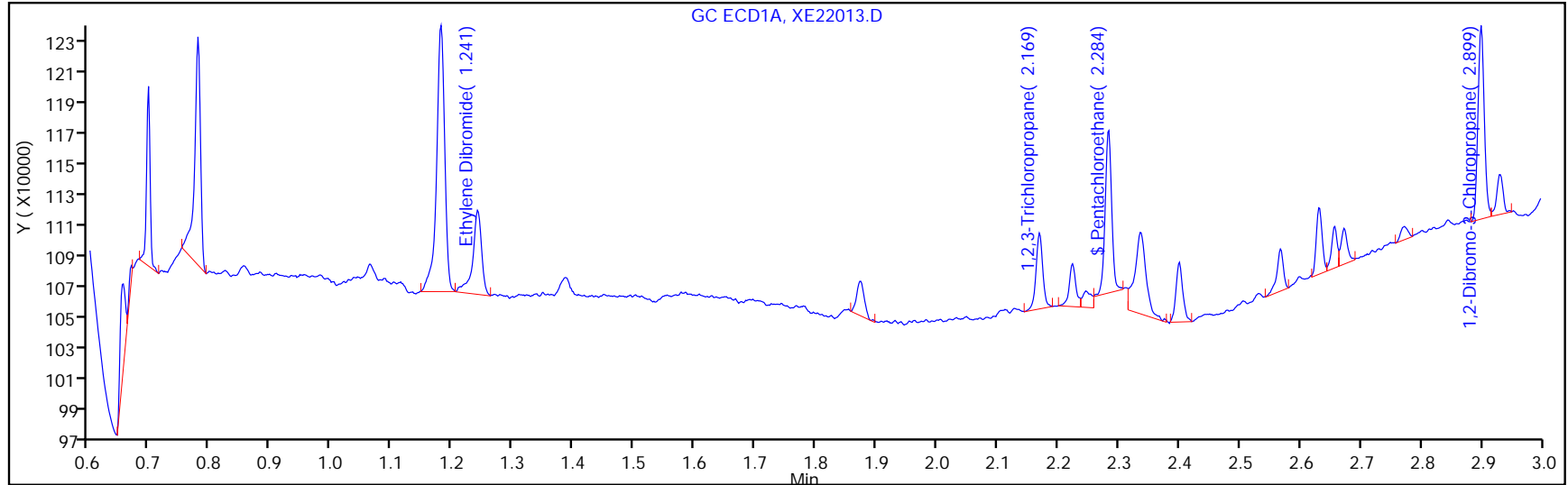
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

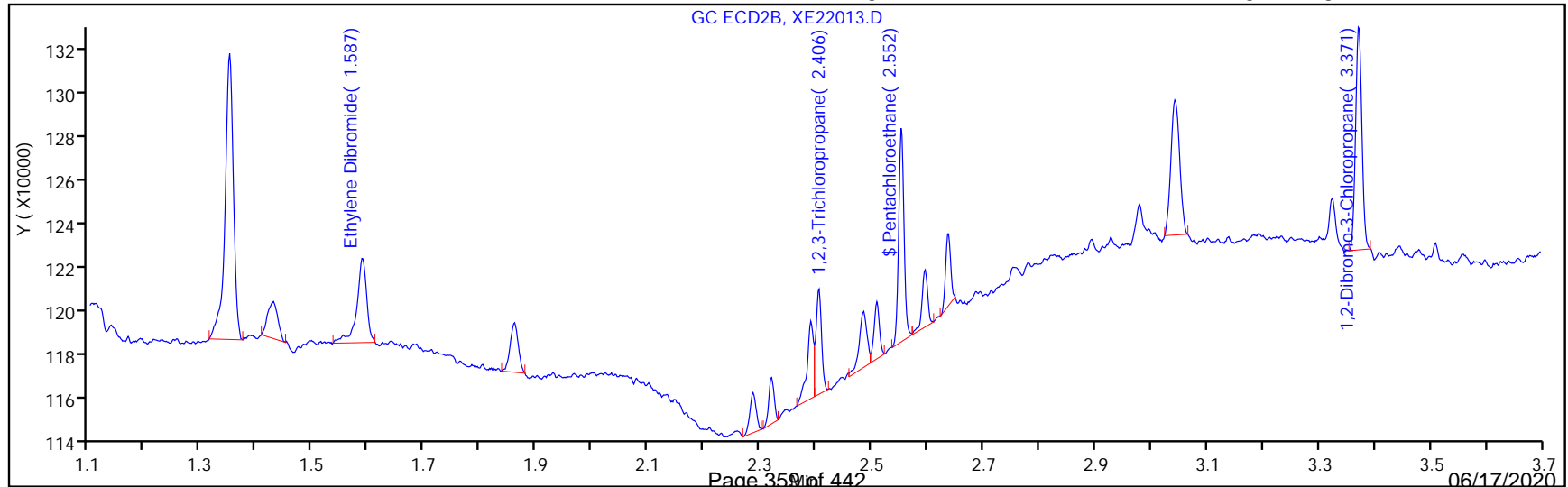
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

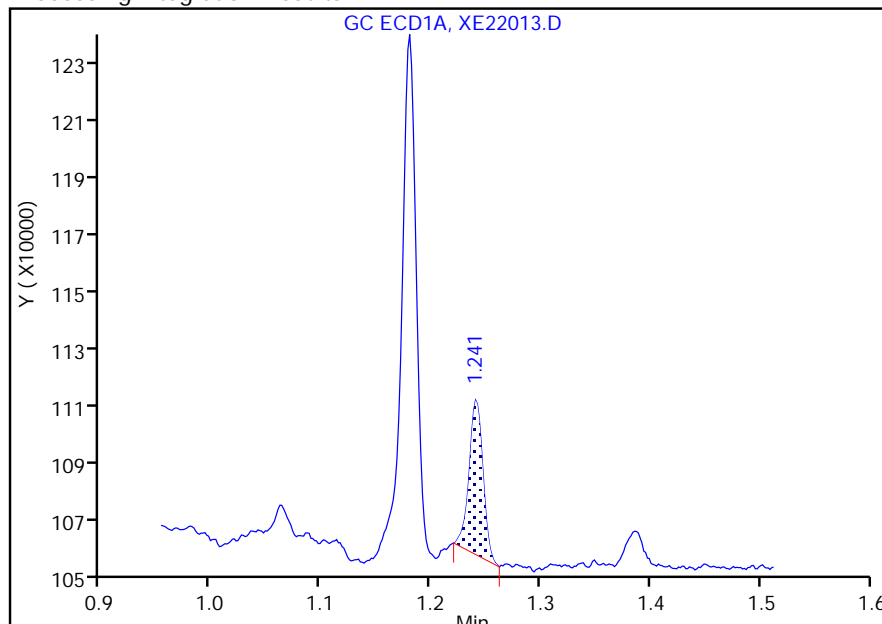
Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Injection Date: 22-May-2020 16:26:32 Instrument ID: CSGX
 Lims ID: IC IV1
 Client ID:
 Operator ID: ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

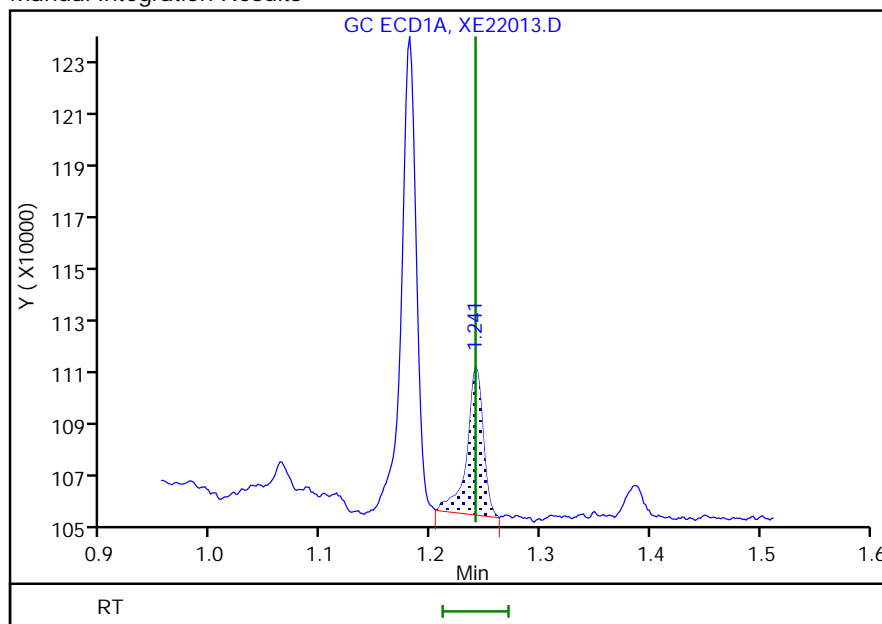
RT: 1.24
 Area: 44061
 Amount: 0.140511
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 54720
 Amount: 0.169883
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:34:12
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

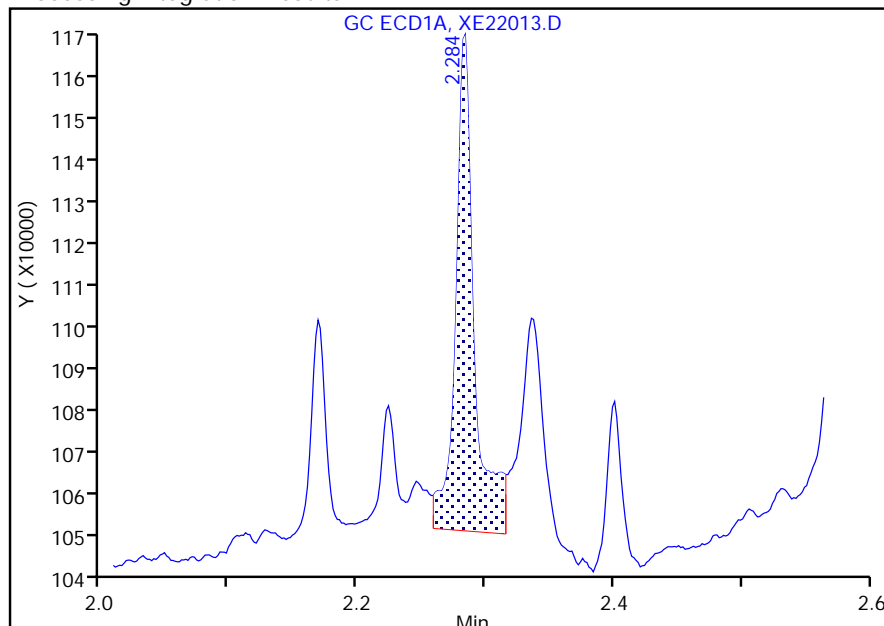
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D	Instrument ID:	CSGX
Injection Date:	22-May-2020 16:26:32	ALS Bottle#:	13
Lims ID:	IC IV1	Dil. Factor:	1.0000
Client ID:		Limit Group:	504.1
Operator ID:		Detector:	GC ECD1A
Injection Vol:	2.0 ul	Worklist Smp#:	13
Method:	EDBDBCP_CSGX		
Column:	CLPesticides I (0.25 mm)		

\$ 4 Pentachloroethane, CAS: 76-01-7

Signal: 1

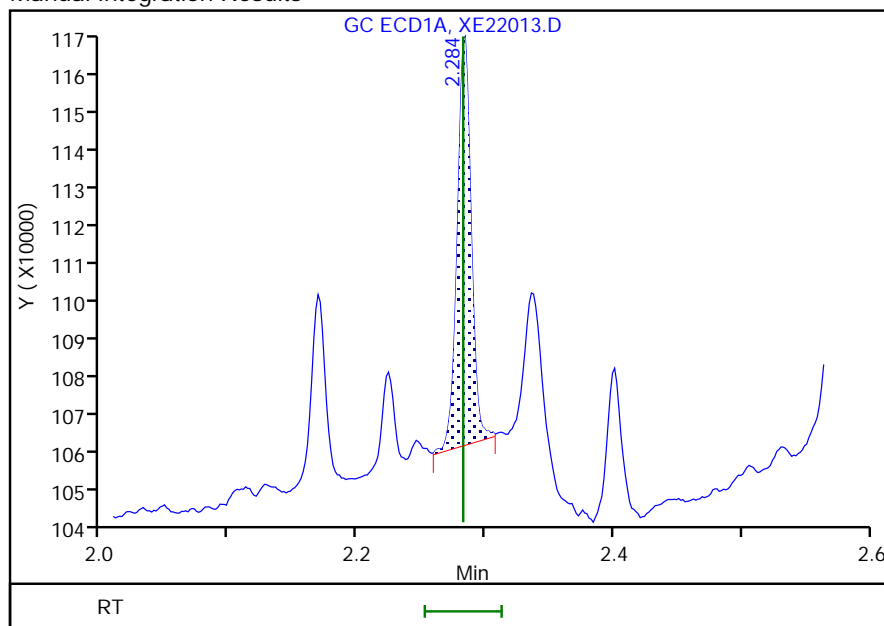
RT: 2.28
 Area: 114067
 Amount: 0.078379
 Amount Units: ng/ml

Processing Integration Results



RT: 2.28
 Area: 78296
 Amount: 0.072705
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:36:06

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75593

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.431						1.401 - 1.461	1.431
Ethylene Dibromide	1.587	1.589	1.589	1.587	1.588	1.588	1.589	1.589			1.557 - 1.617	1.588
1,2,3-Trichloropropane	2.406	2.406	2.406	2.406	2.404	2.405	2.406	2.406			2.376 - 2.436	2.406
1,2-Dibromo-3-Chloropropane	3.371	3.371	3.372	3.371	3.371	3.371	3.371	3.371			3.341 - 3.401	3.371
Pentachloroethane	2.552	2.553	2.554	2.552	2.553	2.553	2.553	2.554			2.522 - 2.582	2.553

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75593

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	470668				Ave		470667.857						20.0			
Ethylene Dibromide	287648 262967	277741 252942	258498 259362	254124 256426	Ave		263713.469			4.7			20.0			
1,2,3-Trichloropropane	39692 33771	38436 32162	34560 31422	34897 30238	Ave		34397.2708			9.6			20.0			
1,2-Dibromo-3-Chloropropane	478426 417258	460720 406508	443701 404666	427013 397152	Ave		429430.368			6.8			20.0			
Pentachloroethane	966080 827013	843024 853035	842488 825669	827989 836437	Ave		852716.781			5.5			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1 Analy Batch No.: 619731
 SDG No.: _____
 Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75593

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3294675					7.00
Ethylene Dibromide	Ave	44945 513788	86794 648406	161561 801332	277948	410886	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
1,2,3-Trichloropropane	Ave	31009 326647	60057 392780	107999 472469	190841	263838	0.781 10.2	1.56 12.5	3.13 15.6	5.47	7.81
1,2-Dibromo-3-Chloropropane	Ave	74754 825719	143975 1011664	277313 1241101	467045	651966	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
Pentachloroethane	Ave	60380 693091	105378 825669	210622 1045546	362245	516883	0.0625 0.813	0.125 1.00	0.250 1.25	0.438	0.625

Curve Type Legend:

Ave = Average

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 22-May-2020 15:18:09 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:00 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.242	1.241	0.001	942479	3.13	2.93	
2	1.589	1.587	0.002	801332	3.13	3.04	
						RPD = 3.78	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	592647	15.6	14.6	
2	2.406	2.406	0.000	472469	15.6	13.7	
						RPD = 6.15	
\$ 4 Pentachloroethane							
1	2.284	2.282	0.002	1302074	1.25	1.21	
2	2.554	2.552	0.002	1045546	1.25	1.23	
						RPD = 1.40	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1409051	3.13	2.86	
2	3.371	3.371	0.000	1241101	3.13	2.89	
						RPD = 1.02	

Reagents:

504 WS #1_00168 Amount Added: 100.00 Units: uL

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D

Injection Date: 22-May-2020 15:18:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

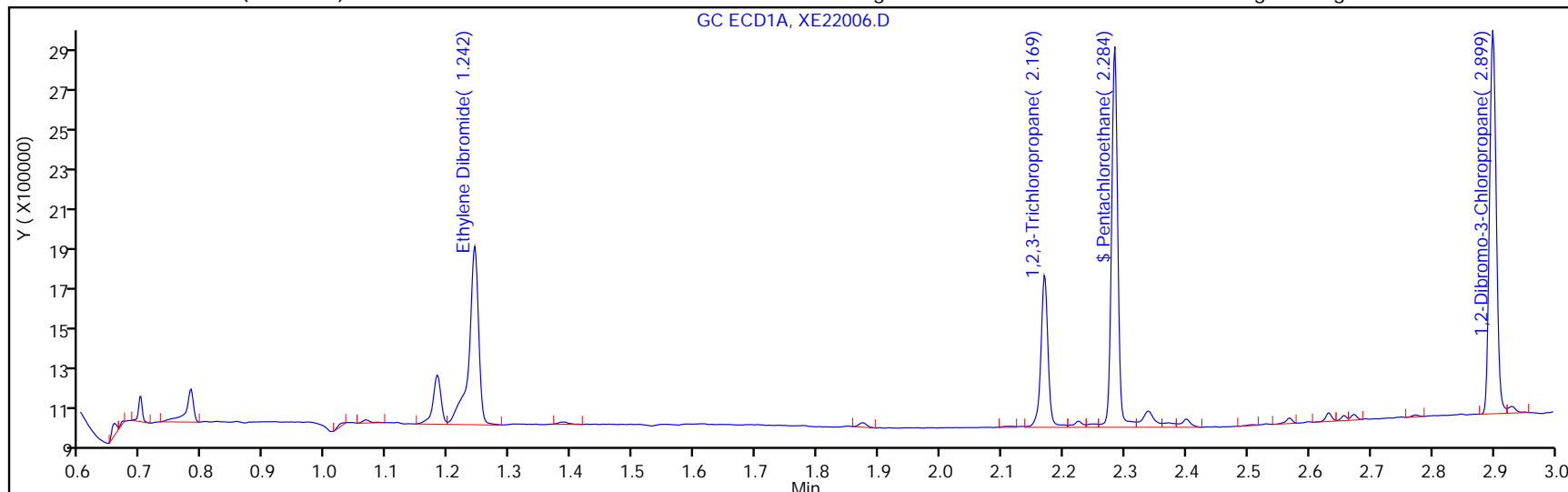
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

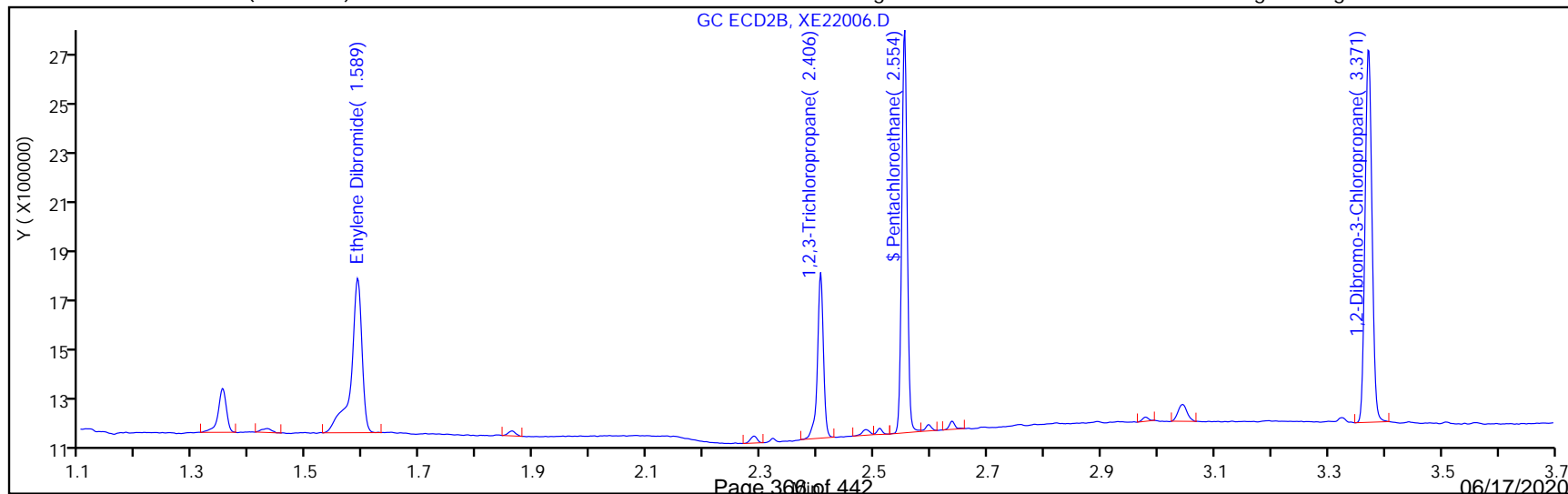
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-May-2020 15:27:51 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-007
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:04 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.243	1.241	0.002	758376	2.50	2.35	
2	1.589	1.587	0.002	648406	2.50	2.46	
						RPD = 4.33	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	469870	12.5	11.6	
2	2.406	2.406	0.000	392780	12.5	11.4	
						RPD = 1.41	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	1018140	1.00	0.9454	
2	2.553	2.552	0.001	825669	1.00	0.9683	
						RPD = 2.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1150666	2.50	2.34	
2	3.371	3.371	0.000	1011664	2.50	2.36	
						RPD = 0.84	

Reagents:

504 WS #1_00168 Amount Added: 80.00 Units: uL

Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D

Injection Date: 22-May-2020 15:27:51

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

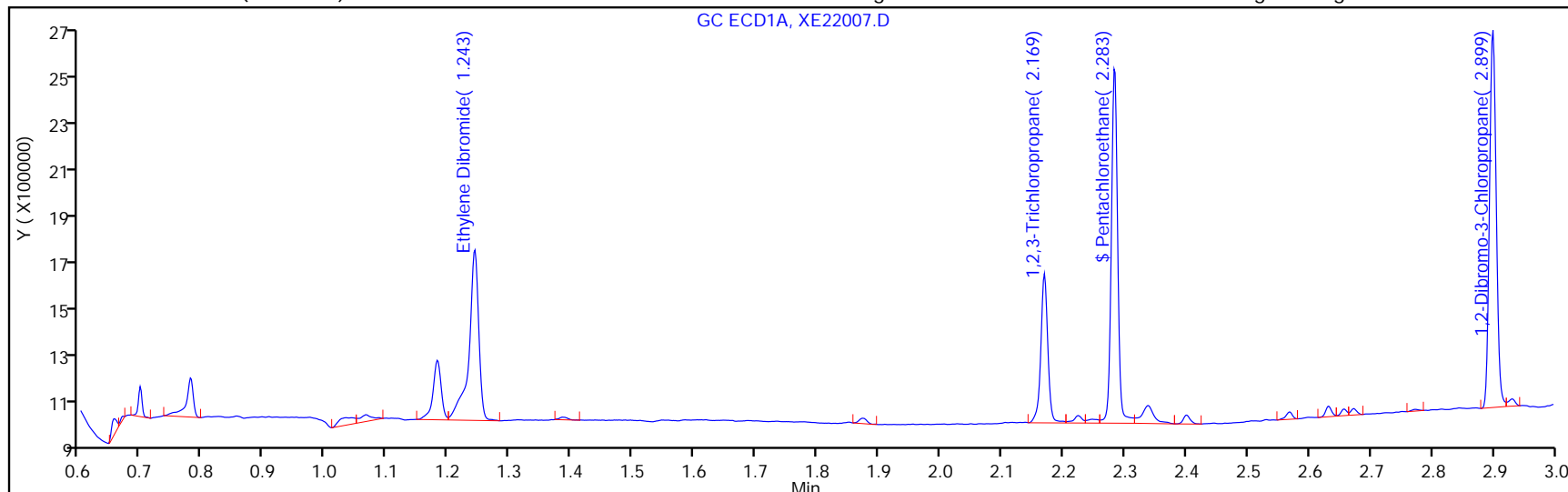
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

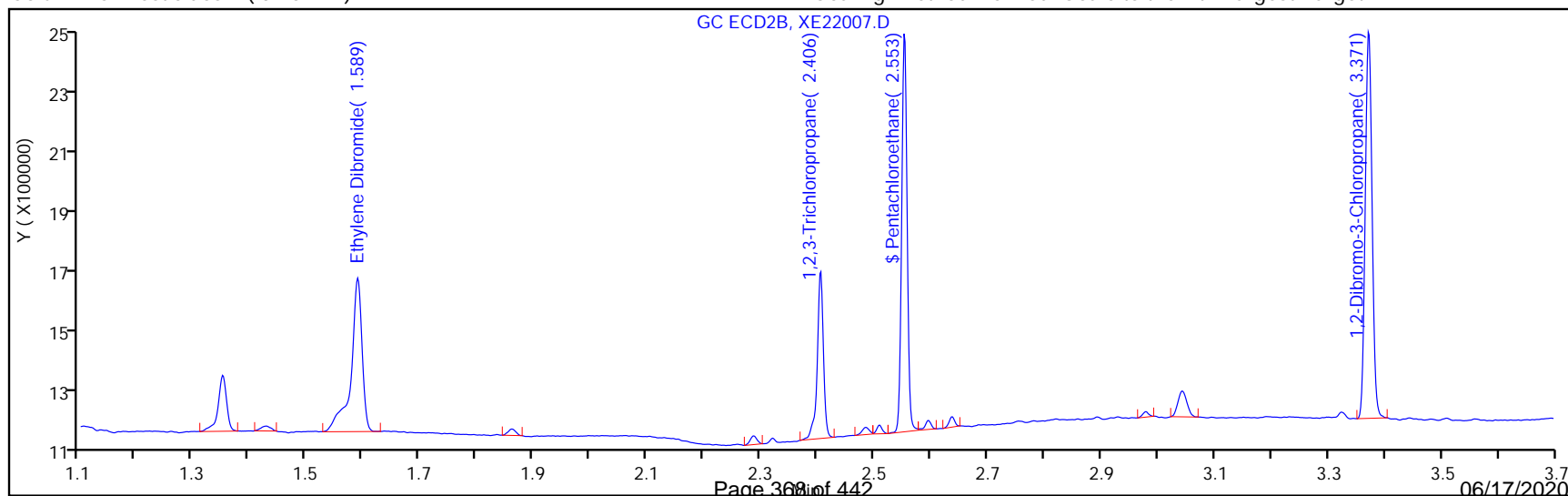
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-May-2020 15:37:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-008
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:06 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.241	-0.001	616986	2.03	1.92	
2	1.588	1.587	0.001	513788	2.03	1.95	
						RPD = 1.70	
3 1,2,3-Trichloropropane							
1	2.170	2.169	0.001	382572	10.2	9.43	
2	2.405	2.406	-0.001	326647	10.2	9.50	
						RPD = 0.71	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	860714	0.8125	0.7993	
2	2.553	2.552	0.001	693091	0.8125	0.8128	
						RPD = 1.68	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.899	0.001	925265	2.03	1.88	
2	3.371	3.371	0.000	825719	2.03	1.92	
						RPD = 2.33	

Reagents:

504 WS #1_00168

Amount Added: 65.00

Units: uL

Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D

Injection Date: 22-May-2020 15:37:38

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

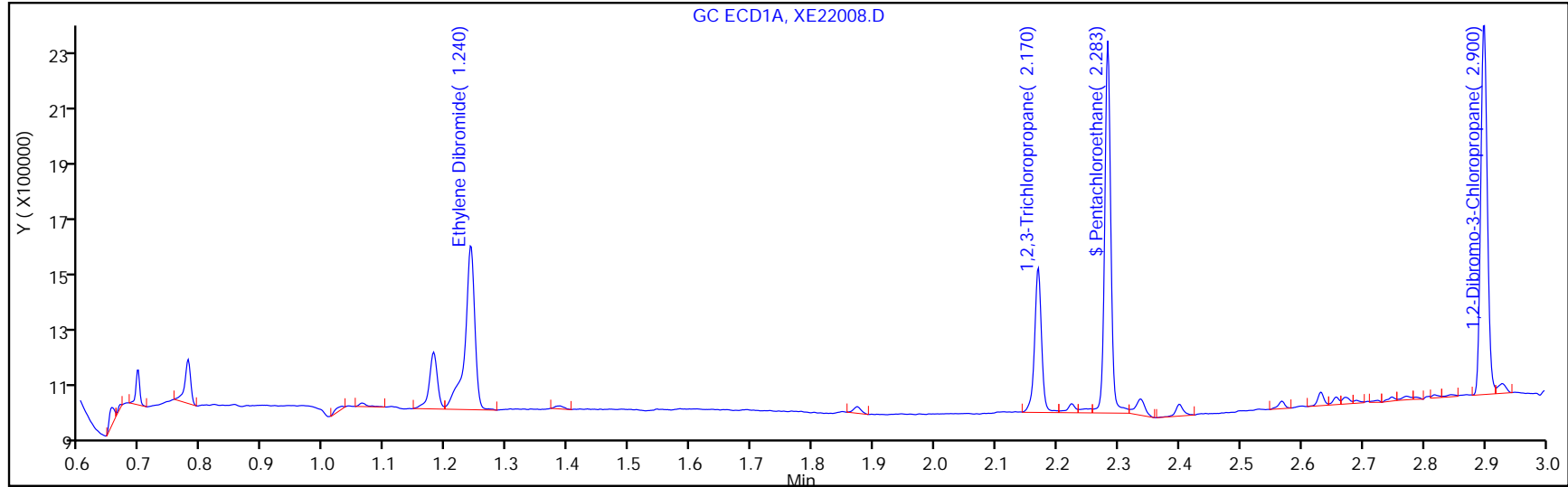
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

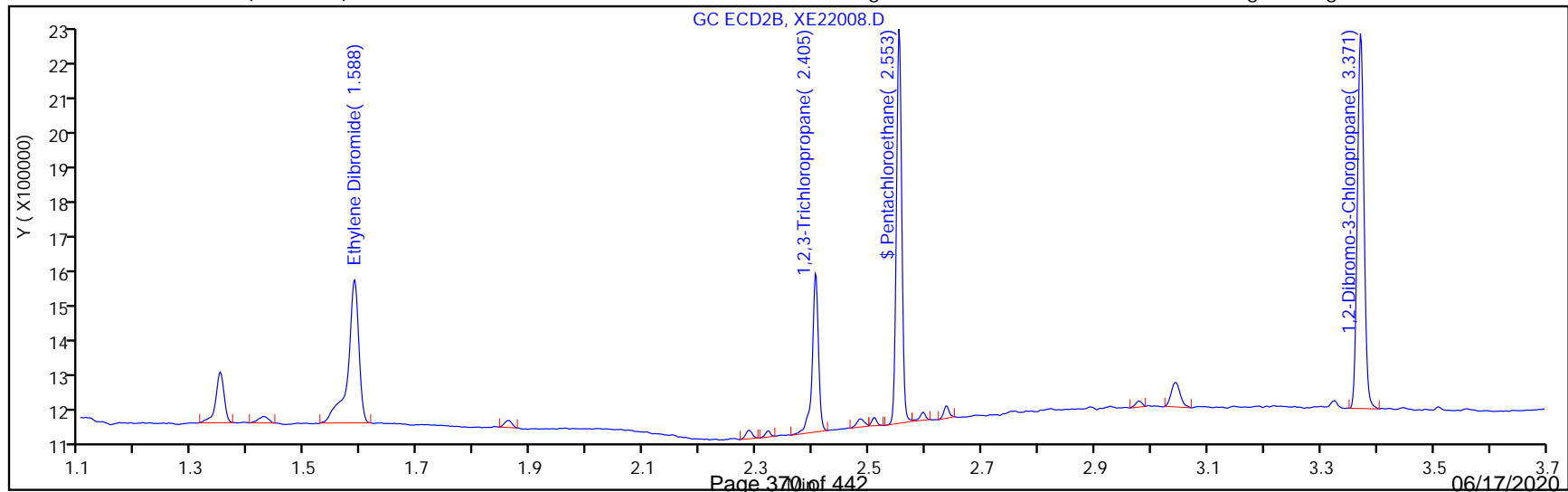
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-May-2020 15:47:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-009
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:07 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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1 Chlorodibromomethane							
1	1.063	1.062	0.001	3950087	7.00	7.00	
2	1.431	1.431	0.000	3294675	7.00	7.00	
						RPD = 0.00	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	522578	1.56	1.62	
2	1.588	1.587	0.001	410886	1.56	1.56	
						RPD = 4.04	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	308023	7.81	7.59	
2	2.404	2.406	-0.002	263838	7.81	7.67	
						RPD = 1.03	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	653683	0.6250	0.6070	
2	2.553	2.552	0.001	516883	0.6250	0.6062	
						RPD = 0.14	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	742389	1.56	1.51	
2	3.371	3.371	0.000	651966	1.56	1.52	
						RPD = 0.72	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D

Injection Date: 22-May-2020 15:47:22

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv5

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

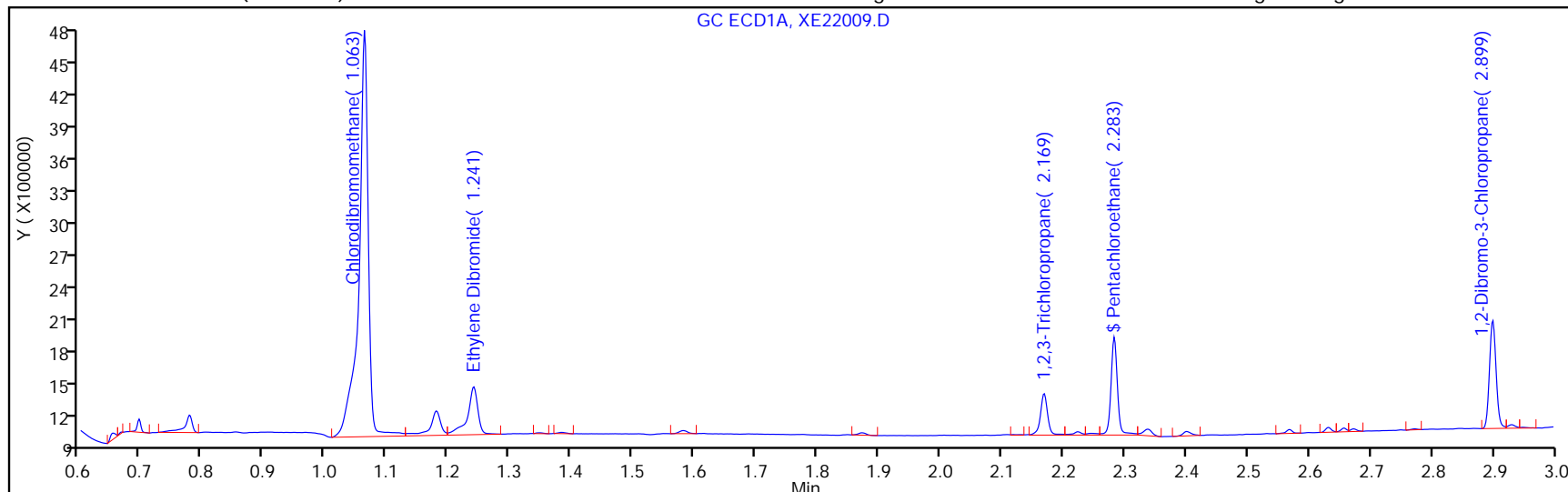
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

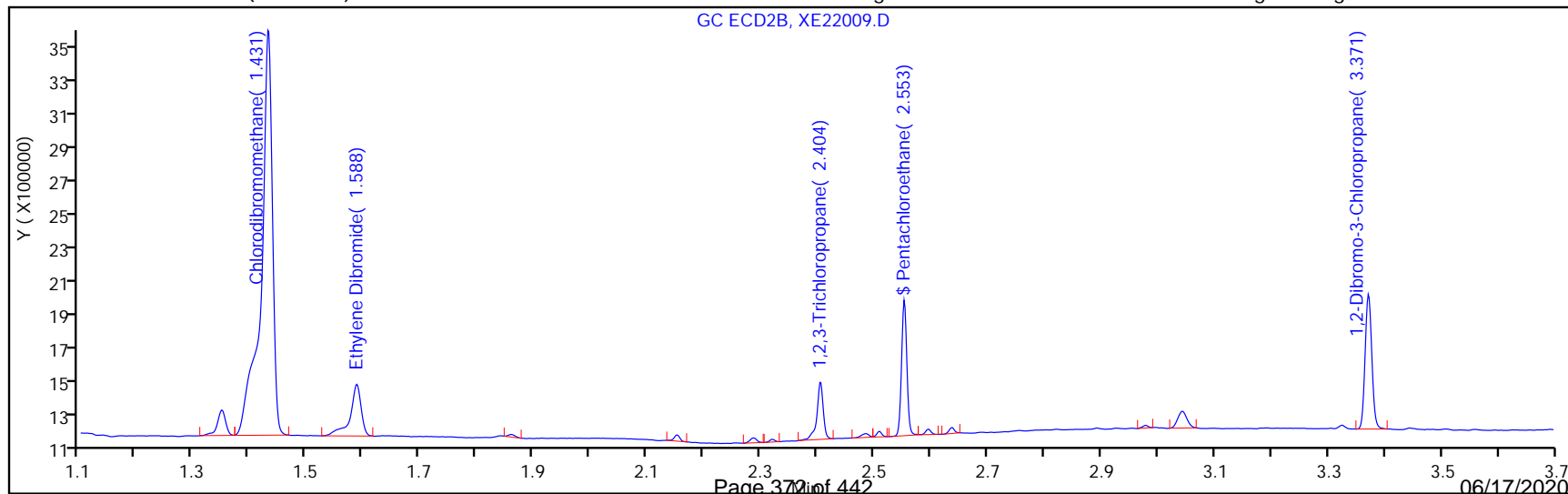
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-May-2020 15:57:09 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-010
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:08 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	345381	1.09	1.07	
2	1.587	1.587	0.000	277948	1.09	1.05	
						RPD = 1.72	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	216575	5.47	5.34	
2	2.406	2.406	0.000	190841	5.47	5.55	
						RPD = 3.86	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	460231	0.4375	0.4274	
2	2.552	2.552	0.000	362245	0.4375	0.4248	
						RPD = 0.60	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	530353	1.09	1.08	
2	3.371	3.371	0.000	467045	1.09	1.09	
						RPD = 1.00	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D

Injection Date: 22-May-2020 15:57:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

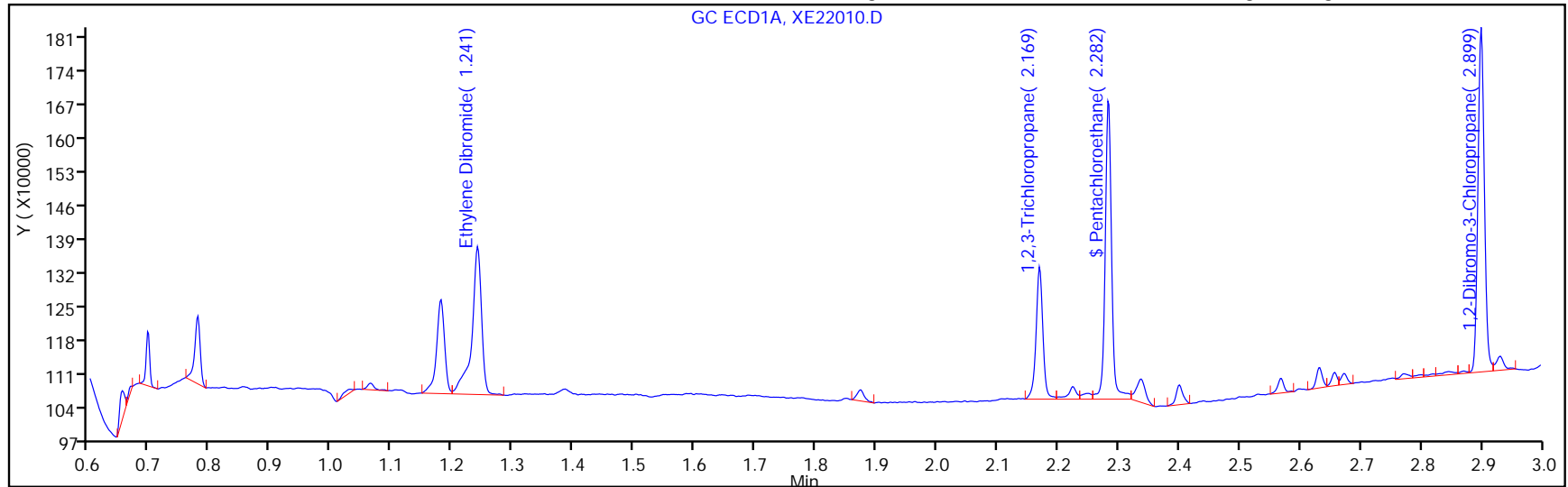
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

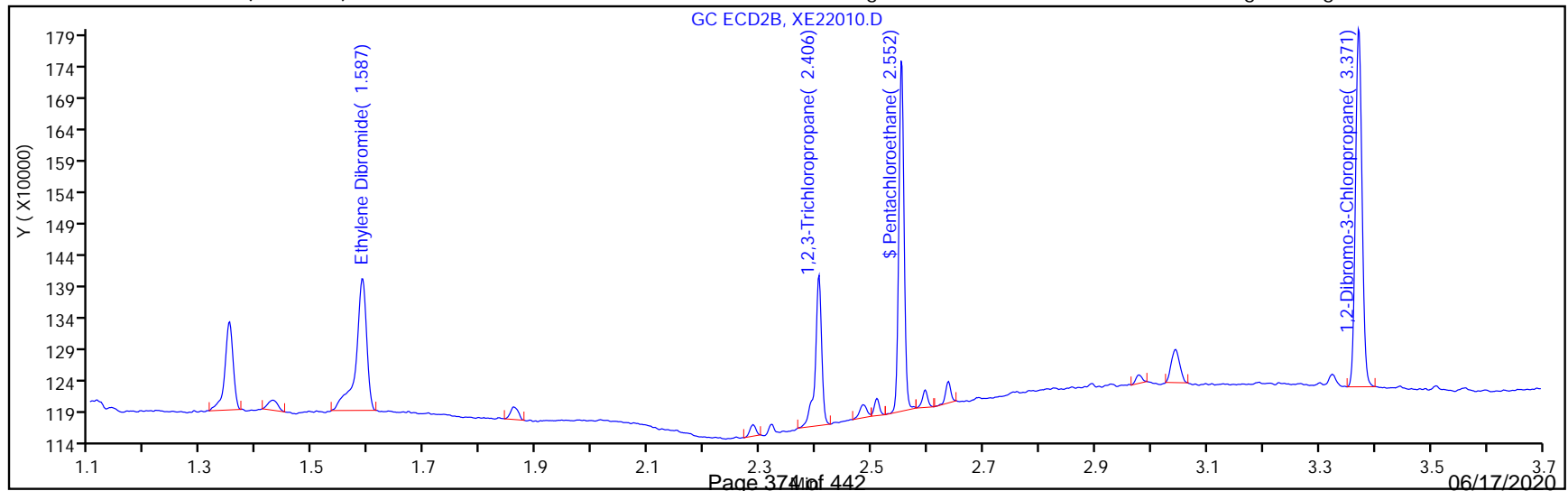
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:10

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-May-2020 16:06:56 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:09 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide

1	1.242	1.241	0.001	210710	0.6250	0.6542	
2	1.589	1.587	0.002	161561	0.6250	0.6126	
							RPD = 6.56

3 1,2,3-Trichloropropane

1	2.171	2.169	0.002	128805	3.13	3.17	
2	2.406	2.406	0.000	107999	3.13	3.14	
							RPD = 1.10

\$ 4 Pentachloroethane

1	2.284	2.282	0.002	254174	0.2500	0.2360	
2	2.554	2.552	0.002	210622	0.2500	0.2470	
							RPD = 4.54

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	317307	0.6250	0.6442	
2	3.372	3.371	0.001	277313	0.6250	0.6458	
							RPD = 0.24

Reagents:

504 WS #1_00168

Amount Added: 20.00

Units: uL

Report Date: 26-May-2020 09:42:10

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D

Injection Date: 22-May-2020 16:06:56

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

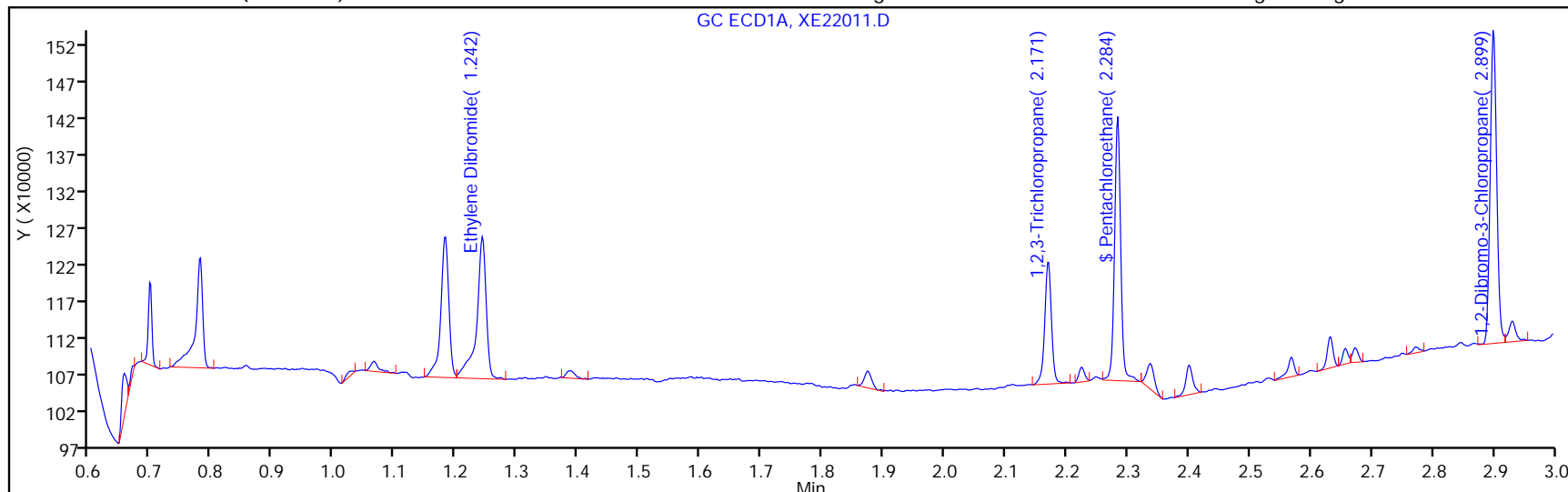
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

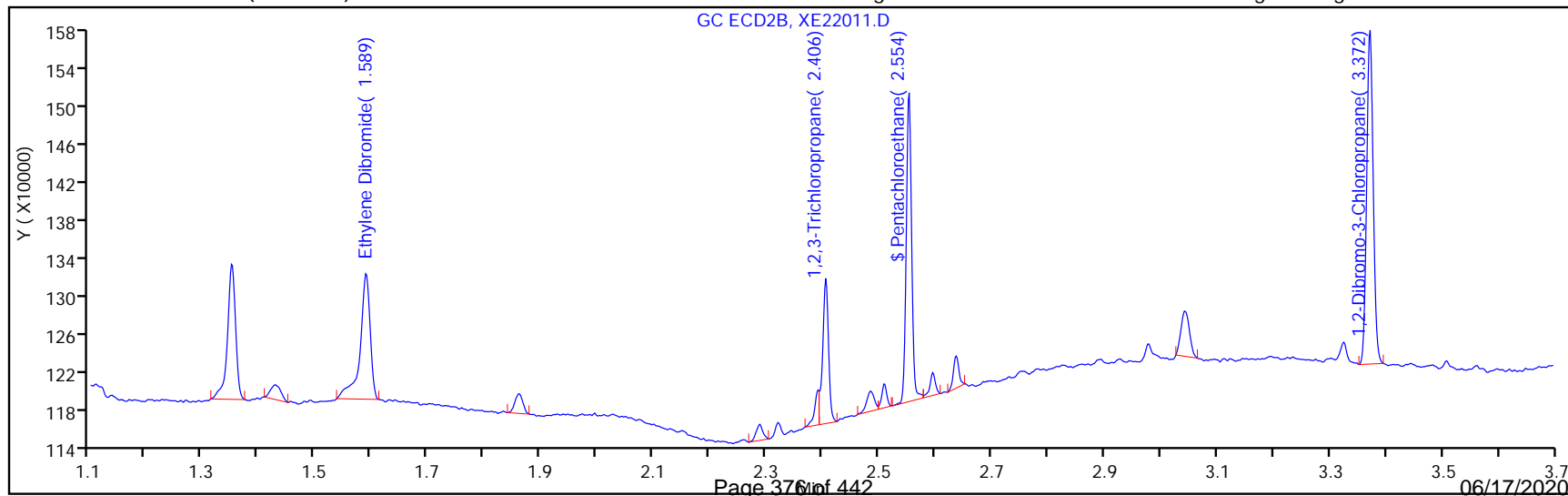
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-May-2020 16:16:45 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:11 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.243	1.241	0.002	103302	0.3125	0.3207	M
2	1.589	1.587	0.002	86794	0.3125	0.3291	M
							RPD = 2.59
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	67958	1.56	1.67	
2	2.406	2.406	0.000	60057	1.56	1.75	
							RPD = 4.15
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	141091	0.1250	0.1310	
2	2.553	2.552	0.001	105378	0.1250	0.1236	
							RPD = 5.84
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	167380	0.3125	0.3398	
2	3.371	3.371	0.000	143975	0.3125	0.3353	
							RPD = 1.35

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 10.00

Units: uL

Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D

Injection Date: 22-May-2020 16:16:45

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

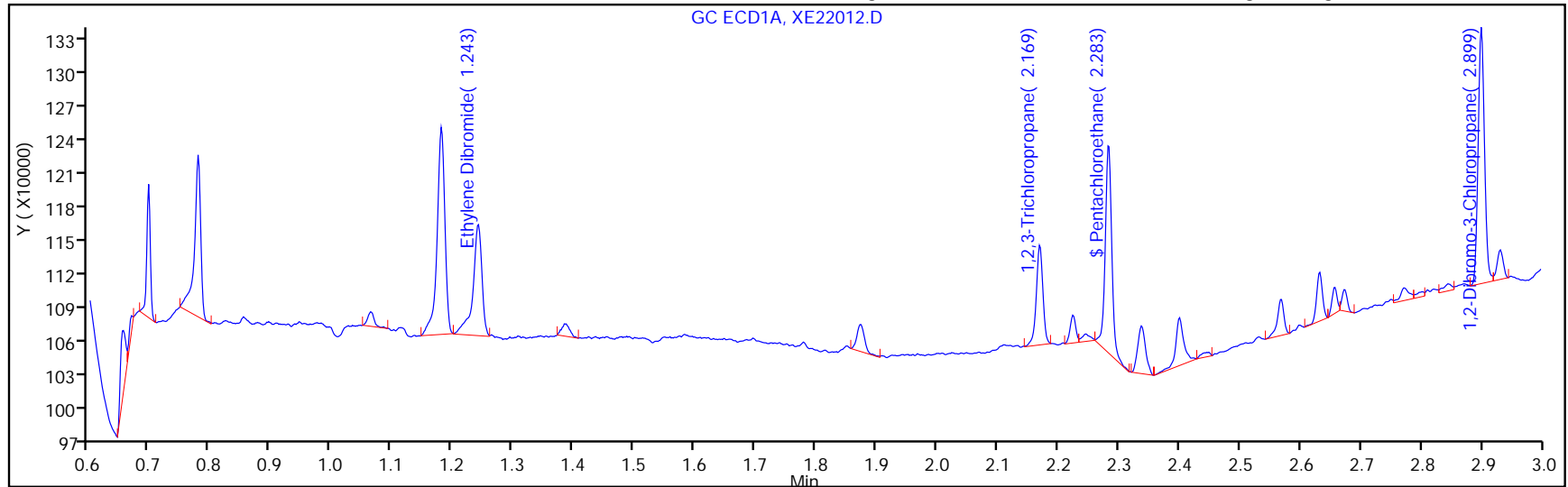
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

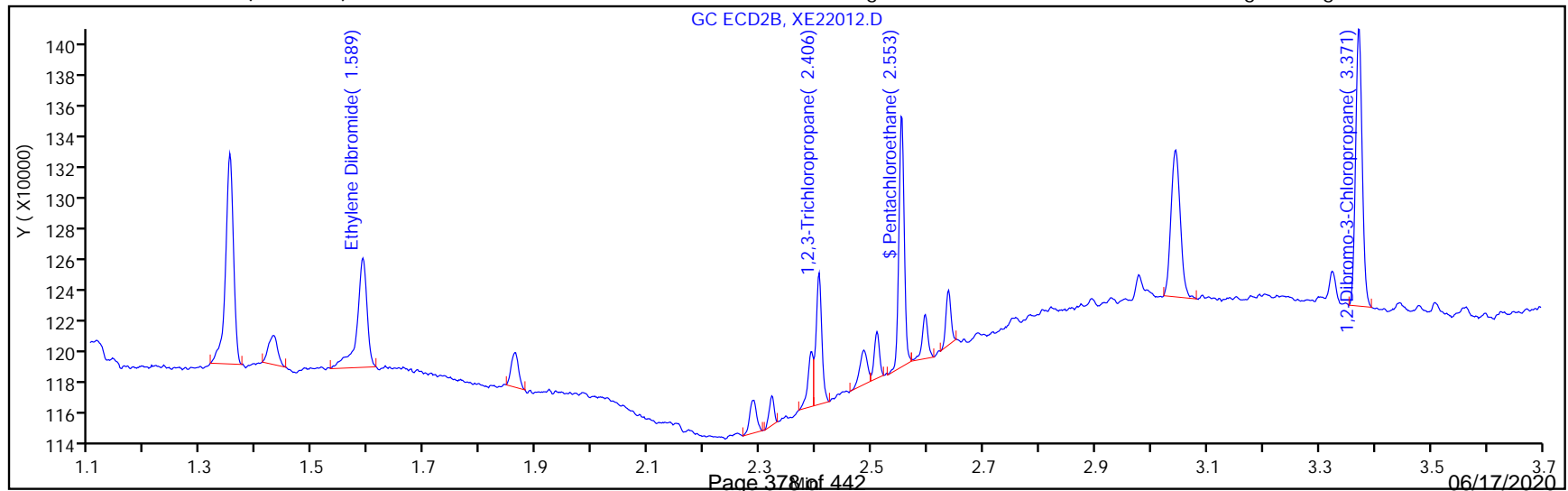
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

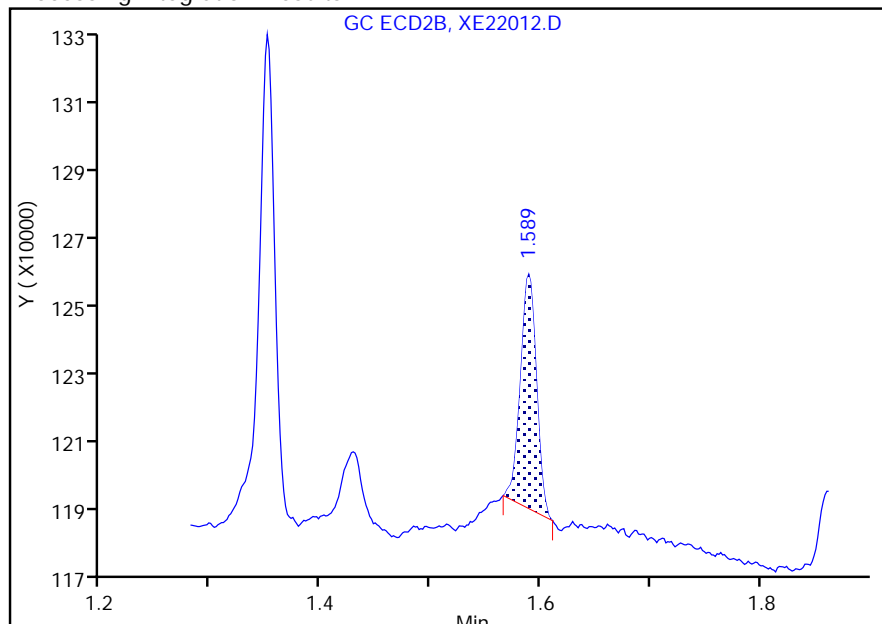
Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D
 Injection Date: 22-May-2020 16:16:45 Instrument ID: CSGX
 Lims ID: IC IV2
 Client ID:
 Operator ID: ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides II (0.25 mm) Detector: GC ECD2B

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

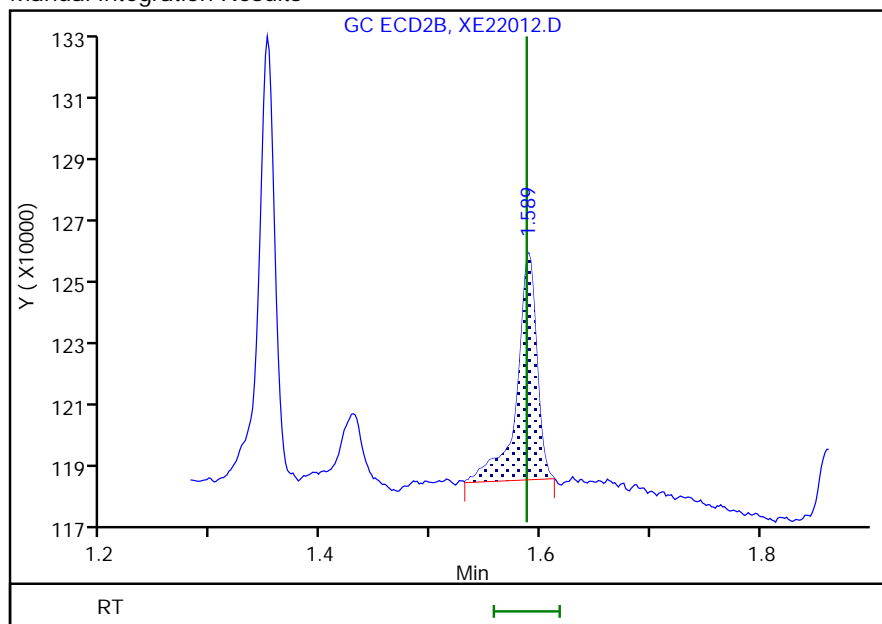
RT: 1.59
 Area: 64740
 Amount: 0.262787
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 86794
 Amount: 0.329122
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:33:41
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-May-2020 16:26:32 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:12 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:34:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.241	1.241	0.000	54720	0.1563	0.1699	M
2	1.587	1.587	0.000	44945	0.1563	0.1704	M
							RPD = 0.32
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	37234	0.7813	0.9177	
2	2.406	2.406	0.000	31009	0.7813	0.9015	
							RPD = 1.78
\$ 4 Pentachloroethane							M
1	2.284	2.282	0.002	78296	0.0625	0.0727	M
2	2.552	2.552	0.000	60380	0.0625	0.0708	
							RPD = 2.64
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	89107	0.1563	0.1809	
2	3.371	3.371	0.000	74754	0.1563	0.1741	
							RPD = 3.85

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 5.00

Units: uL

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D

Injection Date: 22-May-2020 16:26:32

Instrument ID: CSGX

Operator ID:
Worklist Smp#: 13

Lims ID: IC Iv1

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

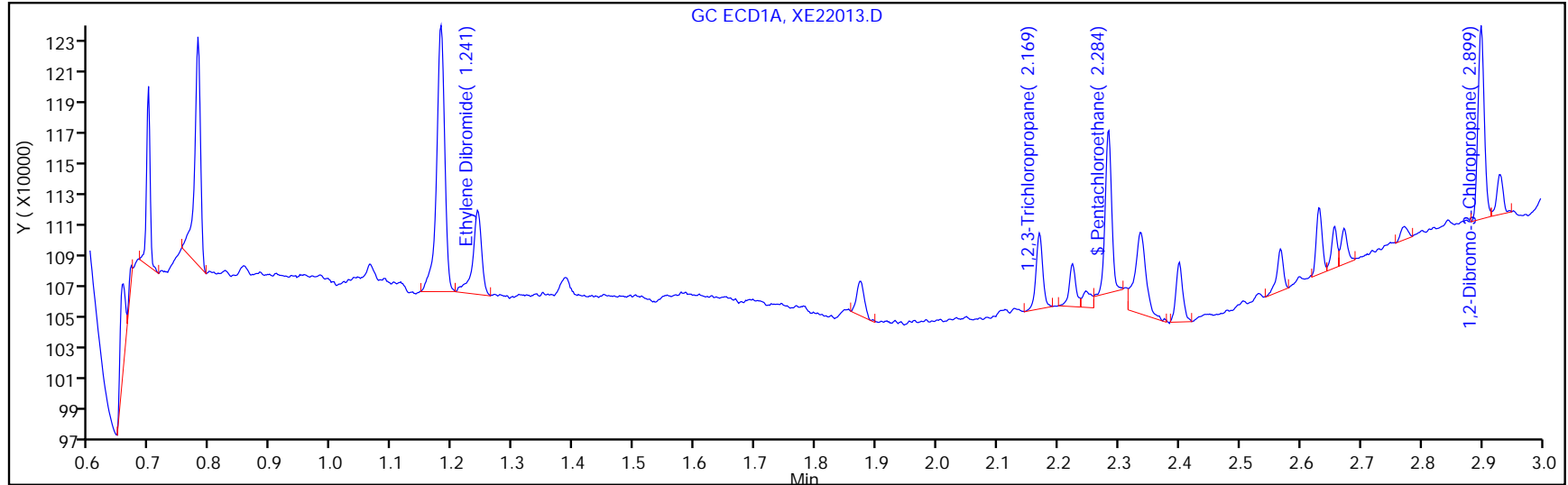
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

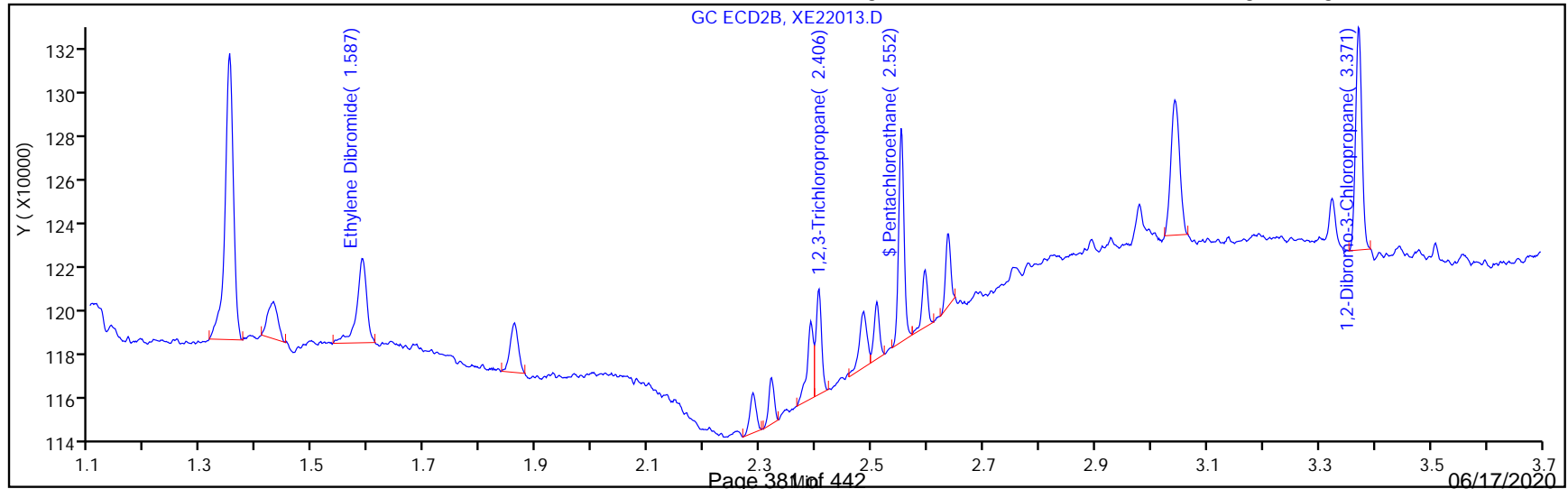
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

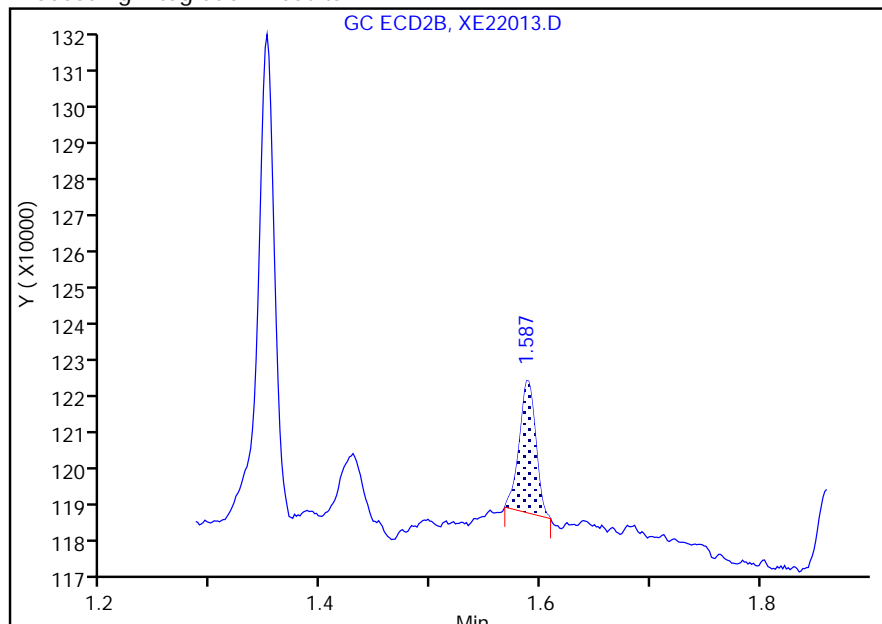
Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Injection Date: 22-May-2020 16:26:32 Instrument ID: CSGX
 Lims ID: IC IV1
 Client ID:
 Operator ID: ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides II (0.25 mm) Detector: GC ECD2B

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

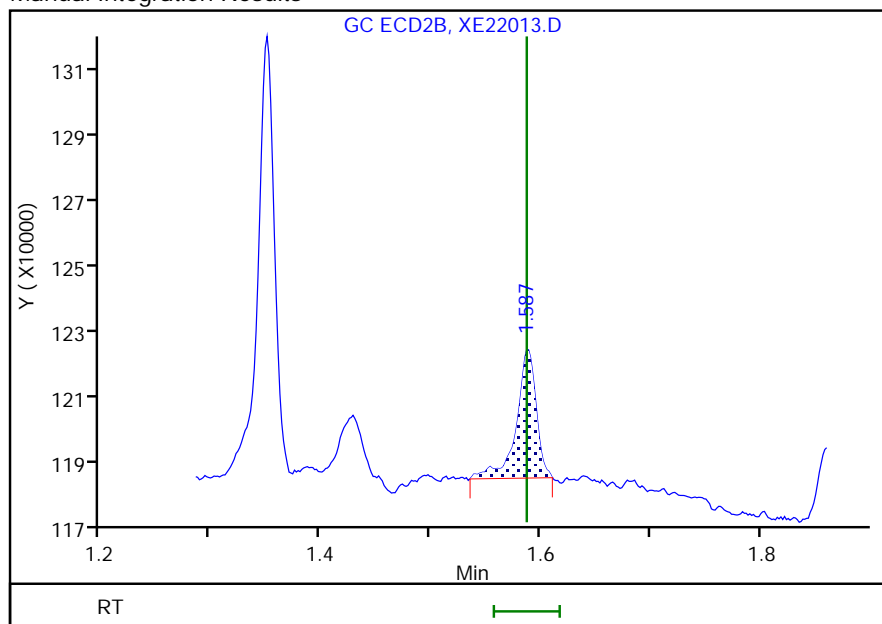
RT: 1.59
 Area: 34279
 Amount: 0.134332
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 44945
 Amount: 0.170431
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:34:22
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322103	302471		1.64	1.75	-6.1	30.0
1,2,3-Trichloropropane	Ave	40573	39818		8.59	8.75	-1.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	492537	484055		1.72	1.75	-1.7	30.0
Pentachloroethane	Ave	1076894	992951		0.403	0.438	-7.8	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-May-2020 16:36:25 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 10:14:46 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canady Date: 26-May-2020 09:37:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.240	1.241	-0.001	529325	1.75	1.64	
2	1.587	1.587	0.000	442418	1.75	1.68	
							RPD = 2.07

3 1,2,3-Trichloropropane

1	2.169	2.169	0.000	348410	8.75	8.59	
2	2.405	2.406	-0.001	278027	8.75	8.08	
							RPD = 6.05

\$ 4 Pentachloroethane

1	2.284	2.282	0.002	434416	0.4375	0.4034	M
2	2.552	2.552	0.000	371043	0.4375	0.4351	
							RPD = 7.57

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	847096	1.75	1.72	
2	3.372	3.371	0.001	739379	1.75	1.72	
							RPD = 0.11

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 Spike_00156 Amount Added: 35.00 Units: uL
 504_NewSurr_00126 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D

Injection Date: 22-May-2020 16:36:25

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

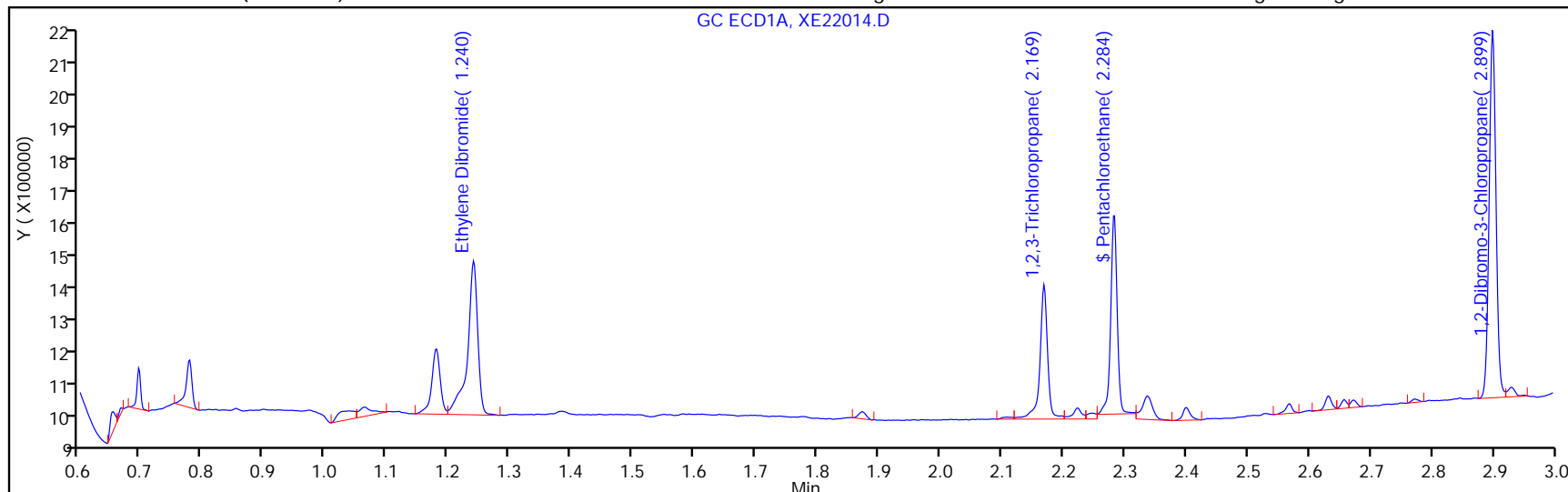
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

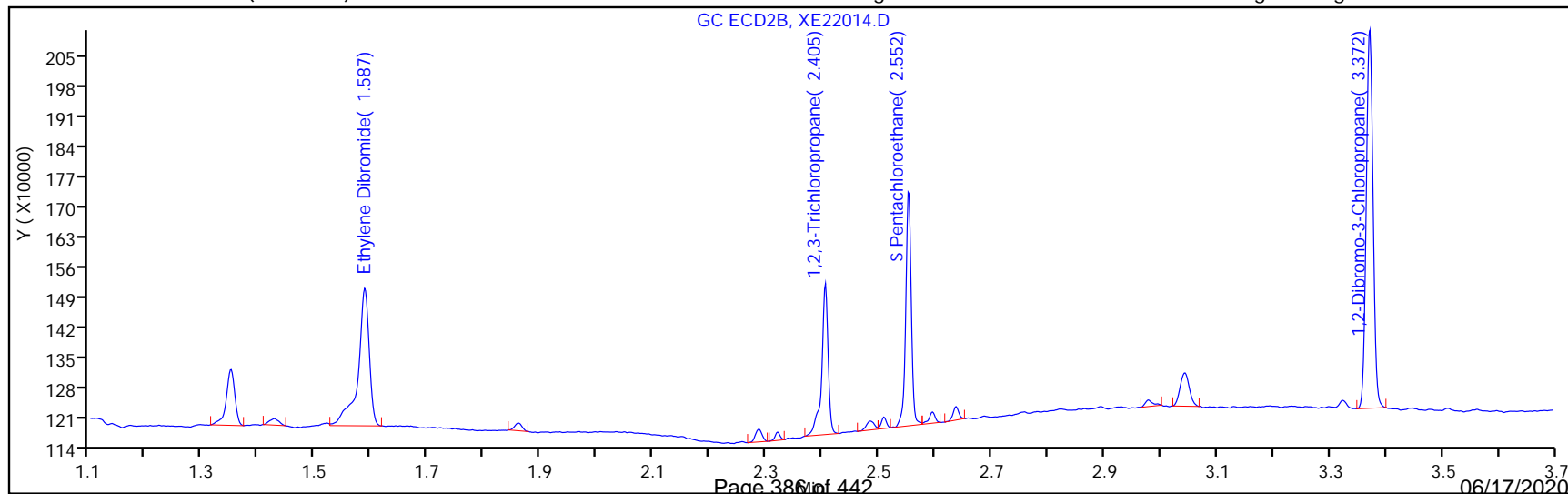
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

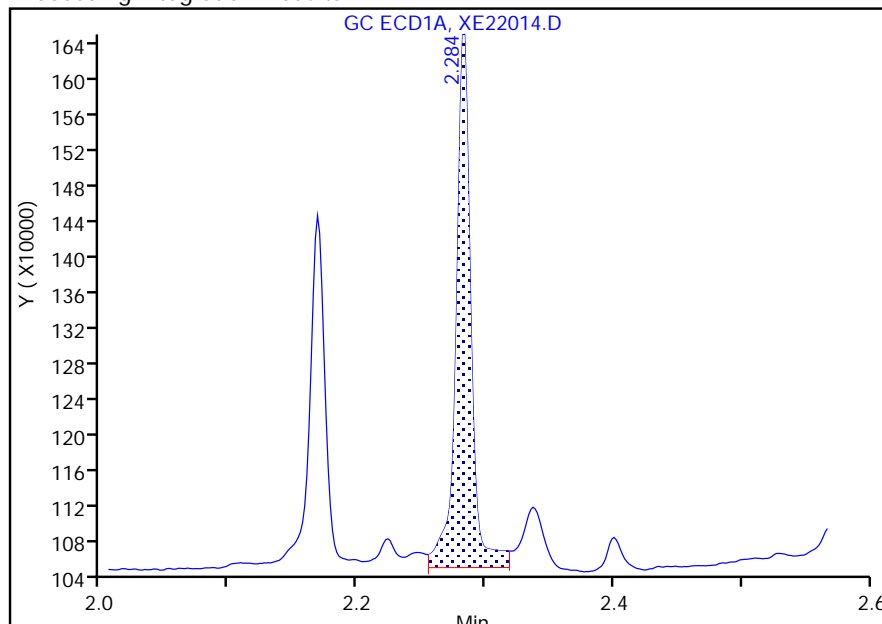
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D	Instrument ID:	CSGX
Injection Date:	22-May-2020 16:36:25	ALS Bottle#:	14
Lims ID:	ICV	Dil. Factor:	1.0000
Client ID:		Limit Group:	504.1
Operator ID:		Detector:	GC ECD1A
Injection Vol:	2.0 ul	Worklist Smp#:	14
Method:	EDBDBCP_CSGX		
Column:	CLPesticides I (0.25 mm)		

\$ 4 Pentachloroethane, CAS: 76-01-7

Signal: 1

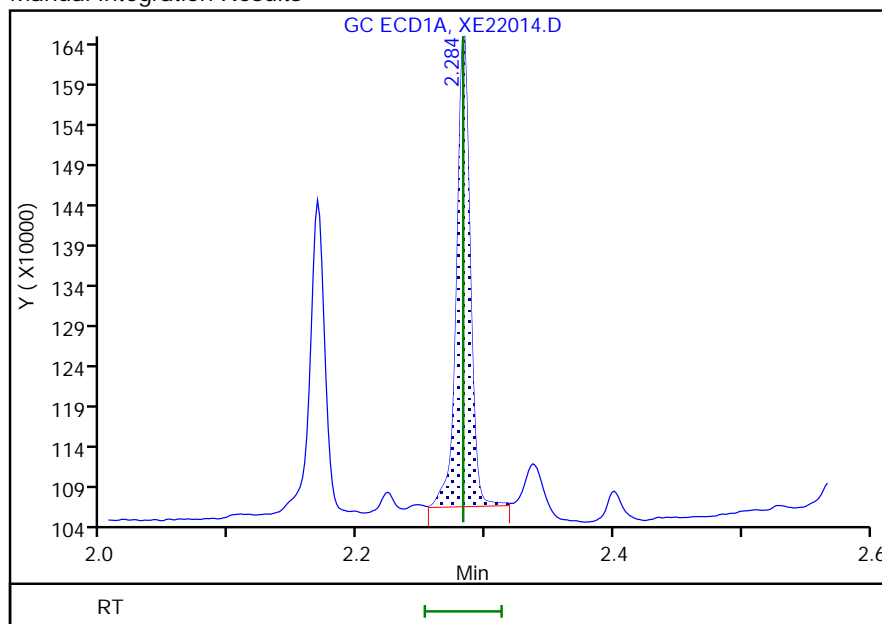
RT: 2.28
 Area: 490185
 Amount: 0.455184
 Amount Units: ng/ml

Processing Integration Results



RT: 2.28
 Area: 434416
 Amount: 0.403397
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:37:01

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263713	252810		1.68	1.75	-4.1	30.0
1,2,3-Trichloropropane	Ave	34397	31775		8.08	8.75	-7.6	30.0
1,2-Dibromo-3-Chloropropane	Ave	429430	422502		1.72	1.75	-1.6	30.0
Pentachloroethane	Ave	852717	848098		0.435	0.438	-0.5	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.41	2.38	2.44
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-May-2020 16:36:25 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 10:14:46 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canady Date: 26-May-2020 09:37:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.240	1.241	-0.001	529325	1.75	1.64	
2	1.587	1.587	0.000	442418	1.75	1.68	
							RPD = 2.07

3 1,2,3-Trichloropropane

1	2.169	2.169	0.000	348410	8.75	8.59	
2	2.405	2.406	-0.001	278027	8.75	8.08	
							RPD = 6.05

\$ 4 Pentachloroethane

1	2.284	2.282	0.002	434416	0.4375	0.4034	M
2	2.552	2.552	0.000	371043	0.4375	0.4351	
							RPD = 7.57

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	847096	1.75	1.72	
2	3.372	3.371	0.001	739379	1.75	1.72	
							RPD = 0.11

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 Spike_00156 Amount Added: 35.00 Units: uL
 504_NewSurr_00126 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D

Injection Date: 22-May-2020 16:36:25

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

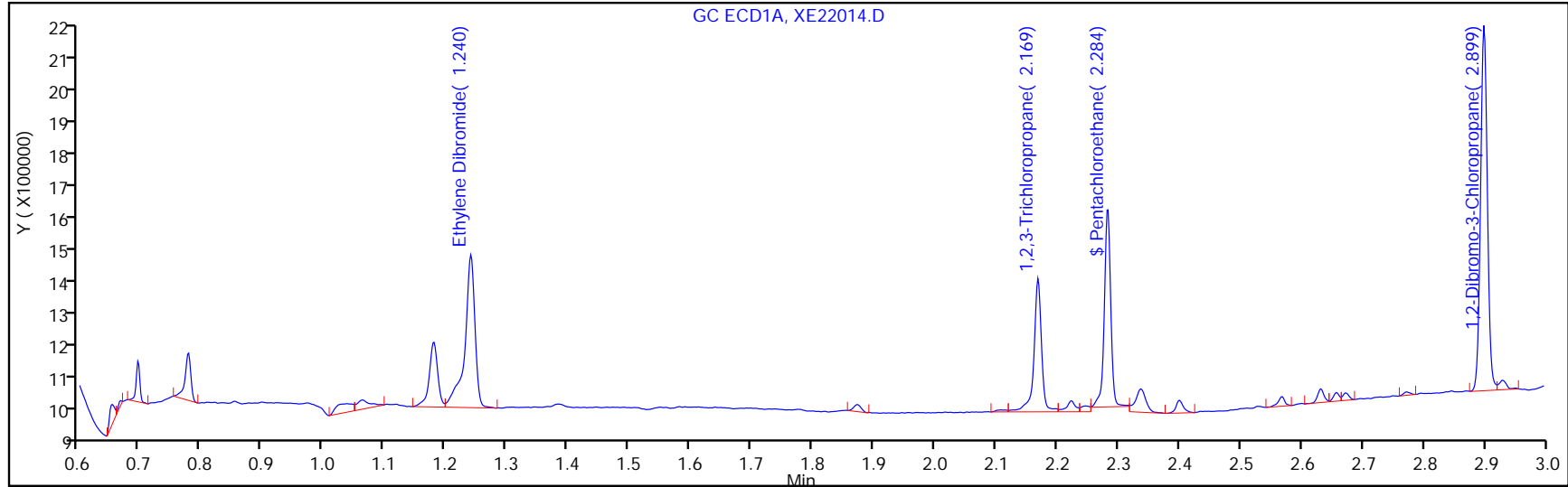
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

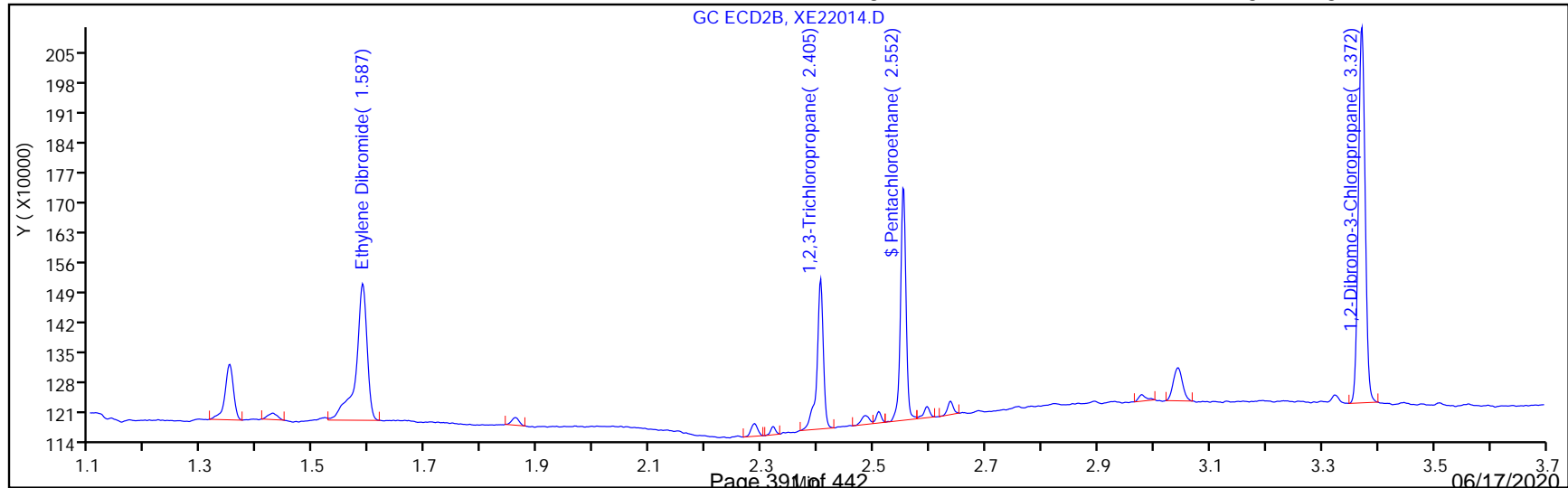
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Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322103	308134		1.49	1.56	-4.3	30.0
1,2,3-Trichloropropane	Ave	40573	37537		7.23	7.81	-7.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	492537	491359		1.56	1.56	-0.2	30.0
Pentachloroethane	Ave	1076894	1027616		0.596	0.625	-4.6	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 15:34:45 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.063	1.063	0.000	4001585	7.00	7.09	
2	1.431	1.431	0.000	3321831	7.00	7.06	
						RPD = 0.47	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	481459	1.56	1.49	
2	1.588	1.588	0.000	398156	1.56	1.51	
						RPD = 1.00	
3 1,2,3-Trichloropropane							
1	2.170	2.170	0.000	293257	7.81	7.23	
2	2.405	2.405	0.000	249942	7.81	7.27	
						RPD = 0.53	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	642260	0.6250	0.5964	
2	2.553	2.553	0.000	552269	0.6250	0.6477	
						RPD = 8.24	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.898	0.000	767749	1.56	1.56	
2	3.371	3.371	0.000	662037	1.56	1.54	
						RPD = 1.10	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D

Injection Date: 05-Jun-2020 15:34:45

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

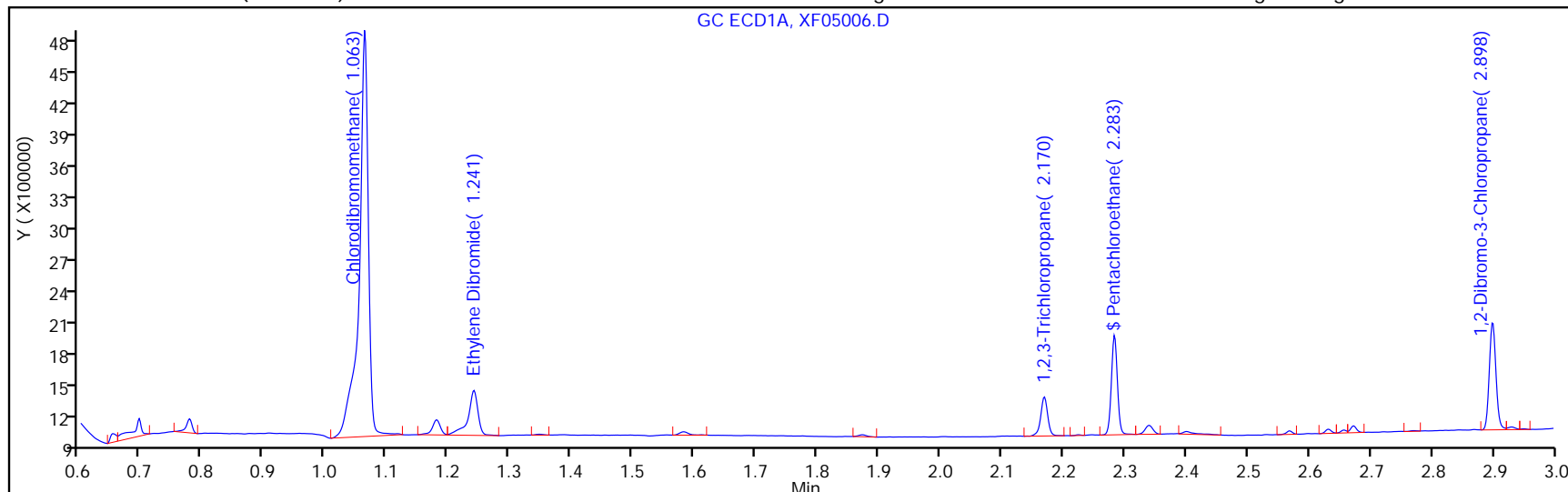
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

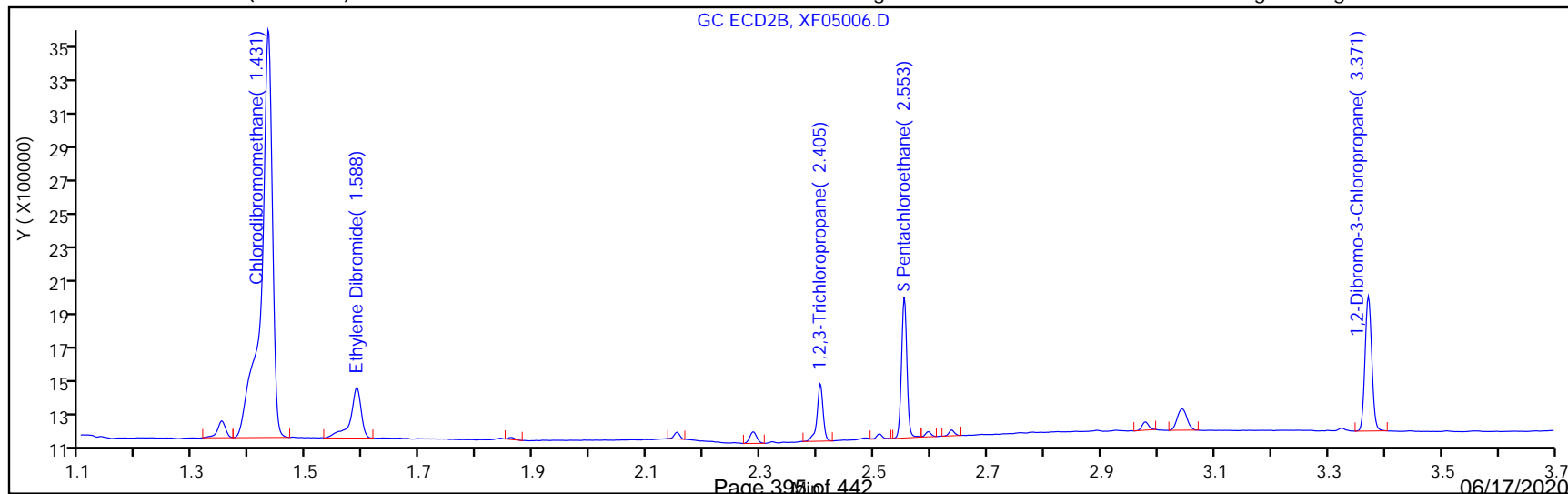
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263713	254820		1.51	1.56	-3.4	30.0
1,2,3-Trichloropropane	Ave	34397	31993		7.27	7.81	-7.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	429430	423704		1.54	1.56	-1.3	30.0
Pentachloroethane	Ave	852717	883630		0.648	0.625	3.6	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.41	2.38	2.44
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 15:34:45 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.063	1.063	0.000	4001585	7.00	7.09	
2	1.431	1.431	0.000	3321831	7.00	7.06	
						RPD = 0.47	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	481459	1.56	1.49	
2	1.588	1.588	0.000	398156	1.56	1.51	
						RPD = 1.00	
3 1,2,3-Trichloropropane							
1	2.170	2.170	0.000	293257	7.81	7.23	
2	2.405	2.405	0.000	249942	7.81	7.27	
						RPD = 0.53	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	642260	0.6250	0.5964	
2	2.553	2.553	0.000	552269	0.6250	0.6477	
						RPD = 8.24	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.898	0.000	767749	1.56	1.56	
2	3.371	3.371	0.000	662037	1.56	1.54	
						RPD = 1.10	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D

Injection Date: 05-Jun-2020 15:34:45

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

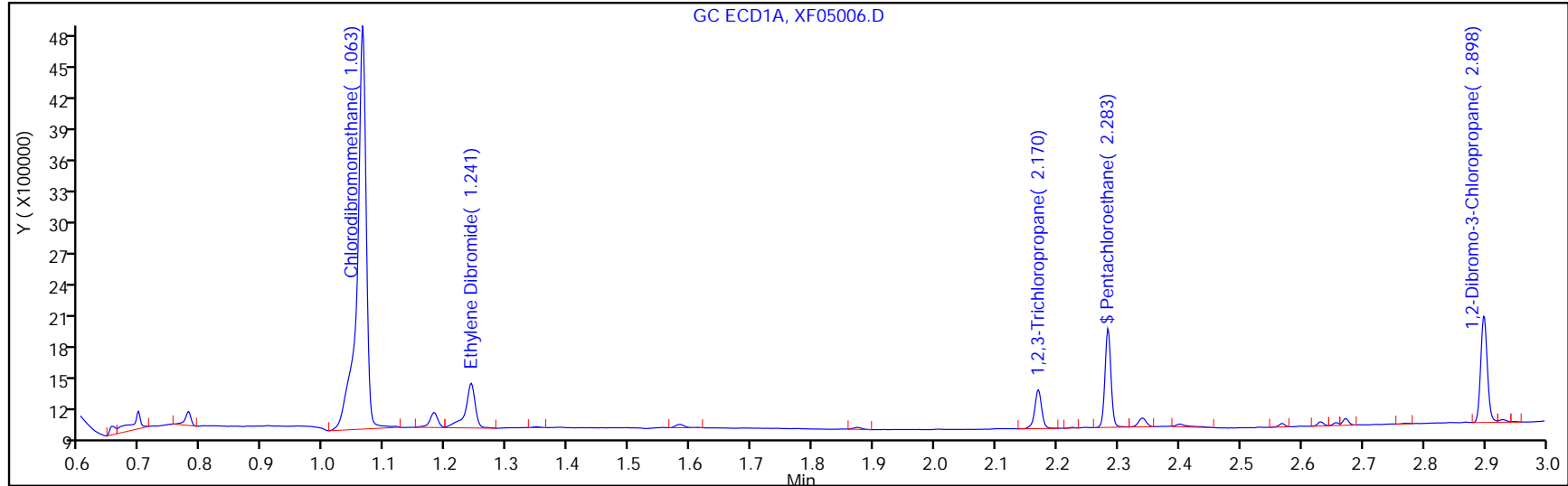
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

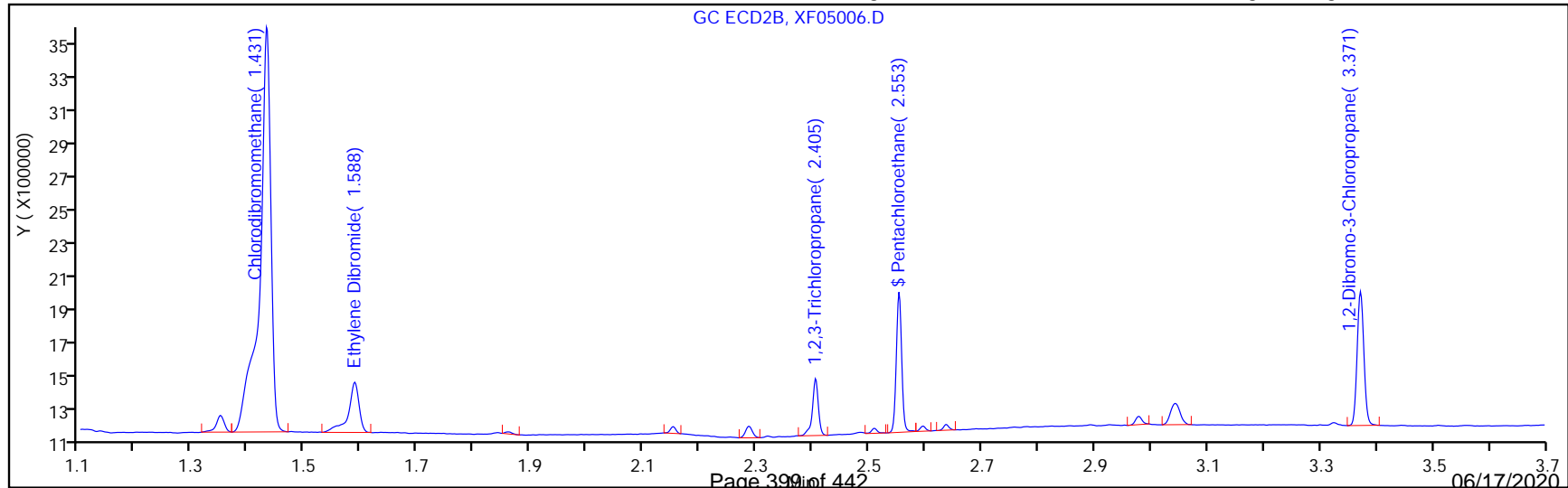
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322103	298204		1.01	1.09	-7.4	30.0
1,2,3-Trichloropropane	Ave	40573	40589		5.47	5.47	0.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	492537	501384		1.11	1.09	1.8	30.0
Pentachloroethane	Ave	1076894	929614		0.378	0.438	-13.7	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D
 Lims ID: CCV lvl4
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 20:19:19 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-035
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	326161	1.09	1.01	
2	1.588	1.588	0.000	275853	1.09	1.05	
						RPD = 3.25	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	221973	5.47	5.47	
2	2.404	2.404	0.000	182292	5.47	5.30	
						RPD = 3.18	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	406706	0.4375	0.3777	
2	2.553	2.553	0.000	378275	0.4375	0.4436	
						RPD = 16.06	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	548389	1.09	1.11	
2	3.371	3.371	0.000	461405	1.09	1.07	
						RPD = 3.56	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D

Injection Date: 05-Jun-2020 20:19:19

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl4

Worklist Smp#: 35

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

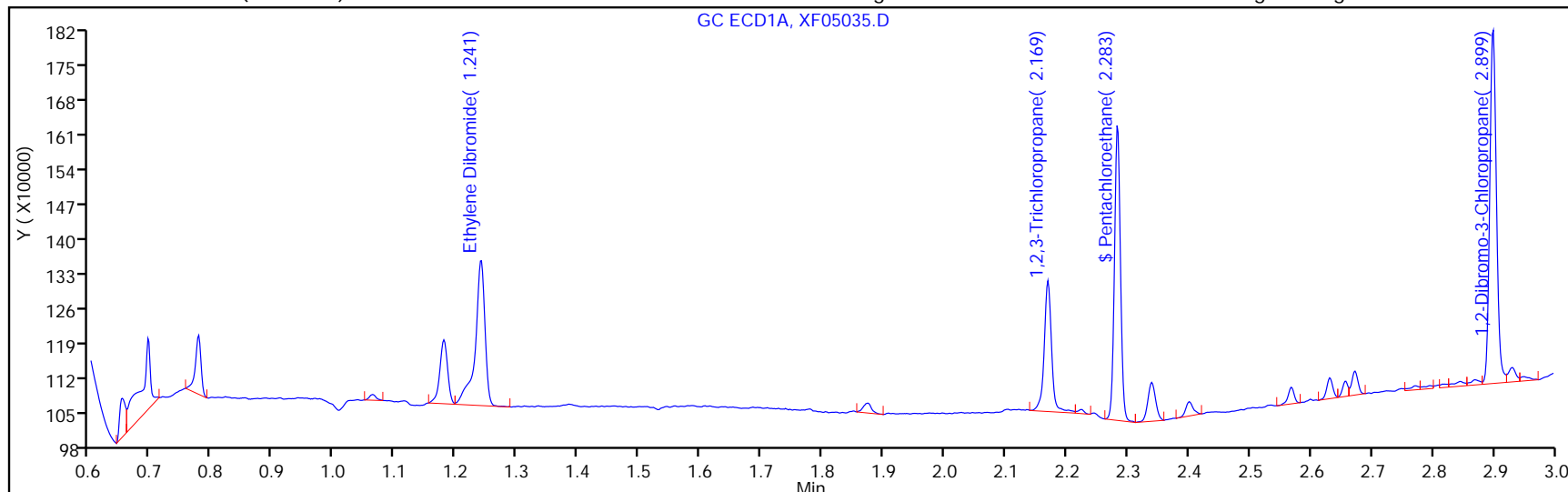
ALS Bottle#: 35

Method: EDBDBCP_CSGX

Limit Group: 504.1

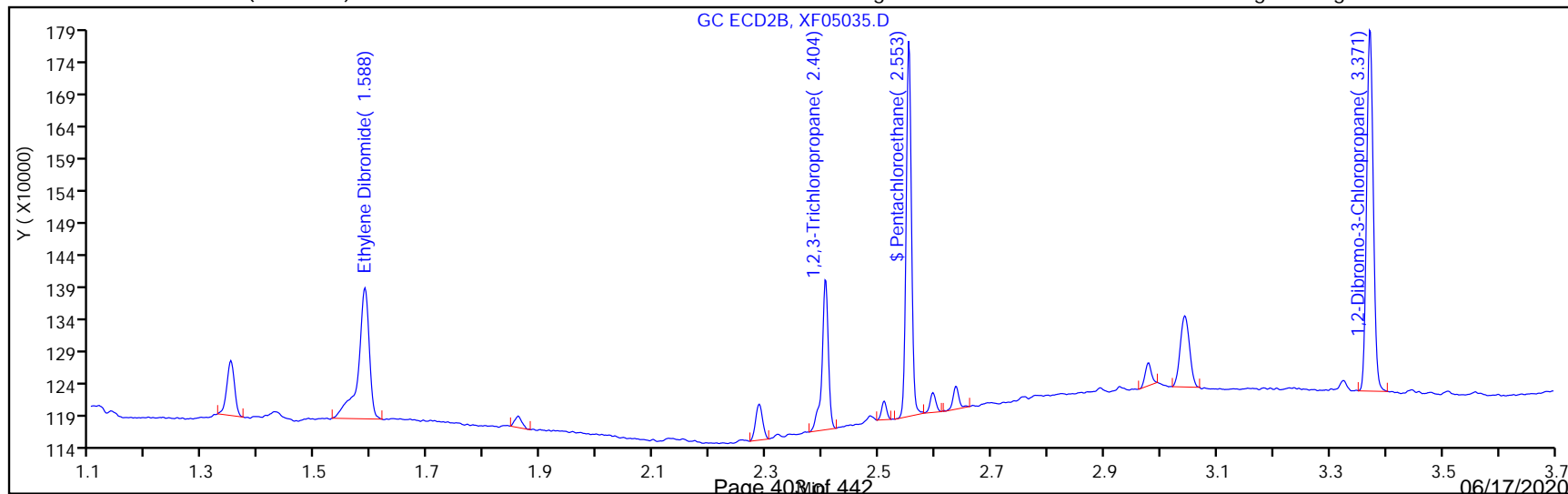
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263713	252208		1.05	1.09	-4.4	30.0
1,2,3-Trichloropropane	Ave	34397	33333		5.30	5.47	-3.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	429430	421856		1.07	1.09	-1.8	30.0
Pentachloroethane	Ave	852717	864629		0.444	0.438	1.4	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.40	2.37	2.43
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D
 Lims ID: CCV Iv4
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 20:19:19 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-035
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	326161	1.09	1.01	
2	1.588	1.588	0.000	275853	1.09	1.05	
						RPD = 3.25	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	221973	5.47	5.47	
2	2.404	2.404	0.000	182292	5.47	5.30	
						RPD = 3.18	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	406706	0.4375	0.3777	
2	2.553	2.553	0.000	378275	0.4375	0.4436	
						RPD = 16.06	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	548389	1.09	1.11	
2	3.371	3.371	0.000	461405	1.09	1.07	
						RPD = 3.56	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D

Injection Date: 05-Jun-2020 20:19:19

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl4

Worklist Smp#: 35

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

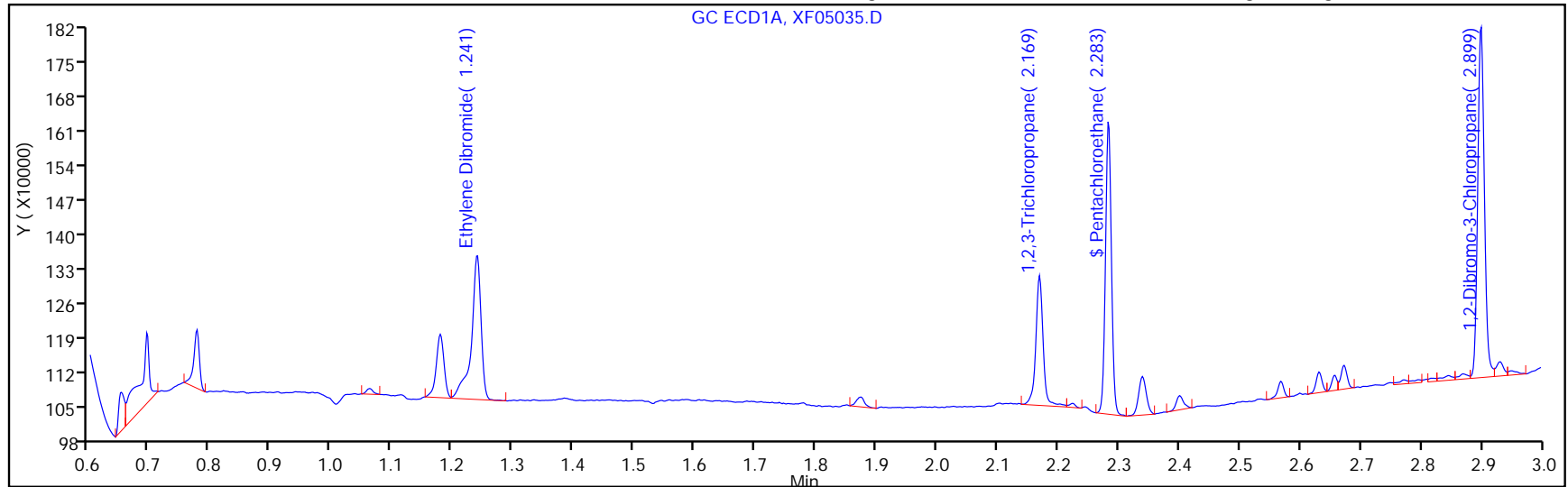
ALS Bottle#: 35

Method: EDBDBCP_CSGX

Limit Group: 504.1

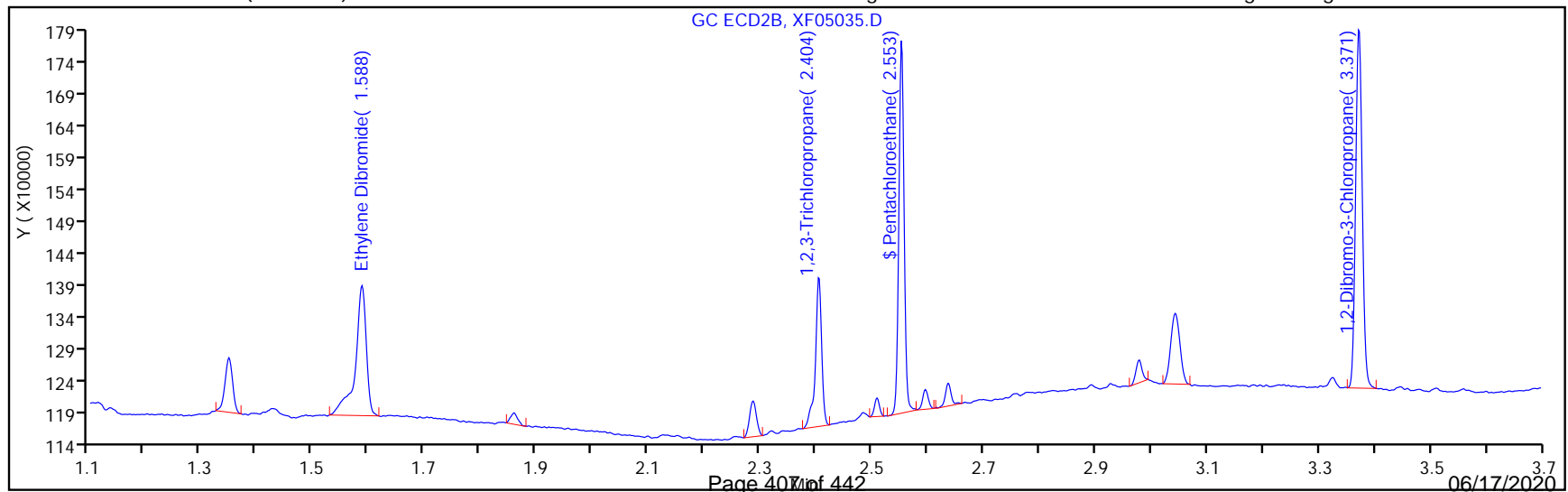
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-621423/3-A
 Matrix: Water Lab File ID: XF05008.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35 (mL) Date Analyzed: 06/05/2020 15:54
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	101		70-130

Report Date: 08-Jun-2020 10:57:36

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05008.D
 Lims ID: MB 680-621423/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Jun-2020 15:54:22 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	477536	0.4375	0.4434	
2	2.552	2.553	-0.001	374287	0.4375	0.4389	

RPD = 1.02

Report Date: 08-Jun-2020 10:57:36

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05008.D

Injection Date: 05-Jun-2020 15:54:22

Instrument ID: CSGX

Operator ID:

Lims ID: MB 680-621423/3-A

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

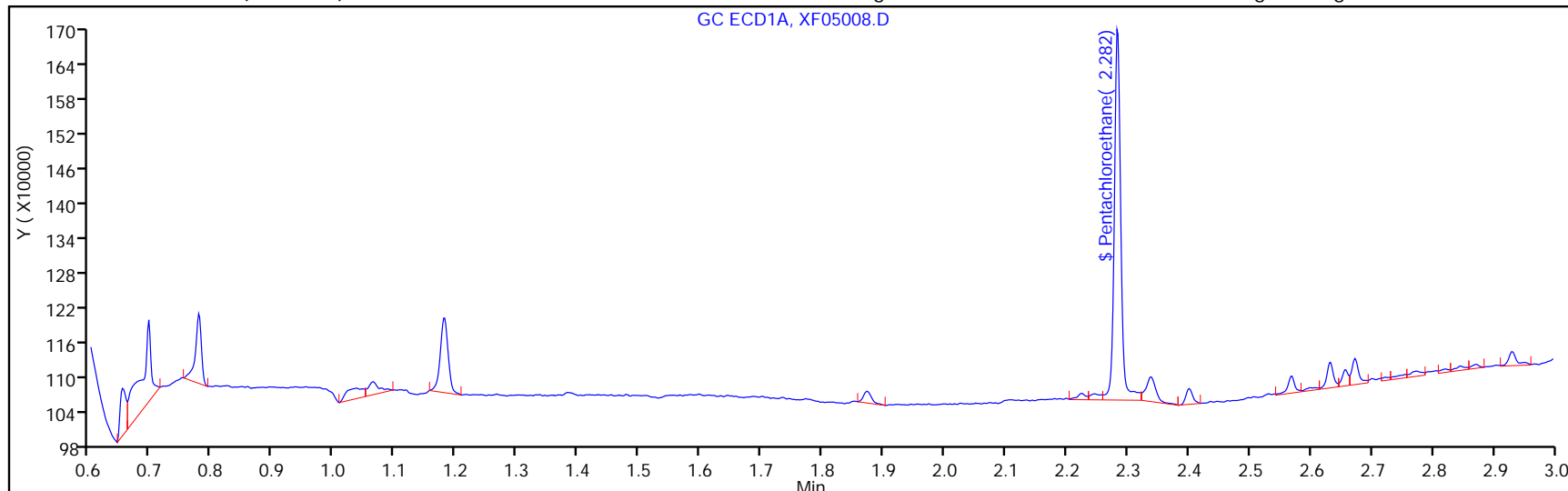
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

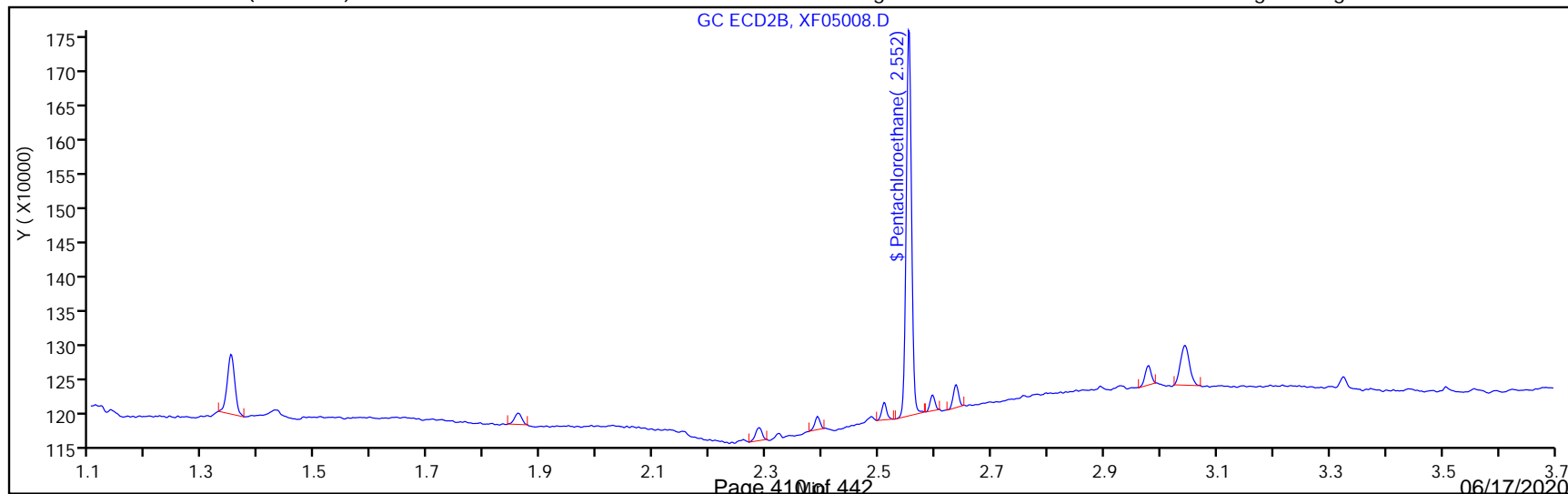
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:36

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05008.D
 Lims ID: MB 680-621423/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Jun-2020 15:54:22 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4434	101.36

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4389	100.33

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/7
 Matrix: Water Lab File ID: XF05007.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 15:44
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 15:44:33 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-007
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052
 First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D

Injection Date: 05-Jun-2020 15:44:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

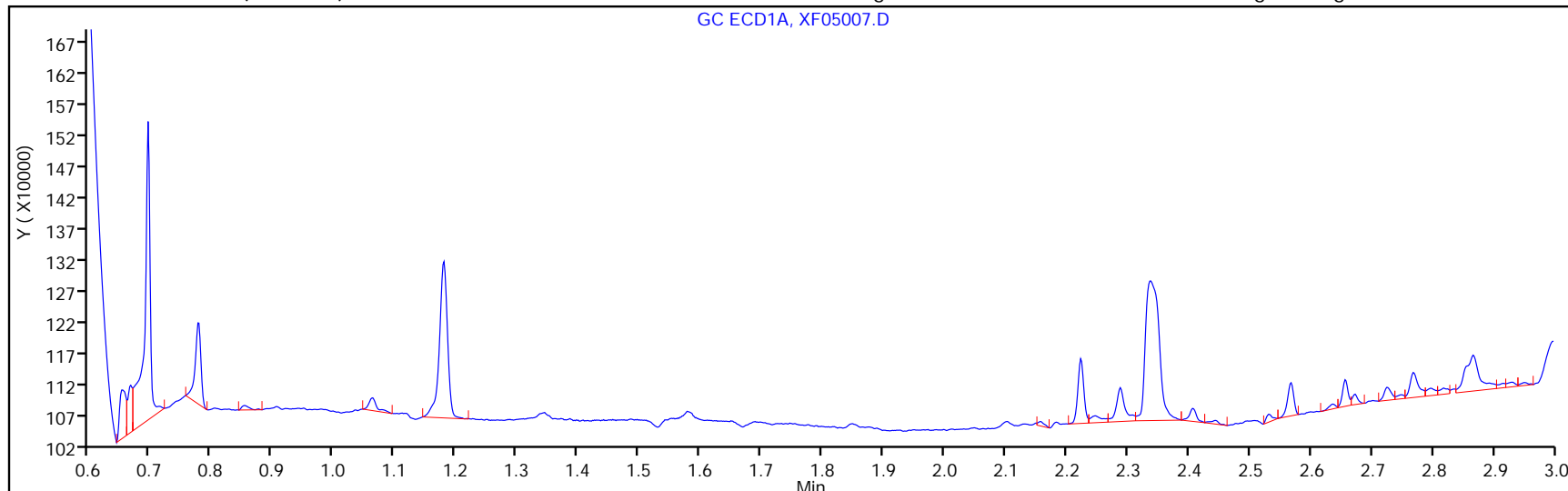
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

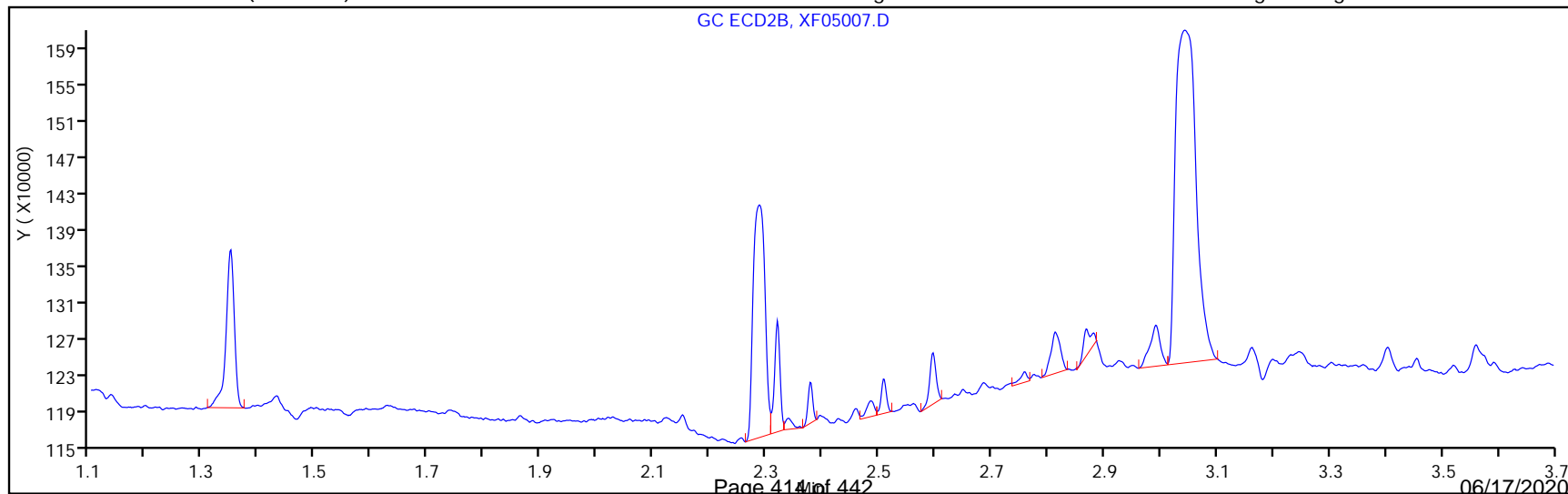
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/7
 Matrix: Water Lab File ID: XF05007.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 15:44
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 15:44:33 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-007
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052
 First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D

Injection Date: 05-Jun-2020 15:44:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

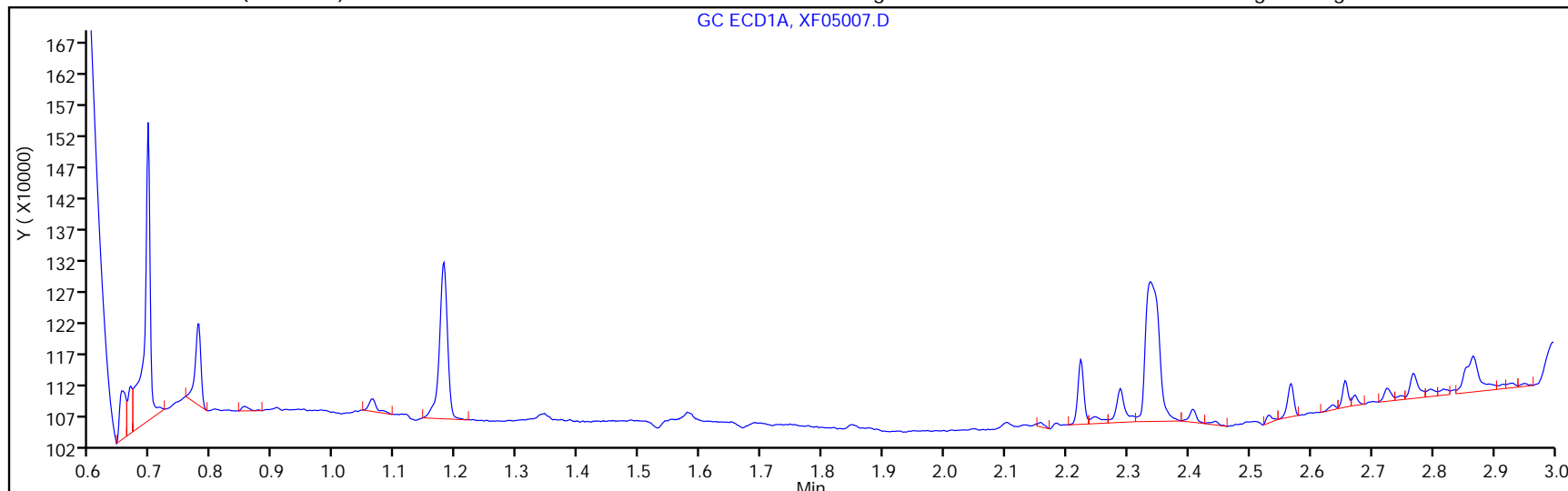
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

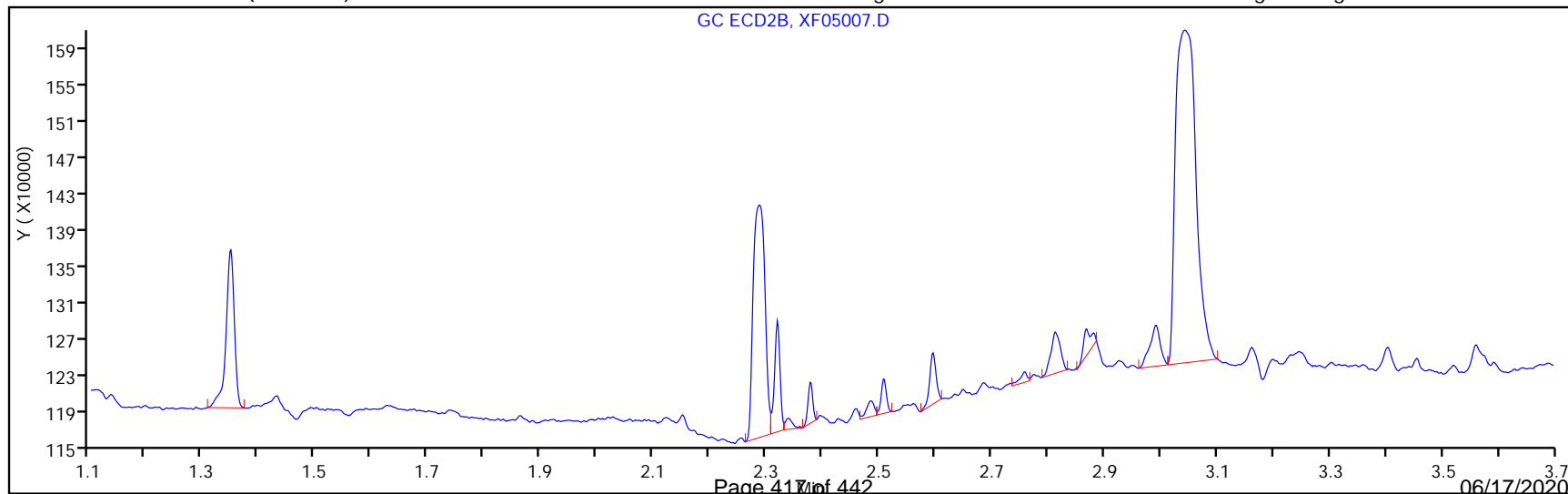
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/36
 Matrix: Water Lab File ID: XF05036.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 20:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 20:29:08 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-036
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D

Injection Date: 05-Jun-2020 20:29:08

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 36

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

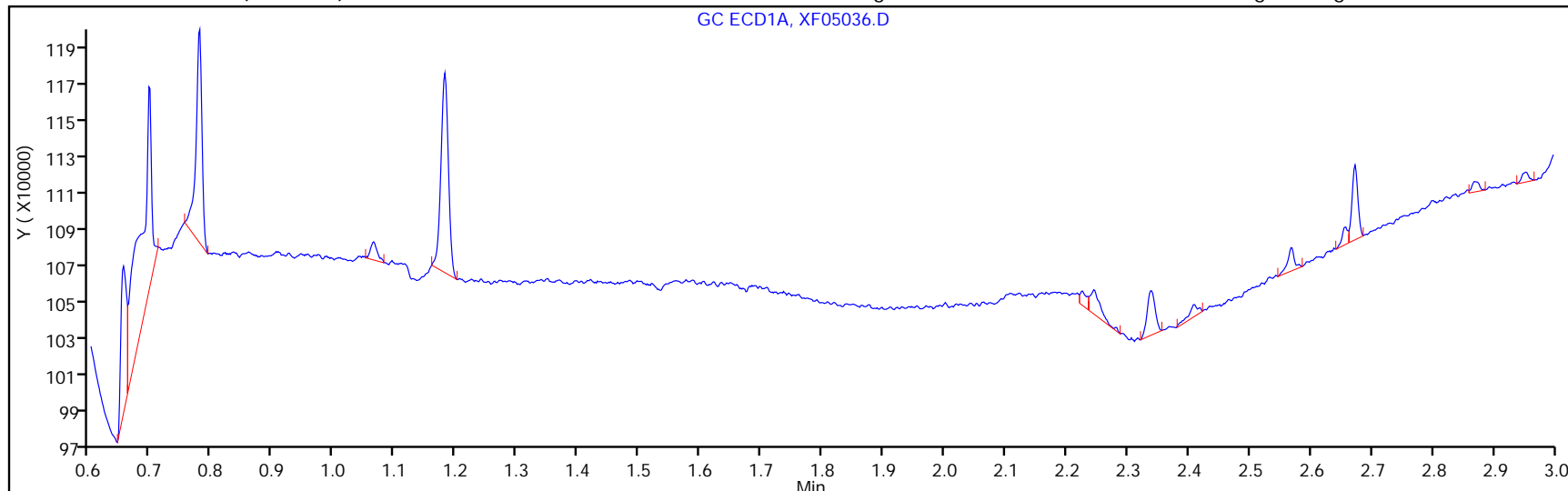
ALS Bottle#: 36

Method: EDBDBCP_CSGX

Limit Group: 504.1

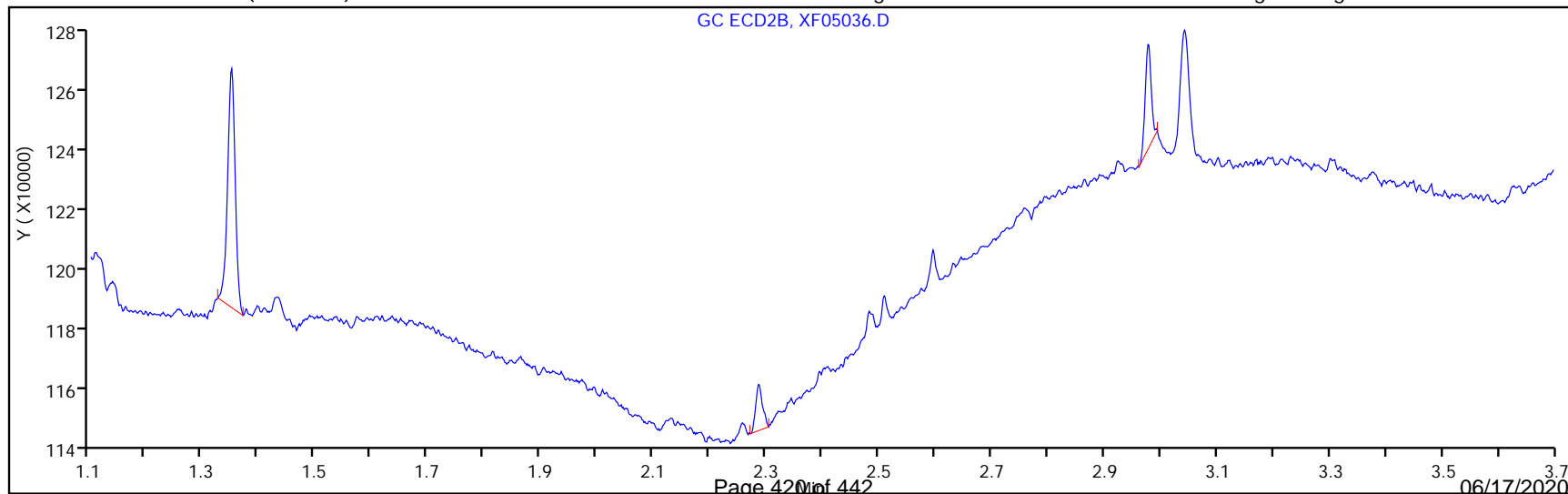
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/36
 Matrix: Water Lab File ID: XF05036.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 20:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 20:29:08 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-036
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D

Injection Date: 05-Jun-2020 20:29:08

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 36

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

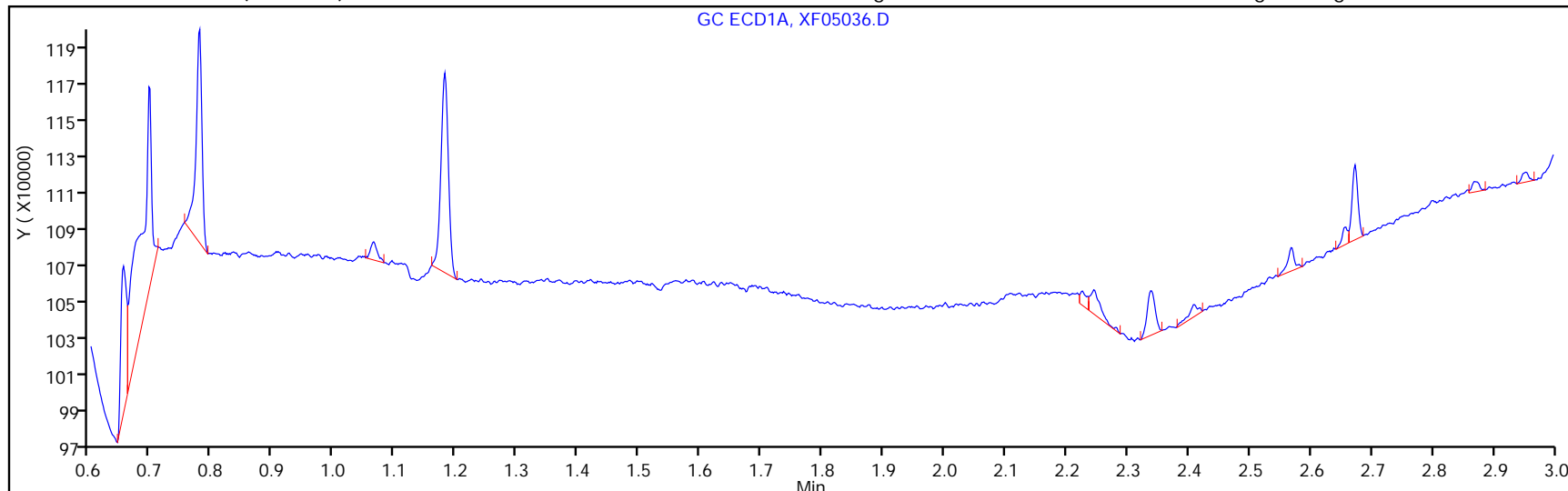
ALS Bottle#: 36

Method: EDBDBCP_CSGX

Limit Group: 504.1

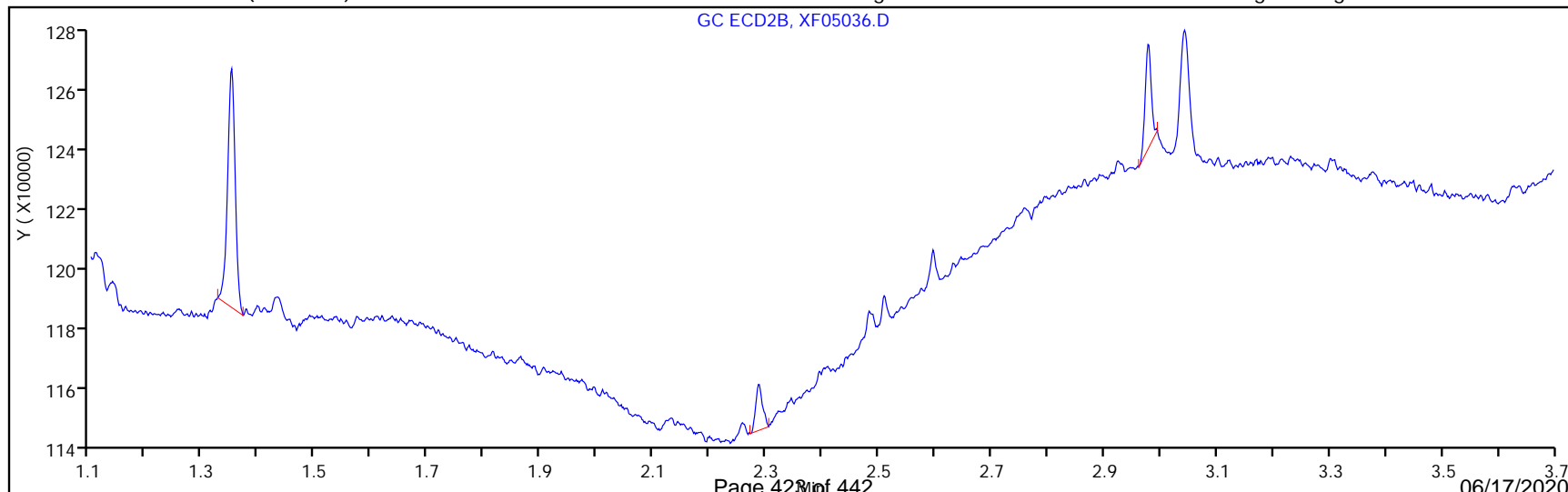
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-621423/4-A
 Matrix: Water Lab File ID: XF05009.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35 (mL) Date Analyzed: 06/05/2020 16:04
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.102		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	102		70-130

Report Date: 08-Jun-2020 10:57:37

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05009.D
 Lims ID: LCS 680-621423/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Jun-2020 16:04:10 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.243	1.241	0.002	555539	1.75	1.72	
2	1.591	1.588	0.003	468926	1.75	1.78	
						RPD = 3.05	
3 1,2,3-Trichloropropane							
1	2.169	2.170	-0.001	324959	8.75	8.01	
2	2.406	2.405	0.001	276133	8.75	8.03	
						RPD = 0.23	
\$ 4 Pentachloroethane							
1	2.284	2.283	0.001	468010	0.4375	0.4346	
2	2.554	2.553	0.001	380457	0.4375	0.4462	
						RPD = 2.63	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.898	0.001	886049	1.75	1.80	
2	3.373	3.371	0.002	761908	1.75	1.77	
						RPD = 1.38	

Report Date: 08-Jun-2020 10:57:37

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05009.D

Injection Date: 05-Jun-2020 16:04:10

Instrument ID: CSGX

Operator ID:

Lims ID: LCS 680-621423/4-A

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

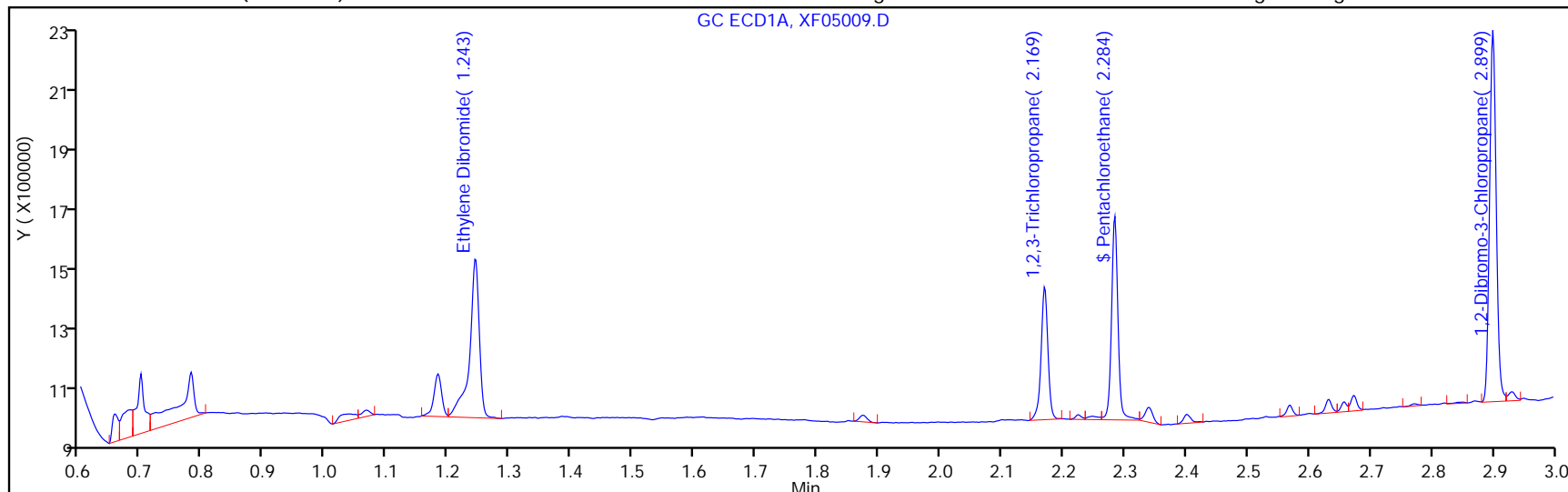
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

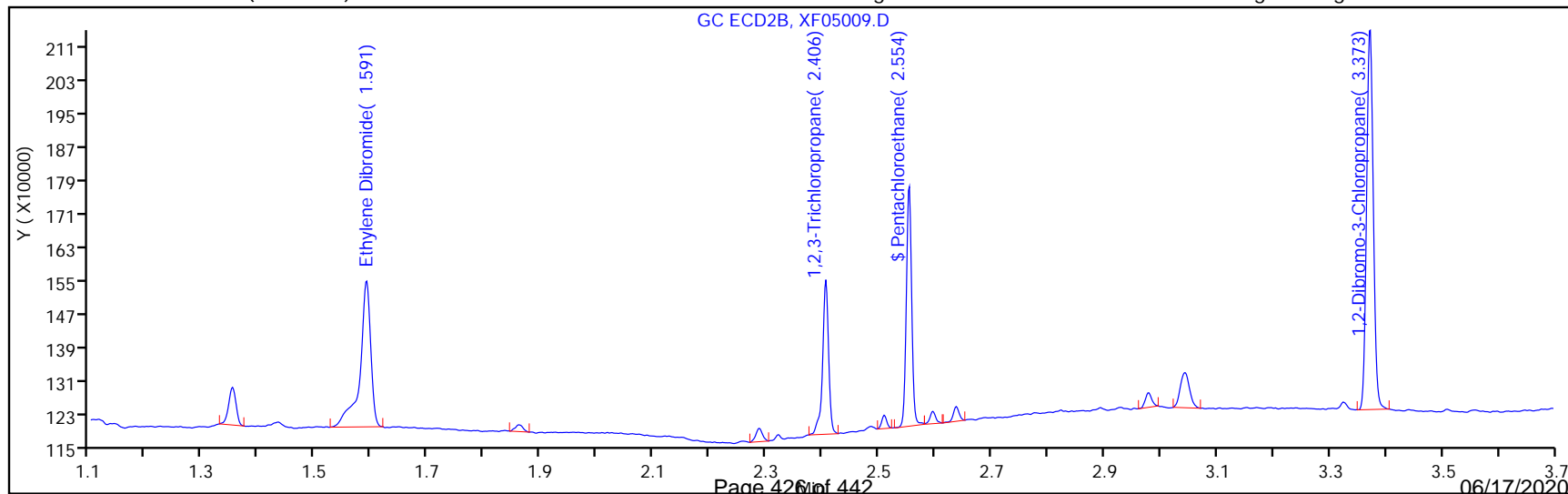
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:37

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05009.D
 Lims ID: LCS 680-621423/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Jun-2020 16:04:10 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4346	99.34

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4462	101.98

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-621423/5-A
 Matrix: Water Lab File ID: XF05010.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35 (mL) Date Analyzed: 06/05/2020 16:13
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.0972		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	98		70-130

Report Date: 08-Jun-2020 10:57:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05010.D
 Lims ID: LCSD 680-621423/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 05-Jun-2020 16:13:55 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide

1	1.241	1.241	0.000	520384	1.75	1.62	
2	1.588	1.588	0.000	448711	1.75	1.70	
							RPD = 5.18

3 1,2,3-Trichloropropane

1	2.169	2.170	-0.001	327987	8.75	8.08	
2	2.404	2.405	-0.001	271474	8.75	7.89	
							RPD = 2.40

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	431714	0.4375	0.4009	M
2	2.553	2.553	0.000	364347	0.4375	0.4273	
							RPD = 6.37

5 1,2-Dibromo-3-Chloropropane

1	2.898	2.898	0.000	854804	1.75	1.74	
2	3.371	3.371	0.000	736070	1.75	1.71	
							RPD = 1.24

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 08-Jun-2020 10:57:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05010.D

Injection Date: 05-Jun-2020 16:13:55

Instrument ID: CSGX

Operator ID:

Lims ID: LCSD 680-621423/5-A

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

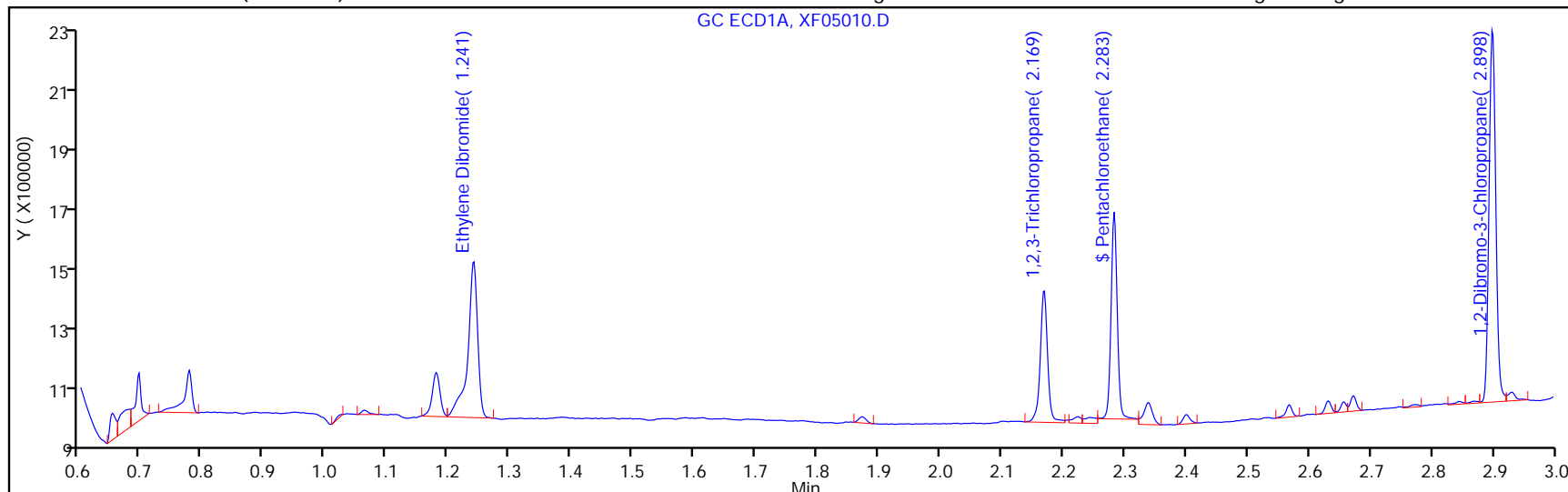
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

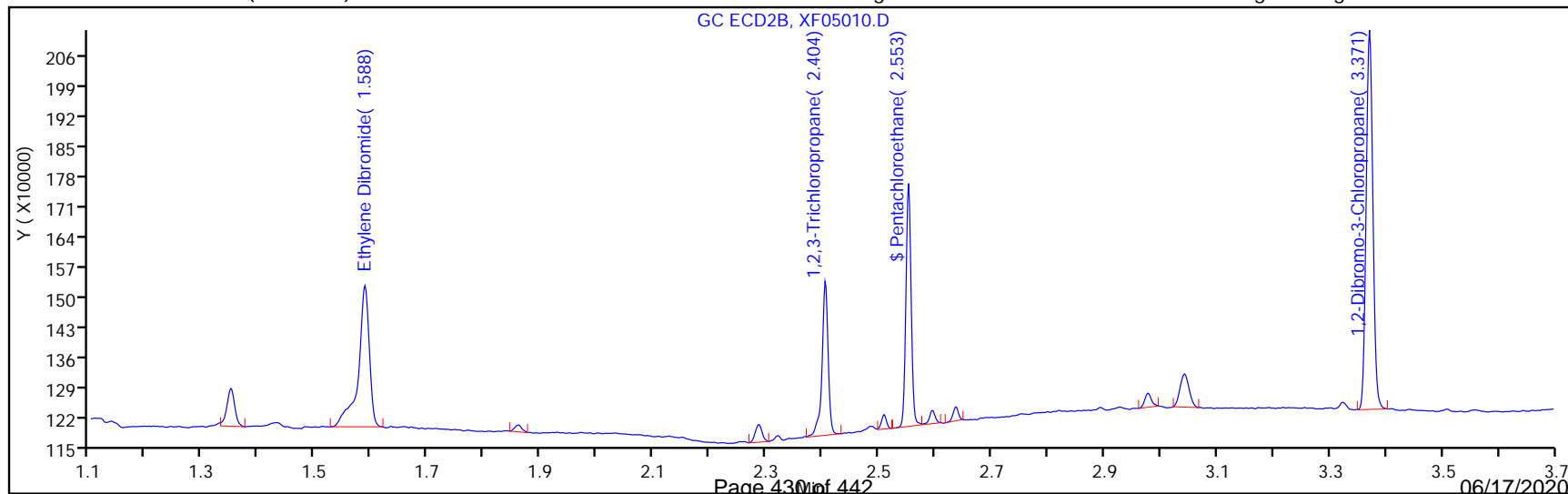
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05010.D
 Lims ID: LCSD 680-621423/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 05-Jun-2020 16:13:55 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052
 First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:49

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4009	91.63

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4273	97.66

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, SavannahJob No.: 680-184595-1

SDG No.: _____

Instrument ID: CSGXStart Date: 05/22/2020 15:18Analysis Batch Number: 619731End Date: 05/22/2020 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-619731/6		05/22/2020 15:18	1	XE22006.D	CLP I 0.25 0.25 (mm)
IC 680-619731/6		05/22/2020 15:18	1	XE22006.D	CLP II 0.25 0.25 (mm)
IC 680-619731/7		05/22/2020 15:27	1	XE22007.D	CLP I 0.25 0.25 (mm)
IC 680-619731/7		05/22/2020 15:27	1	XE22007.D	CLP II 0.25 0.25 (mm)
IC 680-619731/8		05/22/2020 15:37	1	XE22008.D	CLP I 0.25 0.25 (mm)
IC 680-619731/8		05/22/2020 15:37	1	XE22008.D	CLP II 0.25 0.25 (mm)
IC 680-619731/9		05/22/2020 15:47	1	XE22009.D	CLP I 0.25 0.25 (mm)
IC 680-619731/9		05/22/2020 15:47	1	XE22009.D	CLP II 0.25 0.25 (mm)
IC 680-619731/10		05/22/2020 15:57	1	XE22010.D	CLP I 0.25 0.25 (mm)
IC 680-619731/10		05/22/2020 15:57	1	XE22010.D	CLP II 0.25 0.25 (mm)
IC 680-619731/11		05/22/2020 16:06	1	XE22011.D	CLP I 0.25 0.25 (mm)
IC 680-619731/11		05/22/2020 16:06	1	XE22011.D	CLP II 0.25 0.25 (mm)
IC 680-619731/12		05/22/2020 16:16	1	XE22012.D	CLP I 0.25 0.25 (mm)
IC 680-619731/12		05/22/2020 16:16	1	XE22012.D	CLP II 0.25 0.25 (mm)
IC 680-619731/13		05/22/2020 16:26	1	XE22013.D	CLP I 0.25 0.25 (mm)
IC 680-619731/13		05/22/2020 16:26	1	XE22013.D	CLP II 0.25 0.25 (mm)
ICV 680-619731/14 CCV		05/22/2020 16:36	1	XE22014.D	CLP I 0.25 0.25 (mm)
ICV 680-619731/14 CCV		05/22/2020 16:36	1	XE22014.D	CLP II 0.25 0.25 (mm)
PIBLK 680-619731/15		05/22/2020 16:46	1		CLP I 0.25 0.25 (mm)
PIBLK 680-619731/15		05/22/2020 16:46	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 16:56	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 16:56	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:05	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:05	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:15	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:15	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:25	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:25	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:35	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:35	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:45	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:45	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:54	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:54	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:04	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:04	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:14	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:14	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:24	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:24	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:01	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:01	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:11	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:11	1		CLP II 0.25 0.25 (mm)

504.1

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Instrument ID: CSGX Start Date: 05/22/2020 15:18Analysis Batch Number: 619731 End Date: 05/22/2020 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-619731/43		05/22/2020 21:21	1		CLP I 0.25 0.25 (mm)
CCV 680-619731/43		05/22/2020 21:21	1		CLP II 0.25 0.25 (mm)
PIBLK 680-619731/44		05/22/2020 21:30	1		CLP I 0.25 0.25 (mm)
PIBLK 680-619731/44		05/22/2020 21:30	1		CLP II 0.25 0.25 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1
 SDG No.: _____
 Instrument ID: CSGX Start Date: 06/05/2020 15:34
 Analysis Batch Number: 621463 End Date: 06/05/2020 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-621463/6		06/05/2020 15:34	1	XF05006.D	CLP I 0.25 0.25 (mm)
CCV 680-621463/6		06/05/2020 15:34	1	XF05006.D	CLP II 0.25 0.25 (mm)
PIBLK 680-621463/7		06/05/2020 15:44	1	XF05007.D	CLP I 0.25 0.25 (mm)
PIBLK 680-621463/7		06/05/2020 15:44	1	XF05007.D	CLP II 0.25 0.25 (mm)
MB 680-621423/3-A		06/05/2020 15:54	1	XF05008.D	CLP I 0.25 0.25 (mm)
MB 680-621423/3-A		06/05/2020 15:54	1	XF05008.D	CLP II 0.25 0.25 (mm)
LCS 680-621423/4-A		06/05/2020 16:04	1	XF05009.D	CLP I 0.25 0.25 (mm)
LCS 680-621423/4-A		06/05/2020 16:04	1	XF05009.D	CLP II 0.25 0.25 (mm)
LCS 680-621423/5-A		06/05/2020 16:13	1	XF05010.D	CLP I 0.25 0.25 (mm)
LCS 680-621423/5-A		06/05/2020 16:13	1	XF05010.D	CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:23	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:23	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:33	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:33	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:43	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:43	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:53	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:53	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:03	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:03	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:12	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:12	1		CLP II 0.25 0.25 (mm)
680-184595-1		06/05/2020 18:31	1	XF05024.D	CLP I 0.25 0.25 (mm)
680-184595-1		06/05/2020 18:31	1	XF05024.D	CLP II 0.25 0.25 (mm)
680-184595-2		06/05/2020 18:41	1	XF05025.D	CLP I 0.25 0.25 (mm)
680-184595-2		06/05/2020 18:41	1	XF05025.D	CLP II 0.25 0.25 (mm)
680-184595-3		06/05/2020 18:50	1	XF05026.D	CLP I 0.25 0.25 (mm)
680-184595-3		06/05/2020 18:50	1	XF05026.D	CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:00	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:00	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:10	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:10	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:20	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:20	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:40	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:40	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:49	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:49	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:59	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:59	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 20:09	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 20:09	1		CLP II 0.25 0.25 (mm)
CCV 680-621463/35		06/05/2020 20:19	1	XF05035.D	CLP I 0.25 0.25 (mm)
CCV 680-621463/35		06/05/2020 20:19	1	XF05035.D	CLP II 0.25 0.25 (mm)
PIBLK 680-621463/36		06/05/2020 20:29	1	XF05036.D	CLP I 0.25 0.25 (mm)

504.1

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Instrument ID: CSGX Start Date: 06/05/2020 15:34Analysis Batch Number: 621463 End Date: 06/05/2020 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 680-621463/36		06/05/2020 20:29	1	XF05036.D	CLP II 0.25 0.25 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184595-1

SDG No.: _____

Batch Number: 621423 Batch Start Date: 06/05/20 13:32 Batch Analyst: Canady, Daniel

Batch Method: 504.1 Batch End Date: 06/05/20 14:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ResidualChlorine	504 Spike 00156
MB 680-621423/3		504.1, 504.1				35 mL	2 mL		
LCS 680-621423/4		504.1, 504.1				35 mL	2 mL		35 uL
LCSD 680-621423/5		504.1, 504.1				35 mL	2 mL		35 uL
680-184595-A-1	GWVA2-2023	504.1, 504.1	T	62.65 g	26.63 g	36 mL	2 mL	No	
680-184595-C-2	GWK015-2023	504.1, 504.1	T	61.96 g	26.64 g	35.3 mL	2 mL	No	
680-184595-A-3	TB2023-1	504.1, 504.1	T	61.93 g	26.82 g	35.1 mL	2 mL	No	

Lab Sample ID	Client Sample ID	Method Chain	Basis	504 NewSurr 00126	AnalysisComment				
MB 680-621423/3		504.1, 504.1		35 uL					
LCS 680-621423/4		504.1, 504.1		35 uL					
LCSD 680-621423/5		504.1, 504.1		35 uL					
680-184595-A-1	GWVA2-2023	504.1, 504.1	T	35 uL	Na2S2O3				
680-184595-C-2	GWK015-2023	504.1, 504.1	T	35 uL	Na2S2O3				
680-184595-A-3	TB2023-1	504.1, 504.1	T	35 uL	Na2S2O3				

Batch Notes	
Balance ID	36
Analyst ID - Extraction	CanadyD
NaCl ID	6586568
Pipette/Syringe/Dispenser ID	SG6
Prep Solvent ID	6541511
Residual Chlorine Indicator ID	6088022
Analyst ID - Spike Analyst	CanadyD
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.


504.1


Shipping and Receiving Documents


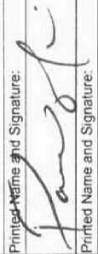
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06/17/2020


CHAIN-OF-CUSTODY RECORD

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-7000 Fax No: (410) 771-1025	PROJECT NUMBER: 62735DM02 LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	COC NUMBER COC-VA2-2023 YEAR: 2020 QUARTER: 2 - June	FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA FAX AND MAIL REPORTS/IEDD TO: Pam Moss: pmoss@eaest.com EA LAB CONTACT: 1 (912) 354-7858
PROJECT NAME: Kirtland AFB Bulk Fuels Facility PROJECT SITE AND PHASE: ST106/SS111	LAB PO NUMBER: 16065		


ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)	COMMENTS
1	GWVA2-2023	6/2/2020	1130	(EPA Method 524.2) VOCs (EPA Method 524.2) BTEX (EPA Method 524.2) BTEXN (EPA Method 504.1) EDB (6020A/6010C) Total (As,Pb,Ca,K,Na,Mg) (6010C) Dissolved Fe, Mn (300.0A) Chloride, bromide, sulfate (353.2) Nitrate-Nitrite (2320B) Alkalinity (Total, Carbonate, and Bicarbonate) (4500NH3B/C) Ammonia Nitrogen (4500 S2CF) Sulfide	*Please also report results for TCE, PCE, and VC  680-184595 Chain of Custody
2					
3					
4					
5					
6					

SAMPLER(S): G. Bracht RELINQUISHED BY:  Printed Name and Signature: GINNY BRACHT	DATE: 6/2/2020 TIME: 1500	RECEIVED BY:  Printed Name and Signature:	DATE: 6/3/2020 TIME: 1030
COURIER AND SHIPPING NUMBER: FedEx 4538 373Z 782Z		TB2023-1	

CHAIN-OF-CUSTODY RECORD


 <p>225 Scilling Circle Suite 400 Hunt Valley, MD Tel No. (410) 594-7000 Fax No. (410) 771-1025</p>	<p>PROJECT NAME: Kirtland AFB Bulk Fuels Facility</p> <p>PROJECT NUMBER: 62735DM02</p> <p>LABORATORY NAME AND CONTACT: Test America Sample Receiving 3102 LaRoche Ave Savannah, GA 31404</p> <p>LAB PO NUMBER: 16065</p>	<p>COC NUMBER COC-K015-2023</p> <p>YEAR: 2020</p> <p>QUARTER: 2 - June</p>	<p>FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA</p> <p>Amanda Smith: asmith@eaest.com EA</p> <p>FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA</p> <p>LAB CONTACT: 1 (912) 354-7858</p>
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ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)						COMMENTS				
				(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	Total (As,Pb,Ca,K,Na,Mg)	(6010C) Dissolved Fe, Mn		(300.0A) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	(4500NH3B/C) Ammonia Nitrogen
1	GWK015-2023	6/2/2020	1000	6	3	1	3	1	3					
2														
3														
4														
5														
6														

SAMPLER(S): G. Bacht Printed Name and Signature: Gunn Bacht Printed Name and Signature:	RELINQUISHED BY:  Printed Name and Signature: Gunn Bacht Printed Name and Signature:	DATE 6/2/2020 TIME 1500	RECEIVED BY: 3.9/4.3 DATE 6/3/2020 TIME 1030
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COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7822	TB2023- 1
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CHAIN-OF-CUSTODY RECORD

 225 Schilling Circle Suite 400 Hunt Valley MD Tel No: (410) 584-2000 Fax No: (410) 771-1025	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	COC NUMBER COC-TB2023-1 YEAR: 2020 QUARTER: 2 - June
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT SITE AND PHASE: ST106/SS111	LAB PO NUMBER: 16065	FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA Pam Moss: pmoss@eaest.com EA
LAB CONTACT: 1 (912) 354-7858			

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)		COMMENTS
				DATE	TIME	
1	TB2023-1	6/2/2020	0800	4	2-2	Associated with: GWVAZ-2023 GWK015-2023
2						
3						
4						
5						
6						

SAMPLER(S): G. Bracht	COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7822	RECEIVED BY:	DATE: 6/3/2020	TIME: 0930
RELINQUISHED BY: Printed Name and Signature: Ginny Bracat Signature: <i>Ginny Bracat</i>	RECEIVED BY: Printed Name and Signature: Fang Signature: <i>Fang</i>	DATE: 6/12/2020	TIME: 1500	TIME: 0930
Printed Name and Signature:	Printed Name and Signature:	DATE:	TIME:	TIME:

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 680-184595-1

Login Number: 184595**List Source: Eurofins TestAmerica, Savannah****List Number: 1****Creator: Laughlin, Paul D**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
WV: Container Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	N/A	
Sample Preservation Verified.	True	
Residual Chlorine Checked.	True	
Sample custody seals are intact.	N/A	

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 680-184595-1

Login Number: 184595**List Source: Eurofins TestAmerica, Savannah****List Number: 2****Creator: Laughlin, Paul D**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		



Environment Testing
America

ANALYTICAL REPORT

Job Number: 680-184600-1

Job Description: Production/Irrigation Well, Kirtland AFB

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
7995 E. Prentice Ave, Suite 206E
Greenwood Village, CO 80111

Attention: Pamela J Moss

A handwritten signature in black ink that reads "Darlene Bandy".

Approved for release.
Darlene F Bandy
Project Manager I
6/17/2020 3:10 PM

Darlene F Bandy, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0188
darlene.bandy@testamericainc.com
06/17/2020

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the Eurofins TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Eurofins TestAmerica, Savannah

5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

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Definitions/Glossary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE**Client: EA Engineering, Science, and Technology****Project: Production/Irrigation Well, Kirtland AFB****Report Number: 680-184600-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 6/3/2020 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.1° C and 5.4° C.

DRINKING WATER VOLATILES (GC-MS)

Samples GWK003-2023 (680-184600-1), GWK016-2023 (680-184600-2) and TB2023-2 (680-184600-3) were analyzed for drinking water volatiles (GC-MS) in accordance with EPA Method 524.2. The samples were analyzed on 06/16/2020.

Internal standard (ISTD) response for 1,4-Dichlorobenzene-d4 for the following sample was outside acceptance criteria: TB2023-2 (680-184600-3). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-622635. A duplicate LCS (LCSD) was performed.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

EDB

Samples GWK003-2023 (680-184600-1), GWK016-2023 (680-184600-2) and TB2023-2 (680-184600-3) were analyzed for EDB in accordance with EPA Method 504.1. The samples were prepared and analyzed on 06/05/2020.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Client Sample ID: GWK003-2023

Lab Sample ID: 680-184600-1

No Detections.

Client Sample ID: GWK016-2023

Lab Sample ID: 680-184600-2

No Detections.

Client Sample ID: TB2023-2

Lab Sample ID: 680-184600-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Savannah

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Client Sample ID: GWK003-2023

Lab Sample ID: 680-184600-1

Date Collected: 06/02/20 10:40

Matrix: Water

Date Received: 06/03/20 09:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/16/20 16:39	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/16/20 16:39	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 16:39	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	103		70 - 130		06/16/20 16:39	1
4-Bromofluorobenzene	91		70 - 130		06/16/20 16:39	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	100		70 - 130	06/05/20 13:32	06/05/20 19:00	1

Client Sample ID: GWK016-2023

Lab Sample ID: 680-184600-2

Date Collected: 06/02/20 09:30

Matrix: Water

Date Received: 06/03/20 09:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/16/20 17:03	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/16/20 17:03	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 17:03	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	104		70 - 130		06/16/20 17:03	1
4-Bromofluorobenzene	93		70 - 130		06/16/20 17:03	1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 19:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Pentachloroethane	96		70 - 130	06/05/20 13:32	06/05/20 19:10	1

Client Sample ID: TB2023-2

Lab Sample ID: 680-184600-3

Date Collected: 06/02/20 08:00

Matrix: Water

Date Received: 06/03/20 09:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/16/20 15:49	1
Ethylbenzene	ND	*3	0.50	0.099	ug/L			06/16/20 15:49	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 15:49	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	118	*3	70 - 130		06/16/20 15:49	1
4-Bromofluorobenzene	91		70 - 130		06/16/20 15:49	1

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Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Client Sample ID: TB2023-2
Lab Sample ID: 680-184600-3
Date Collected: 06/02/20 08:00
Matrix: Water
Date Received: 06/03/20 09:30
Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 19:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pentachloroethane	97		70 - 130				06/05/20 13:32	06/05/20 19:20	1

Eurofins TestAmerica, Savannah

06/17/2020

September 2020

Default Detection Limits

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
Benzene	0.50	0.082	ug/L
Ethylbenzene	0.50	0.099	ug/L
Toluene	0.50	0.086	ug/L
Xylenes, Total	0.50	0.086	ug/L

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Prep: 504.1

Analyte	RL	MDL	Units
Ethylene Dibromide	0.018	0.0025	ug/L

Surrogate Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCZ (70-130)	BFB (70-130)
680-184600-1	GWK003-2023	103	91
680-184600-2	GWK016-2023	104	93
680-184600-3	TB2023-2	118 *3	91
LCS 680-622635/5	Lab Control Sample	91	105
LCSD 680-622635/6	Lab Control Sample Dup	103	102
MB 680-622635/11	Method Blank	104	95

Surrogate Legend

DCZ = 1,2-Dichlorobenzene-d4 (Surr)

BFB = 4-Bromofluorobenzene

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		PCA2 (70-130)
680-184600-1	GWK003-2023	100
680-184600-2	GWK016-2023	96
680-184600-3	TB2023-2	97
LCS 680-621423/4-A	Lab Control Sample	102
LCSD 680-621423/5-A	Lab Control Sample Dup	98

Surrogate Legend

PCA = Pentachloroethane

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		PCA1 (70-130)
MB 680-621423/3-A	Method Blank	101

Surrogate Legend

PCA = Pentachloroethane

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-622635/11

Matrix: Water

Analysis Batch: 622635

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.082	ug/L			06/16/20 14:36	1
Ethylbenzene	ND		0.50	0.099	ug/L			06/16/20 14:36	1
Toluene	ND		0.50	0.086	ug/L			06/16/20 14:36	1
Xylenes, Total	ND		0.50	0.086	ug/L			06/16/20 14:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4 (Surr)	104		70 - 130		06/16/20 14:36	1
4-Bromofluorobenzene	95		70 - 130		06/16/20 14:36	1

Lab Sample ID: LCS 680-622635/5

Matrix: Water

Analysis Batch: 622635

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	52.4		ug/L		105	70 - 130
Ethylbenzene	50.0	48.7		ug/L		97	70 - 130
Toluene	50.0	53.2		ug/L		106	70 - 130
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichlorobenzene-d4 (Surr)	91		70 - 130
4-Bromofluorobenzene	105		70 - 130

Lab Sample ID: LCSD 680-622635/6

Matrix: Water

Analysis Batch: 622635

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	50.0	52.0		ug/L		104	70 - 130	1	20
Ethylbenzene	50.0	52.8		ug/L		106	70 - 130	8	20
Toluene	50.0	54.4		ug/L		109	70 - 130	2	20
Xylenes, Total	100	108		ug/L		108	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichlorobenzene-d4 (Surr)	103		70 - 130
4-Bromofluorobenzene	102		70 - 130

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Lab Sample ID: MB 680-621423/3-A

Matrix: Water

Analysis Batch: 621463

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 621423

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.018	0.0025	ug/L		06/05/20 13:32	06/05/20 15:54	1

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QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: MB 680-621423/3-A
 Matrix: Water
 Analysis Batch: 621463

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 621423

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Pentachloroethane	101		70 - 130	06/05/20 13:32	06/05/20 15:54	1

Lab Sample ID: LCS 680-621423/4-A
 Matrix: Water
 Analysis Batch: 621463

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 621423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits								
								%Recovery	Qualifier						
Ethylene Dibromide	0.100	0.102		ug/L		102	70 - 130								
<table border="1"> <thead> <tr> <th>Surrogate</th> <th>LCS %Recovery</th> <th>LCS Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Pentachloroethane</td> <td>102</td> <td></td> <td>70 - 130</td> </tr> </tbody> </table>								Surrogate	LCS %Recovery	LCS Qualifier	Limits	Pentachloroethane	102		70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits												
Pentachloroethane	102		70 - 130												

Lab Sample ID: LCSD 680-621423/5-A
 Matrix: Water
 Analysis Batch: 621463

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 621423

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit								
										%Recovery	Qualifier						
Ethylene Dibromide	0.100	0.0972		ug/L		97	70 - 130	4	30								
<table border="1"> <thead> <tr> <th>Surrogate</th> <th>LCSD %Recovery</th> <th>LCSD Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Pentachloroethane</td> <td>98</td> <td></td> <td>70 - 130</td> </tr> </tbody> </table>										Surrogate	LCSD %Recovery	LCSD Qualifier	Limits	Pentachloroethane	98		70 - 130
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits														
Pentachloroethane	98		70 - 130														

QC Association Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

GC/MS VOA

Analysis Batch: 622635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184600-1	GWK003-2023	Total/NA	Water	524.2	
680-184600-2	GWK016-2023	Total/NA	Water	524.2	
680-184600-3	TB2023-2	Total/NA	Water	524.2	
MB 680-622635/11	Method Blank	Total/NA	Water	524.2	
LCS 680-622635/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-622635/6	Lab Control Sample Dup	Total/NA	Water	524.2	

GC Semi VOA

Prep Batch: 621423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184600-1	GWK003-2023	Total/NA	Water	504.1	
680-184600-2	GWK016-2023	Total/NA	Water	504.1	
680-184600-3	TB2023-2	Total/NA	Water	504.1	
MB 680-621423/3-A	Method Blank	Total/NA	Water	504.1	
LCS 680-621423/4-A	Lab Control Sample	Total/NA	Water	504.1	
LCSD 680-621423/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	

Analysis Batch: 621463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-184600-1	GWK003-2023	Total/NA	Water	504.1	621423
680-184600-2	GWK016-2023	Total/NA	Water	504.1	621423
680-184600-3	TB2023-2	Total/NA	Water	504.1	621423
MB 680-621423/3-A	Method Blank	Total/NA	Water	504.1	621423
LCS 680-621423/4-A	Lab Control Sample	Total/NA	Water	504.1	621423
LCSD 680-621423/5-A	Lab Control Sample Dup	Total/NA	Water	504.1	621423

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Client Sample ID: GWK003-2023**Lab Sample ID: 680-184600-1****Date Collected: 06/02/20 10:40****Matrix: Water****Date Received: 06/03/20 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	622635	06/16/20 16:39	P1C	TAL SAV
Total/NA	Prep	504.1			621423	06/05/20 13:32	DC	TAL SAV
Total/NA	Analysis	504.1		1	621463	06/05/20 19:00	DC	TAL SAV

Client Sample ID: GWK016-2023**Lab Sample ID: 680-184600-2****Date Collected: 06/02/20 09:30****Matrix: Water****Date Received: 06/03/20 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	622635	06/16/20 17:03	P1C	TAL SAV
Total/NA	Prep	504.1			621423	06/05/20 13:32	DC	TAL SAV
Total/NA	Analysis	504.1		1	621463	06/05/20 19:10	DC	TAL SAV

Client Sample ID: TB2023-2**Lab Sample ID: 680-184600-3****Date Collected: 06/02/20 08:00****Matrix: Water****Date Received: 06/03/20 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	622635	06/16/20 15:49	P1C	TAL SAV
Total/NA	Prep	504.1			621423	06/05/20 13:32	DC	TAL SAV
Total/NA	Analysis	504.1		1	621463	06/05/20 19:20	DC	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Laboratory: Eurofins TestAmerica, Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	GA00006	06-30-20

Laboratory: Eurofins TestAmerica, Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21
A2LA	ISO/IEC 17025	2907.01	10-31-21
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-21
Arizona	State	AZ0713	12-20-20
Arkansas DEQ	State	19-047-0	06-01-21
California	State	2513	01-08-21
Connecticut	State	PH-0686	09-30-20
Florida	NELAP	E87667-57	06-30-20
Georgia	State	4025-011	01-09-21
Illinois	NELAP	2000172019-1	04-30-21
Iowa	State	IA#370	12-01-20
Kansas	NELAP	E-10166	04-30-21
Louisiana	NELAP	30785	06-30-20
Maine	State	2019011 (231)	03-03-21
Minnesota	NELAP	1788752	12-31-20
Nevada	State	CO000262020-1	07-31-20
New Hampshire	NELAP	205319	04-29-21
New Jersey	NELAP	190002	06-30-20
New York	NELAP	59923	04-01-21
North Carolina (WW/SW)	State	358	12-31-20
North Dakota	State	R-034	01-08-21
Oklahoma	State	2018-006	08-31-20
Oregon	NELAP	4025-011	01-08-21
Pennsylvania	NELAP	013	08-01-20
South Carolina	State	72002001	01-08-21
Texas	NELAP	T104704183-19-17	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00099	03-26-21
Utah	NELAP	CO000262019-11	07-31-20
Washington	State	C583-19	08-05-20
West Virginia DEP	State	354	11-30-20
Wisconsin	State	999615430	08-31-20
Wyoming (UST)	A2LA	2907.01	10-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Savannah

Method Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL SAV
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW	TAL SAV
504.1	Microextraction	EPA-DW	TAL SAV

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Production/Irrigation Well, Kirtland AFB

Job ID: 680-184600-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
680-184600-1	GWK003-2023	Water	06/02/20 10:40	06/03/20 09:30	
680-184600-2	GWK016-2023	Water	06/02/20 09:30	06/03/20 09:30	
680-184600-3	TB2023-2	Water	06/02/20 08:00	06/03/20 09:30	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184600-1

SDG No.:

Instrument ID: CMSAG Analysis Batch Number: 621037

Lab Sample ID: IC 680-621037/7 Client Sample ID:

Date Analyzed: 06/03/20 14:08 Lab File ID: AGF0307.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.30	Peak assignment corrected	intaracha u	06/04/20 10:58
Chloromethane	1.48	Split Peak	proctors	06/04/20 12:41
Bromomethane	1.75	Incomplete Integration	proctors	06/04/20 12:38
tert-Butyl alcohol	2.66	Incomplete Integration	proctors	06/04/20 12:38
trans-1,2-Dichloroethene	2.77	Incomplete Integration	proctors	06/04/20 12:38
Tert-butyl ethyl ether	3.26	Incomplete Integration	proctors	06/04/20 12:38
Chlorobromomethane	3.60	Incomplete Integration	intaracha u	06/04/20 10:59
Toluene	5.41	Incomplete Integration	proctors	06/03/20 14:48
1,1,1,2-Tetrachloroethane	6.69	Incomplete Integration	intaracha u	06/04/20 11:04
1,2-Dibromo-3-Chloropropane	9.95	Incomplete Integration	proctors	06/04/20 12:42
1,2,4-Trichlorobenzene	10.89	Incomplete Integration	proctors	06/04/20 12:39
Hexachlorobutadiene	11.05	Incomplete Integration	proctors	06/04/20 12:39

Lab Sample ID: IC 680-621037/8 Client Sample ID:

Date Analyzed: 06/03/20 14:33 Lab File ID: AGF0308.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	1.74	Assign Peak	proctors	06/04/20 12:44
Methylene Chloride	2.61	Incomplete Integration	proctors	06/04/20 12:46
cis-1,3-Dichloropropene	5.17	Assign Peak	proctors	06/04/20 12:44
1,2,3-Trichloropropane	7.84	Assign Peak	proctors	06/04/20 12:44
1,2-Dichlorobenzene	9.13	Assign Peak	proctors	06/04/20 12:45

524.2

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184600-1

SDG No.: _____

Instrument ID: CMSAG Analysis Batch Number: 621037

Lab Sample ID: IC 680-621037/9 Client Sample ID: _____

Date Analyzed: 06/03/20 14:58 Lab File ID: AGF0309.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichlorobenzene	9.13	Peak assignment corrected	intarachu	06/04/20 10:55
1,2-Dibromo-3-Chloropropane	9.95	Incomplete Integration	proctors	06/04/20 12:43

Lab Sample ID: ICIS 680-621037/12 Client Sample ID: _____

Date Analyzed: 06/03/20 16:12 Lab File ID: AGF0312.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromo-3-Chloropropane	9.96	Incomplete Integration	intarachu	06/04/20 10:41

Lab Sample ID: IC 680-621037/14 Client Sample ID: _____

Date Analyzed: 06/03/20 17:02 Lab File ID: AGF0314.D GC Column: Rtx-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.48	Incomplete Integration	intarachu	06/04/20 10:51
4-Methyl-2-pentanone (MIBK)	5.26	Incomplete Integration	intarachu	06/04/20 10:52

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184600-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 619731

Lab Sample ID: IC 680-619731/12 Client Sample ID: _____

Date Analyzed: 05/22/20 16:16 Lab File ID: XE22012.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	05/26/20 09:33

Lab Sample ID: IC 680-619731/12 Client Sample ID: _____

Date Analyzed: 05/22/20 16:16 Lab File ID: XE22012.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	05/26/20 09:33

Lab Sample ID: IC 680-619731/13 Client Sample ID: _____

Date Analyzed: 05/22/20 16:26 Lab File ID: XE22013.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.24	Incomplete Integration	canadyd	05/26/20 09:34
Pentachloroethane	2.28	Baseline Smoothing	canadyd	05/26/20 09:36

Lab Sample ID: IC 680-619731/13 Client Sample ID: _____

Date Analyzed: 05/22/20 16:26 Lab File ID: XE22013.D GC Column: CLP II 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene Dibromide	1.59	Incomplete Integration	canadyd	05/26/20 09:34

Lab Sample ID: ICV 680-619731/14 CCV Client Sample ID: _____

Date Analyzed: 05/22/20 16:36 Lab File ID: XE22014.D GC Column: CLP I 0.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pentachloroethane	2.28	Baseline Smoothing	canadyd	05/26/20 09:37

504.1

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Savann Job No.: 680-184600-1

SDG No.: _____

Instrument ID: CSGX Analysis Batch Number: 621463Lab Sample ID: LCSD 680-621423/5-A Client Sample ID: _____Date Analyzed: 06/05/20 16:13 Lab File ID: XF05010.D GC Column: CLP I 0.25 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pentachloroethane	2.28	Baseline Smoothing	canadyd	06/08/20 10:50

504.1

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
504 Spike_00156	06/13/20	05/13/20	Methanol, Lot 00006479519	25 mL	SG123TCP-2_00006	10 uL	1,2,3-Trichloropropane	0.5 ug/mL					
					SG504ICV_00065	12.5 uL	1,2,3-Trichloropropane-(Surr)	0.4 ug/mL					
							1,2,3-Trichloropropane	0.5 ug/mL					
							1,2-Dibromo-3-Chloropropane	0.1 ug/mL					
.SG123TCP-2_00006	11/13/20	Ultra Scientific, Lot CM-2372		(Purchased Reagent)		Ethylene Dibromide	0.1 ug/mL						
						1,2,3-Trichloropropane	1000 ug/mL						
						1,2,3-Trichloropropane-(Surr)	1000 ug/mL						
.SG504ICV_00065	07/31/20	UltraScientific, Lot CR-2830		(Purchased Reagent)		1,2,3-Trichloropropane	200 ug/mL						
						1,2-Dibromo-3-Chloropropane	200 ug/mL						
						Ethylene Dibromide	200 ug/mL						
504 WS #1_00168	06/13/20	05/13/20	Methanol, Lot 00006479519	25 mL	504 INT A_00156	125 uL	1,2,3-Trichloropropane	0.3125 ug/mL					
							1,2-Dibromo-3-Chloropropane	0.0625 ug/mL					
					.504 INT A_00156	06/13/20	05/13/20	Methanol, Lot 00006479519	2 mL	504 Penta_00082	1250 uL	Ethylene Dibromide	0.0625 ug/mL
										SG123TCP_00088	125 uL	1,2,3-Trichloropropane	62.5 ug/mL
					SG504CAL_00054	125 uL	1,2-Dibromo-3-Chloropropane	12.5 ug/mL					
							Ethylene Dibromide	12.5 ug/mL					
..SG123TCP_00088	11/13/20	Ultra Scientific, Lot CR-4822		(Purchased Reagent)		1,2,3-Trichloropropane	1000 ug/mL						
..SG504CAL_00054	10/13/20	AccuStandard, Lot 218111119		(Purchased Reagent)		1,2-Dibromo-3-Chloropropane	200 ug/mL						
						Ethylene Dibromide	200 ug/mL						
.504 Penta_00082	06/13/20	05/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL					
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL						
504-DBCM_00132	06/13/20	05/13/20	Methanol, Lot 00006479519	2 mL	DBCM (504)_00053	5.6 uL	Chlorodibromomethane	0.28 ug/mL					
.DBCM (504)_00053	09/12/20	Ultra Scientific, Lot CR-0227		(Purchased Reagent)		Chlorodibromomethane	100 ug/mL						
504_NewSurr_00126	06/13/20	05/13/20	Methanol, Lot 00006479519	25 mL	504 Penta_00082	1250 uL	Pentachloroethane	0.025 ug/mL					
.504 Penta_00082	06/13/20	05/13/20	Methanol, Lot 00006479519	100 mL	SGPCE504_00004	25 uL	Pentachloroethane	0.5 ug/mL					
..SGPCE504_00004	09/12/20	Restek, Lot a0123209		(Purchased Reagent)		Pentachloroethane	2000 ug/mL						
524 ISSU/2016_00092	06/29/20	05/29/20	Methanol, Lot _00136	50 mL	30241_00521	200 uL	1,4-Dichlorobenzene-d4	10 ug/mL					
							Chlorobenzene-d5	10 ug/mL					
					.30241_00521	06/29/20	Restek, Lot A0156714	(Purchased Reagent)	31070_00032	250 uL	1,2-Dichlorobenzene-d4 (Surr)	10 ug/mL	
											4-Bromofluorobenzene	10 ug/mL	
						1,4-Dichlorobenzene-d4	2500 ug/mL						
						Chlorobenzene-d5	2500 ug/mL						
						Fluorobenzene	2500 ug/mL						
.31070_00032	06/29/20	Absolute Standards, inc., Lot 123118		(Purchased Reagent)		1,2-Dichlorobenzene-d4 (Surr)	2000 ug/mL						
						4-Bromofluorobenzene	2000 ug/mL						
524mix_00170	06/05/20	06/03/20	Methanol, Lot MeOH_124454	25 mL	524_ETBE_00009	500 uL	Tert-butyl ethyl ether	40 ug/mL					
					524_TAME_00007	500 uL	Tert-amyl methyl ether	40 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					569721_00262	500 uL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					569722_00242	500 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
							571992_00133	500 uL
					1,1,1-Trichloroethane	50 ug/mL		
					1,1,2,2-Tetrachloroethane	50 ug/mL		
					1,1,2-Trichloro-1,2,2-trifluor	50 ug/mL		
					oethane			
					1,1,2-Trichloroethane	50 ug/mL		
					1,1-Dichloroethane	50 ug/mL		
					1,1-Dichloroethene	50 ug/mL		
					1,1-Dichloropropene	50 ug/mL		
					1,2,3-Trichlorobenzene	50 ug/mL		
					1,2,3-Trichloropropane	50 ug/mL		
					1,2,4-Trichlorobenzene	50 ug/mL		
					1,2,4-Trimethylbenzene	50 ug/mL		
					1,2-Dibromo-3-Chloropropane	50 ug/mL		
					1,2-Dichlorobenzene	50 ug/mL		
					1,2-Dichloroethane	50 ug/mL		
					1,2-Dichloropropane	50 ug/mL		
					1,3,5-Trimethylbenzene	50 ug/mL		
					1,3-Dichlorobenzene	50 ug/mL		
					1,3-Dichloropropane	50 ug/mL		
					1,4-Dichlorobenzene	50 ug/mL		
					2,2-Dichloropropane	50 ug/mL		
					2-Chlorotoluene	50 ug/mL		
					2-Methyl-2-propanol	500 ug/mL		
					4-Chlorotoluene	50 ug/mL		
					4-Isopropyltoluene	50 ug/mL		
					Benzene	50 ug/mL		
					Bromobenzene	50 ug/mL		
					Bromoform	50 ug/mL		
					Carbon tetrachloride	50 ug/mL		
					Chlorobenzene	50 ug/mL		
					Chlorobromomethane	50 ug/mL		
Chlorodibromomethane	50 ug/mL							
Chloroform	50 ug/mL							
cis-1,2-Dichloroethene	50 ug/mL							
cis-1,3-Dichloropropene	50 ug/mL							
Dibromomethane	50 ug/mL							
Dichlorobromomethane	50 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
.524 ETBE 00009	06/10/20		Restek, Lot A0160808			(Purchased Reagent)	Tert-butyl ethyl ether	2000 ug/mL
.524 TAME 00007	06/10/20		Restek, Lot A0143927			(Purchased Reagent)	Tert-amyl methyl ether	2000 ug/mL
.569721_00262	06/10/20		Restek, Lot A0156095			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.569722_00242	06/10/20		Restek, Lot A0154679			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.571992_00133	06/10/20		Restek, Lot A0143774			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
524MMix_00173	06/23/20	06/16/20	Methanol, Lot MeOH_124454	10 mL	571992.sec_00102	500 uL	Benzene	125 ug/mL
							Ethylbenzene	125 ug/mL
							Toluene	125 ug/mL
							Xylenes, Total	250 ug/mL
.571992.sec_00102	06/30/20		Restek, Lot A0144202		(Purchased Reagent)		Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Toluene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylenes, Total	5000 ug/mL
VM_bfb_00218							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
					VMVG_BFB_00375	125 uL	4-Bromofluorobenzene	25 ug/mL
							BFB	25 ug/mL
.VMVG_BFB_00375	06/07/20		RESTEK, Lot A0156625			(Purchased Reagent)	4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL
VM_bfb_00219							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Trihalomethane formation potential	
							Trihalomethanes, Total	
							Xylenes, Total	
					VMVG_BFB_00361	125 uL	4-Bromofluorobenzene	25 ug/mL
							BFB	25 ug/mL
.VMVG_BFB_00361	06/20/20		RESTEK, Lot A0150404			(Purchased Reagent)	4-Bromofluorobenzene	2000 ug/mL
							BFB	2000 ug/mL
VM_MMIX_SEC_00126	06/05/20	05/22/20	Methanol, Lot 5080923	25 mL	571992.sec_00105	500 uL	Benzene	50 ug/mL
							Ethylbenzene	50 ug/mL
							Toluene	50 ug/mL
							Xylenes, Total	100 ug/mL
.571992.sec_00105	06/05/20		Restek, Lot A0144202			(Purchased Reagent)	Benzene	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Toluene	2500 ug/mL
							Xylenes, Total	5000 ug/mL

Reagent

30241_00521

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Catalog No. : 30241 Lot No.: A0156714
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : January 31, 2025 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Fluorobenzene CAS # 462-06-6 (Lot BCBZ5549) Purity 99%	2,500.2 µg/mL	+/- 14.5364 µg/mL	+/- 140.1837 µg/mL	+/- 143.4639 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-29571) Purity 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL	+/- 140.1725 µg/mL	+/- 143.4524 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	2,500.6 µg/mL	+/- 14.5387 µg/mL	+/- 140.2062 µg/mL	+/- 143.4868 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%



6568907
ID: 30241_00520
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568915
ID: 30241_00524
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568998
ID: 30241_00528
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568909
ID: 30241_00521
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568917
ID: 30241_00525
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6569000
ID: 30241_00529
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568911
ID: 30241_00522
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568994
ID: 30241_00526
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

DAS
4/25/20



6568913
ID: 30241_00523
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M



6568996
ID: 30241_00527
Exp: 01/31/25 Ppfd: DS
8260A Internal Standard M

Page 28 of 351

06/17/2020

Reagent

31070_00032

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 31070
Lot Number: 123118
Description: EPA Method 524 Surrogate Standard
Expiration Date: 123123
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 2694196

Weight(s) shown below were combined and diluted to (mL): 100.0
SE-05 Balance Uncertainty: 0.001
Fask Uncertainty:

Solvent: MeIholn
Lot# DT140

Formulated By:	<i>Elu Aloga</i>	123118
Reviewed By:	<i>Pedro L. Ramias</i>	123118
DATE		

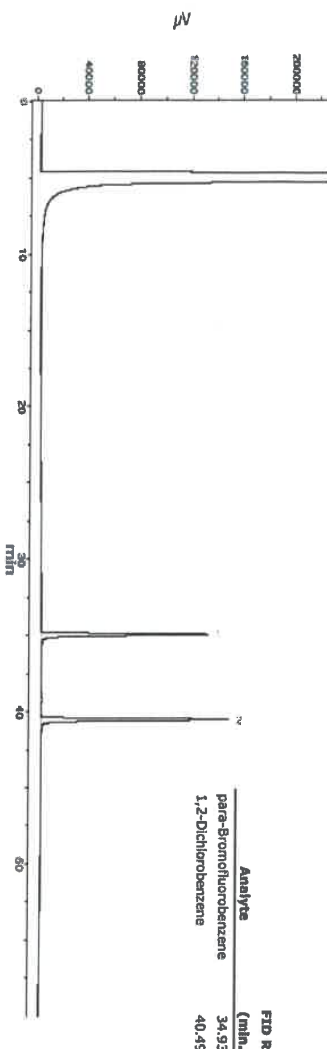
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info, On Attached pg.) CAS#	LD50
1. 1,2-Dichlorobenzene-d4	126	PR-269570527SD81	2000	99	0.2	0.20204	0.20222	2001.8	8.1	2199-69-1 50 ppm (300mg/kg) (CL)	or:rat 500mg/kg
2. p-Bromofluorobenzene	48	01127COV	2000	99	0.2	0.20204	0.20215	2001.1	8.1	460-00-4 N/A	or:rat 2700mg/kg

SDS Information
Expanded Uncertainty (Solvent Safety Info, On Attached pg.)
CAS# 0934 PEL (TWA)

Run 10, "P31070 L123118 12000µg/mL In MeOH"

Run Length: 60.00 min, 35998 points at 10 points/second
Created: 12/21/2019 12:00:00 PM
Sampled: Sequence "123118 GC5.M1", Method "GC5.M1"
Analyzed using Method "GC5.M1"

Comments
GC5-M1 Analyte by Candice Warren
Column ID: SPB-VOCOL 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=280mL/min, Helium (carrier)=10mL/min, Air(=make-up)=240mL/min, Nitrogen(=up)=0mL/min, Hydrogen(=make-up)=40mL/min, Oven Temp=40°C, Injector Temp=250°C, FID Temp=200°C, Rate = 4°C/min, Total run time=80 min, Injection = Split, FID Channel 1
Standard Injection = 0.5µL, Range=3



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening sample, should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty References: Taylor, J.N., and Taylor, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

6553383
ID: 31070_00031
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553387
ID: 31070_00033
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553391
ID: 31070_00035
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553385
ID: 31070_00037
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553386
ID: 31070_00032
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553389
ID: 31070_00034
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553393
ID: 31070_00036
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

6553397
ID: 31070_00038
Exp: 12/31/23 Ppct: EMA
Custom 524 Is/surr: std

49 2020

Part # 31070 Lot # 123118

1 of 1

Printed: 9/23/2020, 10:53:57 AM

Reagent

569722_00242

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2nd level Review 5/1/2020 - Incorrect ID label on

Corrections made, new labels created. BA 5/1/2020 Status changed. For am rules already opened.

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

DFP 3/18/20
Philip G. Paulose

Catalog No. : 569722 Lot No. : A0154679

Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : November 30, 2022 Storage: 0°C or colder

6524245
 ID: 567645_00209
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

~~6524238
 ID: 567645_00209
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

~~6524236
 ID: 567645_00207
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

6524234
 ID: 567645_00206
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase

~~6524118
 ID: 567645_00205
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

Elution Order	CAS #	Purity	Chemical Name	Lot #	Grav. Conc. weight/volume	Expanded Uncertainty (95% C.L.; K=2)		Method
						µg/mL	µg/mL	
1	75-7	99%	Dichlorodifluoroethane	(Lot SHBK6571)	2,502.7	18.2705	140.7566	Gravimetric Unstressed Stressed
2	74-87-3	99%	Chloromethane (methyl chloride)	(Lot SHBK6571)	2,500.3	18.7547	140.6865	Gravimetric Unstressed Stressed
3	75-01-4	99%	Vinyl chloride	(Lot 00015559)	2,501.1	18.5858	140.7083	Gravimetric Unstressed Stressed
4	106-99-0	99%	1,3-Butadiene	(Lot SHBK2299)	2,497.1	17.5808	140.3628	Gravimetric Unstressed Stressed
5	74-83-9	99%	Bromomethane (methyl bromide)	(Lot 101604)	2,500.8	23.3138	141.3956	Gravimetric Unstressed Stressed
6	75-00-3	99%	Chloroethane (ethyl chloride)	(Lot 107-401039114-1)	2,499.0	21.4252	140.9973	Gravimetric Unstressed Stressed

CERTIFIED VALUE

~~6574714
 ID: 569722_00239
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574716
 ID: 569722_00240
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574718
 ID: 569722_00241
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574719
 ID: 569722_00242
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574722
 ID: 569722_00243
 Exp: 11/30/22 Pprd: EMA
 8260 List 1/Std #3 Gases~~ **BAD**

~~6574723
 ID: 569722_00244
 Exp: 11/30/22 Pprd: PEP
 8260 List 1 / Std #3 Gase~~ **BAD**

8	Trichlorofluoromethane (CFC-11)	2,499.6 µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/-	141.0019	µg/mL	Unstressed
	Purity 99%		+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 2 min.) to 240°C
 @ 8°C/min. (hold 5 min.)

Inj. Temp:

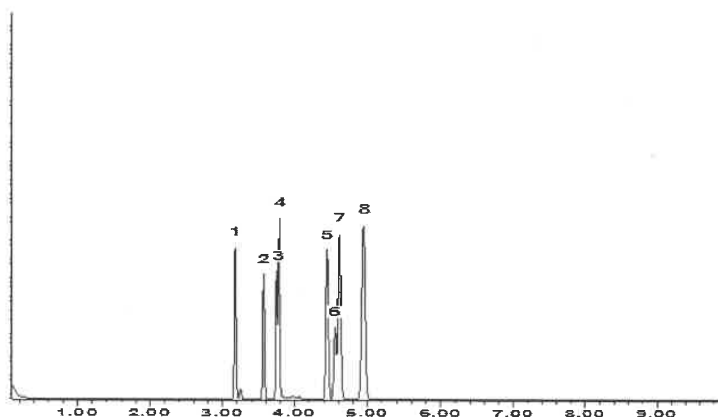
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[Signature]
 Tom Suckal - Mix Technician

Date Mixed: 04-Nov-2019 Balance: B707717271

[Signature]
 Feng-Yun Lu - QC Analyst

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

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Catalog No. : 569722 **Lot No.:** A0154679
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,502.7 µg/mL	+/-	18.2705	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	140.7566	µg/mL	Unstressed
	Purity 99%		+/-	144.0300	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.3 µg/mL	+/-	18.7547	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	140.6865	µg/mL	Unstressed
	Purity 99%		+/-	143.9553	µg/mL	Stressed
3	Vinyl chloride	2,501.1 µg/mL	+/-	18.5858	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	140.7083	µg/mL	Unstressed
	Purity 99%		+/-	143.9787	µg/mL	Stressed
4	1,3-Butadiene	2,497.1 µg/mL	+/-	17.5808	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/-	140.3628	µg/mL	Unstressed
	Purity 99%		+/-	143.6309	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.8 µg/mL	+/-	23.3138	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	141.3956	µg/mL	Unstressed
	Purity 99%		+/-	144.6498	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,499.0 µg/mL	+/-	21.4252	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	140.9973	µg/mL	Unstressed
	Purity 99%		+/-	144.2558	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

Reagent

571992.sec_00102

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Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,517.0 µg/mL	+/-	14.6339	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	151.8598	µg/mL	Unstressed
	Purity 98%		+/-	152.2203	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,506.7 µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	151.2383	µg/mL	Unstressed
	Purity 99%		+/-	151.5974	µg/mL	Stressed
3	1,1-Dichloroethene	2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 7692300)		+/-	151.0372	µg/mL	Unstressed
	Purity 99%		+/-	151.3958	µg/mL	Stressed
4	tert-Butanol (TBA)	25,000.8 µg/mL	+/-	145.3491	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot XYXDO)		+/-	1,508.4071	µg/mL	Unstressed
	Purity 98%		+/-	1,511.9883	µg/mL	Stressed
5	Methyl acetate	5,002.3 µg/mL	+/-	29.0840	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/-	301.8129	µg/mL	Unstressed
	Purity 99%		+/-	302.5295	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,503.5 µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	151.0472	µg/mL	Unstressed
	Purity 99%		+/-	151.4059	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,511.7 µg/mL	+/-	14.6030	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot H3HGC)		+/-	151.5400	µg/mL	Unstressed
	Purity 99%		+/-	151.8998	µg/mL	Stressed

96899
571992.sec_00102
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

DAS
5/20
06/17/2020

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 98%	2,517.0 µg/mL	+/- 14.6339 µg/mL +/- 151.8598 µg/mL +/- 152.2203 µg/mL	Gravimetric Unstressed Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,506.7 µg/mL	+/- 14.5740 µg/mL +/- 151.2383 µg/mL +/- 151.5974 µg/mL	Gravimetric Unstressed Stressed	
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 7692300) Purity 99%	2,503.3 µg/mL	+/- 14.5546 µg/mL +/- 151.0372 µg/mL +/- 151.3958 µg/mL	Gravimetric Unstressed Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.8 µg/mL	+/- 145.3491 µg/mL +/- 1,508.4071 µg/mL +/- 1,511.9883 µg/mL	Gravimetric Unstressed Stressed	
5	Methyl acetate CAS # 79-20-9.SEC (Lot UCNEL) Purity 99%	5,002.3 µg/mL	+/- 29.0840 µg/mL +/- 301.8129 µg/mL +/- 302.5295 µg/mL	Gravimetric Unstressed Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot H3HGC) Purity 99%	2,511.7 µg/mL	+/- 14.6030 µg/mL +/- 151.5400 µg/mL +/- 151.8998 µg/mL	Gravimetric Unstressed Stressed	

96899
571992.sec_00102
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Ppfd: DS
8260 List 1 / Std #1 Mega

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DAS
5/20 And label 5/22/20
06/17/2020

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/-	14.5953 µg/mL 151.4595 µg/mL 151.8191 µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/-	14.6040 µg/mL 151.5500 µg/mL 151.9098 µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/-	14.5430 µg/mL 150.9165 µg/mL 151.2748 µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/-	14.5856 µg/mL 151.3590 µg/mL 151.7183 µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/-	14.5614 µg/mL 151.1076 µg/mL 151.4663 µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/-	14.5585 µg/mL 151.0774 µg/mL 151.4361 µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/-	290.7356 µg/mL 3,017.2028 µg/mL 3,024.3661 µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/-	14.5904 µg/mL 151.4093 µg/mL 151.7687 µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/-	14.5439 µg/mL 150.9266 µg/mL 151.2849 µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/-	14.5866 µg/mL 151.3690 µg/mL 151.7284 µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/-	14.5520 µg/mL 151.0098 µg/mL 151.3684 µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/-	14.5507 µg/mL 150.9970 µg/mL 151.3555 µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/-	14.5643 µg/mL 151.1378 µg/mL 151.4966 µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4 µg/mL	+/-	14.5494 µg/mL 150.9832 µg/mL 151.3417 µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3 µg/mL	+/-	14.5546 µg/mL 151.0372 µg/mL 151.3958 µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/-	7.2941 µg/mL 75.5202 µg/mL 75.6995 µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7 µg/mL	+/-	7.3058 µg/mL 75.6409 µg/mL 75.8205 µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5 µg/mL	+/-	14.5556 µg/mL 151.0472 µg/mL 151.4059 µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7 µg/mL	+/-	14.5740 µg/mL 151.2383 µg/mL 151.5974 µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2 µg/mL	+/-	14.5594 µg/mL 151.0875 µg/mL 151.4462 µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/-	14.5769 µg/mL 151.2685 µg/mL 151.6276 µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2 µg/mL	+/-	14.5653 µg/mL 151.1478 µg/mL 151.5067 µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5 µg/mL	+/-	14.5381 µg/mL 150.8661 µg/mL 151.2243 µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3 µg/mL	+/-	14.5427 µg/mL 150.9137 µg/mL 151.2720 µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7 µg/mL	+/-	14.5682 µg/mL 151.1780 µg/mL 151.5369 µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2 µg/mL	+/-	14.6177 µg/mL 151.6922 µg/mL 152.0524 µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0573 µg/mL 151.4159 µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,506.2 µg/mL	+/- 14.5711 +/- 151.2081 +/- 151.5671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,510.0 µg/mL	+/- 14.5934 +/- 151.4394 +/- 151.7990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	2,509.2 µg/mL	+/- 14.5885 +/- 151.3891 +/- 151.7486	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	2,505.8 µg/mL	+/- 14.5691 +/- 151.1880 +/- 151.5470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot JMIYD)	2,508.7 µg/mL	+/- 14.5856 +/- 151.3590 +/- 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01-IMA)	2,504.7 µg/mL	+/- 14.5623 +/- 151.1176 +/- 151.4764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 6628200)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8562 +/- 151.2143	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	2,506.3 µg/mL	+/- 14.5720 +/- 151.2182 +/- 151.5772	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	2,509.8 µg/mL	+/- 14.5924 +/- 151.4294 +/- 151.7889	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	2,513.7 µg/mL	+/- 14.6147 +/- 151.6607 +/- 152.0207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot R6QDM)	2,501.8 µg/mL	+/- 14.5459 +/- 150.9467 +/- 151.3051	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	2,508.5 µg/mL	+/- 14.5845 +/- 151.3473 +/- 151.7066	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	2,504.4 µg/mL	+/- 14.5607 +/- 151.1002 +/- 151.4590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,503.3 µg/mL	+/- 14.5546 +/- 151.0372 +/- 151.3958	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/- 14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/- 151.5740	µg/mL	Unstressed
	Purity 98%			+/- 151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:

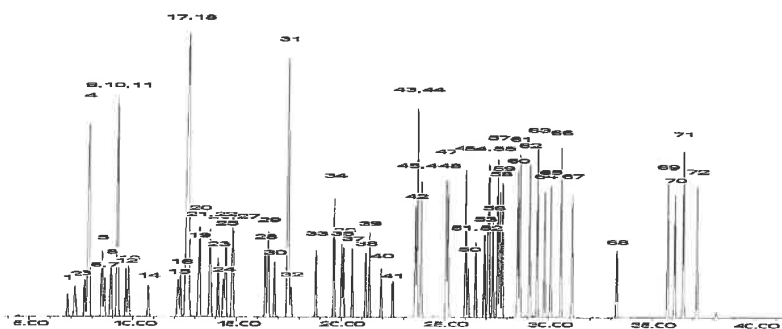
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018

Balance: 1127510105

Diane Shaffer

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

571992.sec_00105

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,517.0 µg/mL	+/-	14.6339	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/-	151.8598	µg/mL	Unstressed
	Purity 98%		+/-	152.2203	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,506.7 µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	151.2383	µg/mL	Unstressed
	Purity 99%		+/-	151.5974	µg/mL	Stressed
3	1,1-Dichloroethene	2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 7692300)		+/-	151.0372	µg/mL	Unstressed
	Purity 99%		+/-	151.3958	µg/mL	Stressed
4	tert-Butanol (TBA)	25,000.8 µg/mL	+/-	145.3491	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot XYXDO)		+/-	1,508.4071	µg/mL	Unstressed
	Purity 98%		+/-	1,511.9883	µg/mL	Stressed
5	Methyl acetate	5,002.3 µg/mL	+/-	29.0840	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/-	301.8129	µg/mL	Unstressed
	Purity 99%		+/-	302.5295	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,503.5 µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	151.0472	µg/mL	Unstressed
	Purity 99%		+/-	151.4059	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,511.7 µg/mL	+/-	14.6030	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot H3HGC)		+/-	151.5400	µg/mL	Unstressed
	Purity 99%		+/-	151.8998	µg/mL	Stressed

96899
571992.sec_00102
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Prpd: DS
60 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Prpd: DS
8260 List 1 / Std #1 Mega

DAS
5/20
06/17/2020

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 98%	2,517.0 µg/mL	+/- 14.6339	µg/mL	Gravimetric	Unstressed
			+/- 151.8598	µg/mL	Unstressed	
			+/- 152.2203	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,506.7 µg/mL	+/- 14.5740	µg/mL	Gravimetric	Unstressed
			+/- 151.2383	µg/mL	Unstressed	
			+/- 151.5974	µg/mL	Stressed	
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 7692300) Purity 99%	2,503.3 µg/mL	+/- 14.5546	µg/mL	Gravimetric	Unstressed
			+/- 151.0372	µg/mL	Unstressed	
			+/- 151.3958	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.8 µg/mL	+/- 145.3491	µg/mL	Gravimetric	Unstressed
			+/- 1,508.4071	µg/mL	Unstressed	
			+/- 1,511.9883	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9.SEC (Lot UCNEL) Purity 99%	5,002.3 µg/mL	+/- 29.0840	µg/mL	Gravimetric	Unstressed
			+/- 301.8129	µg/mL	Unstressed	
			+/- 302.5295	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot Y25A027) Purity 99%	2,503.5 µg/mL	+/- 14.5556	µg/mL	Gravimetric	Unstressed
			+/- 151.0472	µg/mL	Unstressed	
			+/- 151.4059	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot H3HGC) Purity 99%	2,511.7 µg/mL	+/- 14.6030	µg/mL	Gravimetric	Unstressed
			+/- 151.5400	µg/mL	Unstressed	
			+/- 151.8998	µg/mL	Stressed	

96899
571992.sec_00102
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

96921
571992.sec_00103
Exp: 06/30/21 Prpdt: DS
60 List 1 / Std #1 Mega

6596923
ID: 571992.sec_00104
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

6596925
ID: 571992.sec_00105
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

6596927
ID: 571992.sec_00106
Exp: 06/30/21 Prpdt: DS
8260 List 1 / Std #1 Mega

DAS
5/20 And label 5/22/20
06/17/2020

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TSSUB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	2,510.3 µg/mL	+/-	14.5953 µg/mL 151.4595 µg/mL 151.8191 µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot TFHUC)	2,511.8 µg/mL	+/-	14.6040 µg/mL 151.5500 µg/mL 151.9098 µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.3 µg/mL	+/-	14.5430 µg/mL 150.9165 µg/mL 151.2748 µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	2,508.7 µg/mL	+/-	14.5856 µg/mL 151.3590 µg/mL 151.7183 µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot Q02QG)	2,504.5 µg/mL	+/-	14.5614 µg/mL 151.1076 µg/mL 151.4663 µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot ERRBI-RH)	2,504.0 µg/mL	+/-	14.5585 µg/mL 151.0774 µg/mL 151.4361 µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot YVP2C)	50,008.0 µg/mL	+/-	290.7356 µg/mL 3,017.2028 µg/mL 3,024.3661 µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,509.5 µg/mL	+/-	14.5904 µg/mL 151.4093 µg/mL 151.7687 µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 487OA)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,501.5 µg/mL	+/-	14.5439 µg/mL 150.9266 µg/mL 151.2849 µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,508.8 µg/mL	+/-	14.5866 µg/mL 151.3690 µg/mL 151.7284 µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 96%	(Lot ZDMSL)	2,502.9 µg/mL	+/-	14.5520 µg/mL 151.0098 µg/mL 151.3684 µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 7871500)	2,502.5 µg/mL	+/-	14.5498 µg/mL 150.9869 µg/mL 151.3454 µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,502.7 µg/mL	+/-	14.5507 µg/mL 150.9970 µg/mL 151.3555 µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,505.0 µg/mL	+/-	14.5643 µg/mL 151.1378 µg/mL 151.4966 µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10206360)	2,502.4 µg/mL	+/-	14.5494 µg/mL 150.9832 µg/mL 151.3417 µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 99%	(Lot 3505900)	2,503.3 µg/mL	+/-	14.5546 µg/mL 151.0372 µg/mL 151.3958 µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,504.8 µg/mL	+/-	14.5633 µg/mL 151.1277 µg/mL 151.4865 µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,251.7 µg/mL	+/-	7.2941 µg/mL 75.5202 µg/mL 75.6995 µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,253.7 µg/mL	+/-	7.3058 µg/mL 75.6409 µg/mL 75.8205 µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE)	2,503.5 µg/mL	+/-	14.5556 µg/mL 151.0472 µg/mL 151.4059 µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01)	2,506.7 µg/mL	+/-	14.5740 µg/mL 151.2383 µg/mL 151.5974 µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01)	2,504.2 µg/mL	+/-	14.5594 µg/mL 151.0875 µg/mL 151.4462 µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,507.2 µg/mL	+/-	14.5769 µg/mL 151.2685 µg/mL 151.6276 µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,505.2 µg/mL	+/-	14.5653 µg/mL 151.1478 µg/mL 151.5067 µg/mL	Gravimetric Unstressed Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 97%	(Lot 5461400)	2,500.5 µg/mL	+/-	14.5381 µg/mL 150.8661 µg/mL 151.2243 µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane CAS # 75-27-4.SEC Purity 98%	(Lot 13780)	2,501.3 µg/mL	+/-	14.5427 µg/mL 150.9137 µg/mL 151.2720 µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.0 µg/mL	+/-	14.5468 µg/mL 150.9567 µg/mL 151.3151 µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 99%	(Lot GUHZN)	2,505.7 µg/mL	+/-	14.5682 µg/mL 151.1780 µg/mL 151.5369 µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 98%	(Lot 100700-3)	2,514.2 µg/mL	+/-	14.6177 µg/mL 151.6922 µg/mL 152.0524 µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC)	2,503.7 µg/mL	+/-	14.5565 µg/mL 151.0573 µg/mL 151.4159 µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS #	108-86-1.SEC	(Lot 2FUHG-EM)		+/-	151.2081	µg/mL	Unstressed
	Purity	99%			+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS #	108-67-8.SEC	(Lot FGH02-CMLN)		+/-	151.4394	µg/mL	Unstressed
	Purity	99%			+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS #	95-49-8.SEC	(Lot SW8QG-AO)		+/-	151.1176	µg/mL	Unstressed
	Purity	99%			+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS #	106-43-4.SEC	(Lot P4XHJ-AO)		+/-	151.3891	µg/mL	Unstressed
	Purity	99%			+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS #	98-06-6.SEC	(Lot D6OHC)		+/-	151.1880	µg/mL	Unstressed
	Purity	99%			+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS #	95-63-6.SEC	(Lot JMIYD)		+/-	151.3590	µg/mL	Unstressed
	Purity	99%			+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS #	135-98-8.SEC	(Lot OGN01-IMA)		+/-	151.1176	µg/mL	Unstressed
	Purity	99%			+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS #	99-87-6.SEC	(Lot 6628200)		+/-	150.8562	µg/mL	Unstressed
	Purity	99%			+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS #	541-73-1.SEC	(Lot FMDFD)		+/-	151.2182	µg/mL	Unstressed
	Purity	99%			+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS #	106-46-7.SEC	(Lot 4Y5DC)		+/-	151.4294	µg/mL	Unstressed
	Purity	99%			+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS #	104-51-8.SEC	(Lot MMPGA)		+/-	151.6607	µg/mL	Unstressed
	Purity	99%			+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS #	95-50-1.SEC	(Lot R6QDM)		+/-	150.9467	µg/mL	Unstressed
	Purity	99%			+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS #	96-12-8.SEC	(Lot LC00408V)		+/-	151.3473	µg/mL	Unstressed
	Purity	98%			+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS #	120-82-1.SEC	(Lot 3LYYC)		+/-	151.0372	µg/mL	Unstressed
	Purity	99%			+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS #	87-68-3.SEC	(Lot 5526800)		+/-	151.1002	µg/mL	Unstressed
	Purity	97%			+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS #	91-20-3.SEC	(Lot 4KW3H-OO)		+/-	151.0372	µg/mL	Unstressed
	Purity	99%			+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/- 14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/- 151.5740	µg/mL	Unstressed
	Purity 98%			+/- 151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:

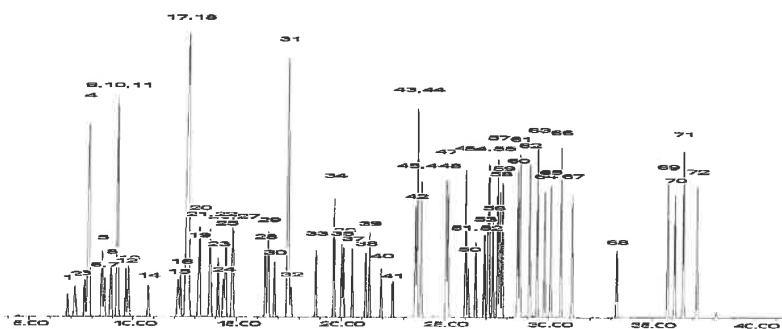
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018

Balance: 1127510105

Diane Shaffer

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

571992_00133

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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 Tel: (800)356-1688
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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PPD ✓ 312512020
Patrick P. Paulsen



6533888
 ID: 571992_00131
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533886
 ID: 571992_00130
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533884
 ID: 571992_00129
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533882
 ID: 571992_00128
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 Purity 99% (Lot SHBJ5713)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 Purity 99% (Lot 00009482)	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBG8609V)	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBJ9404)	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 Purity 99% (Lot SHBG4345V)	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 Purity 99% (Lot SHBH4362V)	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 Purity 99% (Lot WXBB7852V)	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	



6533903
 ID: 571992_00137
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533901
 ID: 571992_00136
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533899
 ID: 571992_00135
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533897
 ID: 571992_00134
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533892
 ID: 571992_00133
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega



6533890
 ID: 571992_00132
 Exp: 06/30/21 Pprd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

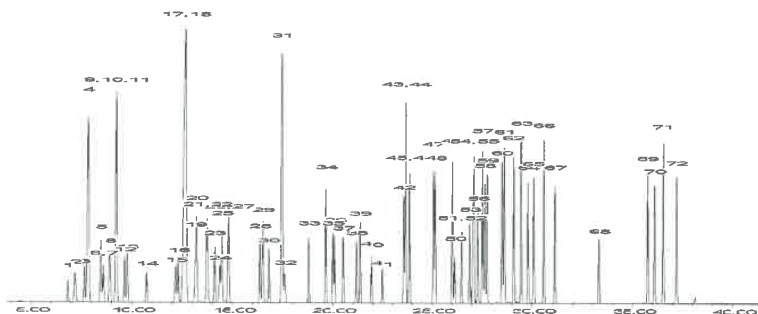
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774
Description : 8260 List 1 / Std #1 MegaMix (2017)
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2021 **Storage:** 0°C or colder

PTP ✓ 3/25/2020
Patrick P. Paul

2nd level EA 4/12/20

6533888
 ID: 571992_00131
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533886
 ID: 571992_00130
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533884
 ID: 571992_00129
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533882
 ID: 571992_00128
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

CERTIFIED VALUES

Elution-Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBJ5713) Purity 99%	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00009482) Purity 99%	2,501.6 µg/mL	+/- 14.5447	µg/mL	Gravimetric	
			+/- 150.9341	µg/mL	Unstressed	
			+/- 151.2925	µg/mL	Stressed	
3	1,1-dichloroethene CAS # 75-35-4 (Lot SHBG8609V) Purity 99%	2,501.9 µg/mL	+/- 14.5461	µg/mL	Gravimetric	
			+/- 150.9492	µg/mL	Unstressed	
			+/- 151.3076	µg/mL	Stressed	
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBJ9404) Purity 99%	25,008.1 µg/mL	+/- 145.3918	µg/mL	Gravimetric	
			+/- 1,508.8503	µg/mL	Unstressed	
			+/- 1,512.4325	µg/mL	Stressed	
5	Methyl acetate CAS # 79-20-9 (Lot SHBG4345V) Purity 99%	5,000.8 µg/mL	+/- 29.0748	µg/mL	Gravimetric	
			+/- 301.7174	µg/mL	Unstressed	
			+/- 302.4337	µg/mL	Stressed	
6	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBH4362V) Purity 99%	2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric	
			+/- 150.8738	µg/mL	Unstressed	
			+/- 151.2320	µg/mL	Stressed	
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot WXBB7852V) Purity 99%	2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric	
			+/- 150.9567	µg/mL	Unstressed	
			+/- 151.3151	µg/mL	Stressed	

6533903
 ID: 571992_00137
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533901
 ID: 571992_00136
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533899
 ID: 571992_00135
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533897
 ID: 571992_00134
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533892
 ID: 571992_00133
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

6533890
 ID: 571992_00132
 Exp: 06/30/21 Pripd: PEP
 8260 List 1 / Std #1 Mega

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

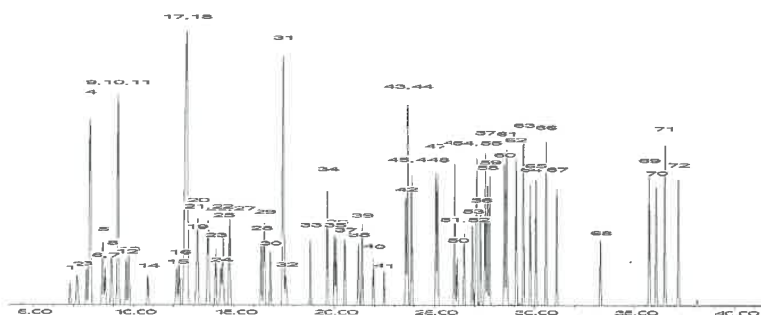
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon
 F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

Diane Shaffer
 Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015
 Registered Quality System
 Certificate #FM 80397

Reagent

DBCM (504)_00053

Certificate of Analysis



Dibromochloromethane Solution

Product Number: HC-100

Page: 1 of 1

Lot Number: CR-0227

Lot Issue Date: 24-Jan-2017

Expiration Date: 28-Feb-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
dibromochloromethane	000124-48-1	RM11370	100.2 ± 0.5 µg/mL

Matrix: methanol (methyl alcohol)

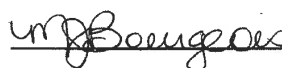
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
Registered
TUV USA, Inc.


John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP-2_00006



Certificate of Analysis



1,2,3-Trichloropropane Solution

Product Number: PPS-250 **Page:** 1 of 1
Lot Number: CR-2372 **Lot Issue Date:** 23-May-2017 **Expiration Date:** 30-Jun-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1004 ± 5 µg/mL

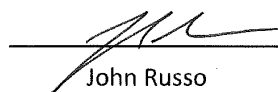
Matrix: methanol (methyl alcohol)

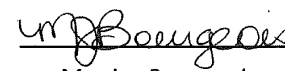
Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 9001
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John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SG123TCP_00088



Certificate of Analysis

1,2,3-Trichloropropane Solution

Product Number: PPS-251 **Page:** 1 of 1
Lot Number: CR-4822 **Lot Issue Date:** 25-Oct-2017 **Expiration Date:** 30-Nov-2021

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2,3-trichloropropane	000096-18-4	RM09131	1003 ± 5 µg/mL

Matrix: methyl tert-butyl ether (MTBE)

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCCL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



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John Russo
President

Monica Bourgeois
Director of QA/RA

Reagent

SG504ICV_00065



Certificate of Analysis



EPA Method 504.1 Mixture

Product Number: DWM-514 **Page:** 1 of 1
Lot Number: CR-2830 **Lot Issue Date:** 22-Jun-2017 **Expiration Date:** 31-Jul-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,2-dibromo-3-chloropropane	000096-12-8	RM11663	200.7 ± 1.0 µg/mL
1,2-dibromoethane	000106-93-4	RM00018	200.8 ± 1.0 µg/mL
1,2,3-trichloropropane	000096-18-4	RM09131	200.8 ± 1.0 µg/mL

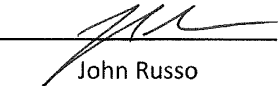
Matrix: methanol (methyl alcohol)

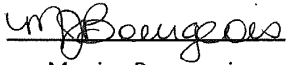
Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



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John Russo
President


Monica Bourgeois
Director of QA/RA

Reagent

SGPCE504_00004

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30404 **Lot No.:** A0123209
Description : Pentachloroethane Standard
Pentachloroethane 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : December 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 160830B-BL2)	2,002.0 µg/mL	+/-	11.8913	µg/mL	Gravimetric
			+/-	112.2765	µg/mL	Unstressed
			+/-	114.9024	µg/mL	Stressed
Solvent:	P&T Methanol CAS # 67-56-1 Purity 99%					

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

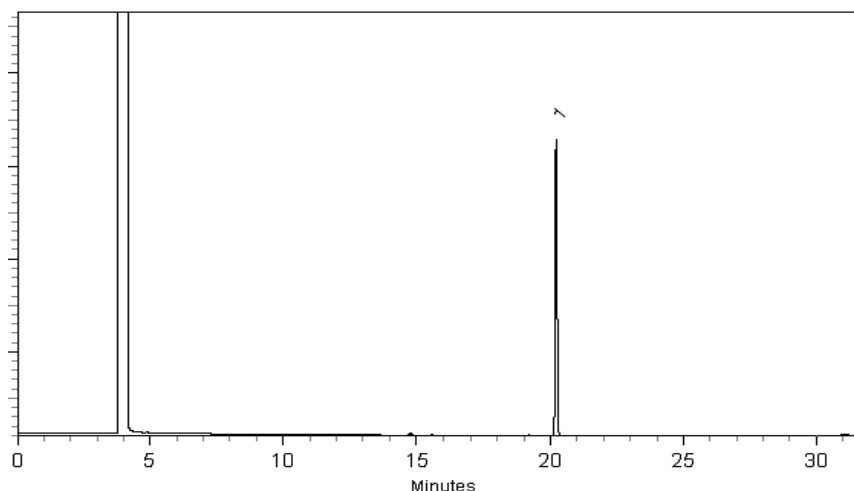
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cathleen Soltis
Cathleen Soltis - Mix Technician

Date Mixed: 02-Dec-2016 Balance: 1125113331

Diane Shaffer
Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Dec-2016

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00361

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0150404
Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2024 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,018.0 µg/mL	+/- 11.8428 µg/mL	Gravimetric	
			+/- 113.1587 µg/mL	Unstressed	
			+/- 115.8060 µg/mL	Stressed	

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%



6439449
 ID: VMVG_BFB_00367
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439447
 ID: VMVG_BFB_00366
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439445
 ID: VMVG_BFB_00365
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439443
 ID: VMVG_BFB_00364
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439441
 ID: VMVG_BFB_00363
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439439
 ID: VMVG_BFB_00362
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439437
 ID: VMVG_BFB_00361
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439435
 ID: VMVG_BFB_00360
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439433
 ID: VMVG_BFB_00359
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml



6439431
 ID: VMVG_BFB_00358
 Exp: 06/30/24 Prpd: PEP
 VMVG p-BFB MIX 2000ug/ml

Philip J. Pankoske PJP
 11/1/2020

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

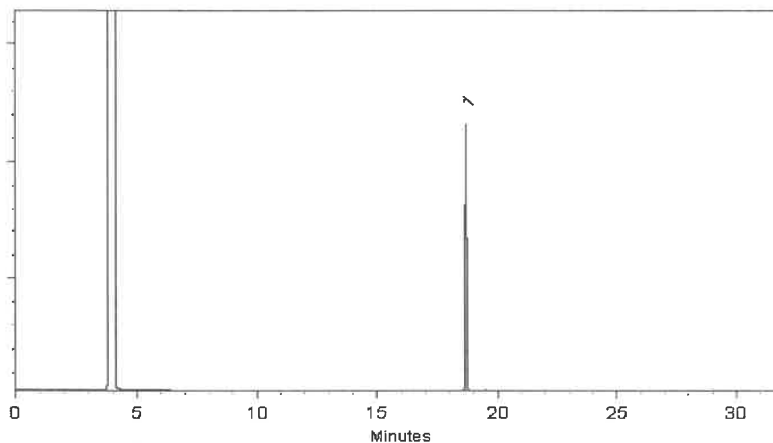
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Walker Workman - Operations Technician I

Date Mixed: 26-Jun-2019 Balance: 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jul-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

VMVG_BFB_00375

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 Lot No.: A0156625
Description : 4-Bromofluorobenzene Mixture
4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : January 31, 2025 Storage: 0°C or colder

PEP ✓ 3/16/20
P. P. P.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,008.0 µg/mL	+/- 11.7841	µg/mL	Gravimetric	
			+/- 112.5980	µg/mL	Unstressed	
			+/- 115.2321	µg/mL	Stressed	

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%



6521575
ID: VMVG_BFB_00371
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521577
ID: VMVG_BFB_00372
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521579
ID: VMVG_BFB_00373
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521581
ID: VMVG_BFB_00374
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml



6521583
ID: VMVG_BFB_00375
Exp: 01/31/24 Pripd: PEP
VMVG p-BFB MIX 2000ug/ml

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

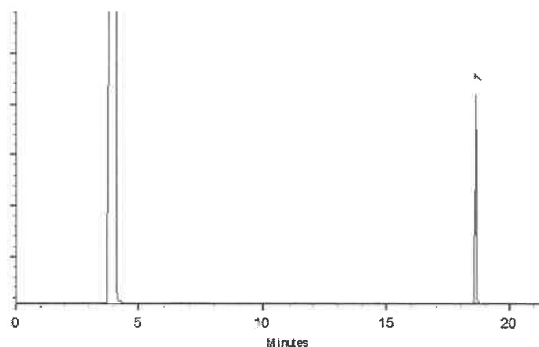
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dustin J. Lidgett

Dustin Lidgett - Mix Technician

Date Mixed: 12-Jan-2020

Balance: 1128342314

Justine Albertson
Justine Albertson - Operations Tech-ARM GC

Date Passed: 14-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes**Expiration Notes:**

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 524.2

Volatile Organic Compounds (GC/MS)
by Method 524.2

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): Rtx-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	BFB #	DCZ #
GWK003-2023	680-184600-1	91	103
GWK016-2023	680-184600-2	93	104
TB2023-2	680-184600-3	91	118 *3
	MB 680-622635/11	95	104
	LCS 680-622635/5	105	91
	LCSD 680-622635/6	102	103

BFB = 4-Bromofluorobenzene
DCZ = 1,2-Dichlorobenzene-d4 (Surr)

QC LIMITS
70-130
70-130

Column to be used to flag recovery values

FORM II 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: AGF1605.D
 Lab ID: LCS 680-622635/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Benzene	50.0	52.4	105	70-130	
Ethylbenzene	50.0	48.7	97	70-130	
Toluene	50.0	53.2	106	70-130	
Xylenes, Total	100	102	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: AGF1606.D

Lab ID: LCSD 680-622635/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	50.0	52.0	104	1	20	70-130	
Ethylbenzene	50.0	52.8	106	8	20	70-130	
Toluene	50.0	54.4	109	2	20	70-130	
Xylenes, Total	100	108	108	5	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 524.2

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab File ID: AGF1611.D Lab Sample ID: MB 680-622635/11
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CMSAG Date Analyzed: 06/16/2020 14:36
 GC Column: Rtx-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-622635/5	AGF1605.D	06/16/2020 12:09
	LCS 680-622635/6	AGF1606.D	06/16/2020 12:33
TB2023-2	680-184600-3	AGF1614.D	06/16/2020 15:49
GWK003-2023	680-184600-1	AGF1616.D	06/16/2020 16:39
GWK016-2023	680-184600-2	AGF1617.D	06/16/2020 17:03

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab File ID: AGF0304.D BFB Injection Date: 06/03/2020
 Instrument ID: CMSAG BFB Injection Time: 12:40
 Analysis Batch No.: 621037

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.0	
75	30.0 - 80.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.9	(1.8) 1
174	>50.0 % of mass 95	50.5	
175	5.0 - 9.0 % of mass 174	4.5	(8.9) 1
176	>95.0 but <101.0 % of mass 174	51.0	(100.9) 1
177	5.0 - 9.0 % of mass 176	3.0	(6.0) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-621037/7	AGF0307.D	06/03/2020	14:08
	IC 680-621037/8	AGF0308.D	06/03/2020	14:33
	IC 680-621037/9	AGF0309.D	06/03/2020	14:58
	IC 680-621037/10	AGF0310.D	06/03/2020	15:23
	IC 680-621037/11	AGF0311.D	06/03/2020	15:48
	ICIS 680-621037/12	AGF0312.D	06/03/2020	16:12
	IC 680-621037/13	AGF0313.D	06/03/2020	16:37
	IC 680-621037/14	AGF0314.D	06/03/2020	17:02
	ICV 680-621037/16	AGF0316.D	06/03/2020	17:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab File ID: AGF1601.D BFB Injection Date: 06/16/2020
 Instrument ID: CMSAG BFB Injection Time: 10:10
 Analysis Batch No.: 622635

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.9	
75	30.0 - 80.0 % of mass 95	54.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.7	
173	Less than 2.0 % of mass 174	1.1	(2.0) 1
174	>50.0 % of mass 95	53.3	
175	5.0 - 9.0 % of mass 174	4.5	(8.5) 1
176	>95.0 but <101.0 % of mass 174	51.1	(95.8) 1
177	5.0 - 9.0 % of mass 176	4.5	(8.7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-622635/4	AGF1604.D	06/16/2020	11:45
	LCS 680-622635/5	AGF1605.D	06/16/2020	12:09
	LCSD 680-622635/6	AGF1606.D	06/16/2020	12:33
	MB 680-622635/11	AGF1611.D	06/16/2020	14:36
TB2023-2	680-184600-3	AGF1614.D	06/16/2020	15:49
GWK003-2023	680-184600-1	AGF1616.D	06/16/2020	16:39
GWK016-2023	680-184600-2	AGF1617.D	06/16/2020	17:03

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Sample No.: ICIS 680-621037/12 Date Analyzed: 06/03/2020 16:12
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): AGF0312.D Heated Purge: (Y/N) N
 Calibration ID: 76069

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	472626	4.18	316943	6.59	166276	8.74
UPPER LIMIT	614414	4.68	412026	7.09	216159	9.24
LOWER LIMIT	330838	3.68	221860	6.09	116393	8.24
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-621037/16	472885	4.19	339428	6.59	154432	8.74

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM VIII

GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Sample No.: CCVIS 680-622635/4 Date Analyzed: 06/16/2020 11:45
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18 (mm)
 Lab File ID (Standard): AGF1604.D Heated Purge: (Y/N) N
 Calibration ID: 76069

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	456920	4.18	285719	6.59	157773	8.74	
UPPER LIMIT	593996	4.68	371435	7.09	205105	9.24	
LOWER LIMIT	319844	3.68	200003	6.09	110441	8.24	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-622635/5	445960	4.19	286911	6.58	153975	8.74	
LCSD 680-622635/6	505226	4.19	311748	6.59	155998	8.74	
MB 680-622635/11	426437	4.18	284662	6.59	120400	8.74	
680-184600-3	TB2023-2	415236	4.19	265855	6.59	105445*3	8.74
680-184600-1	GWK003-2023	408326	4.18	266686	6.59	116748	8.74
680-184600-2	GWK016-2023	414071	4.19	246174	6.59	113210	8.74

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 70%-130% of internal standard area

RT Limit = \pm 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 524.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: GWK003-2023 Lab Sample ID: 680-184600-1
 Matrix: Water Lab File ID: AGF1616.D
 Analysis Method: 524.2 Date Collected: 06/02/2020 10:40
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 16:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	103		70-130
460-00-4	4-Bromofluorobenzene	91		70-130

Report Date: 17-Jun-2020 09:41:25

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1616.D
 Lims ID: 680-184600-F-1
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 16-Jun-2020 16:39:30 ALS Bottle#: 17 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-016
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimstdp

Date: 17-Jun-2020 09:41:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.182	4.181	0.001	97	408326	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.590	-0.005	94	266686	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.737	0.001	96	116748	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.634	0.009	82	148350	9.06	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.108	0.001	94	118821	10.3	

Reagents:

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:41:25

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1616.D

Injection Date: 16-Jun-2020 16:39:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: 680-184600-F-1

Lab Sample ID: 680-184600-1

Worklist Smp#: 16

Client ID: GWK003-2023

Purge Vol: 5.000 mL

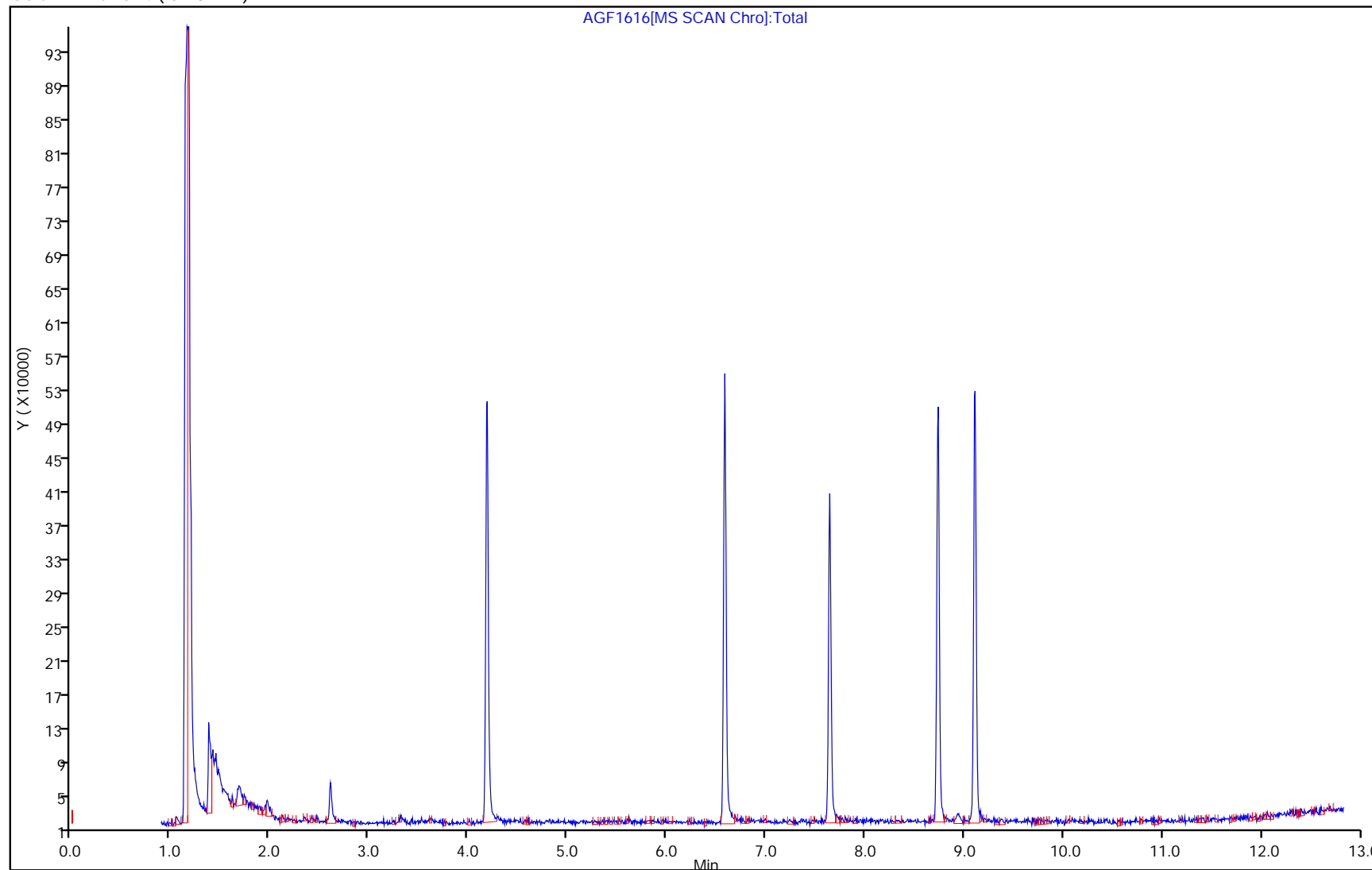
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:41:25

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1616.D
 Lims ID: 680-184600-F-1
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 16-Jun-2020 16:39:30 ALS Bottle#: 17 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-016
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:41:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.06	90.57
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.3	102.73

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: GWK016-2023 Lab Sample ID: 680-184600-2
 Matrix: Water Lab File ID: AGF1617.D
 Analysis Method: 524.2 Date Collected: 06/02/2020 09:30
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 17:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	104		70-130
460-00-4	4-Bromofluorobenzene	93		70-130

Report Date: 17-Jun-2020 09:41:38

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1617.D
 Lims ID: 680-184600-F-2
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 16-Jun-2020 17:03:30 ALS Bottle#: 18 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-017
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimstdp

Date: 17-Jun-2020 09:41:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	97	414071	10.0	
* 2 Chlorobenzene-d5	117	6.588	6.590	-0.002	93	246174	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.736	8.737	-0.001	96	113210	10.0	
\$ 4 4-Bromofluorobenzene	95	7.641	7.634	0.007	84	154564	9.31	
\$ 5 1,2-Dichlorobenzene-d4	152	9.113	9.108	0.005	94	116727	10.4	

Reagents:

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:41:38

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1617.D

Injection Date: 16-Jun-2020 17:03:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: 680-184600-F-2

Lab Sample ID: 680-184600-2

Worklist Smp#: 17

Client ID: GWK016-2023

Purge Vol: 5.000 mL

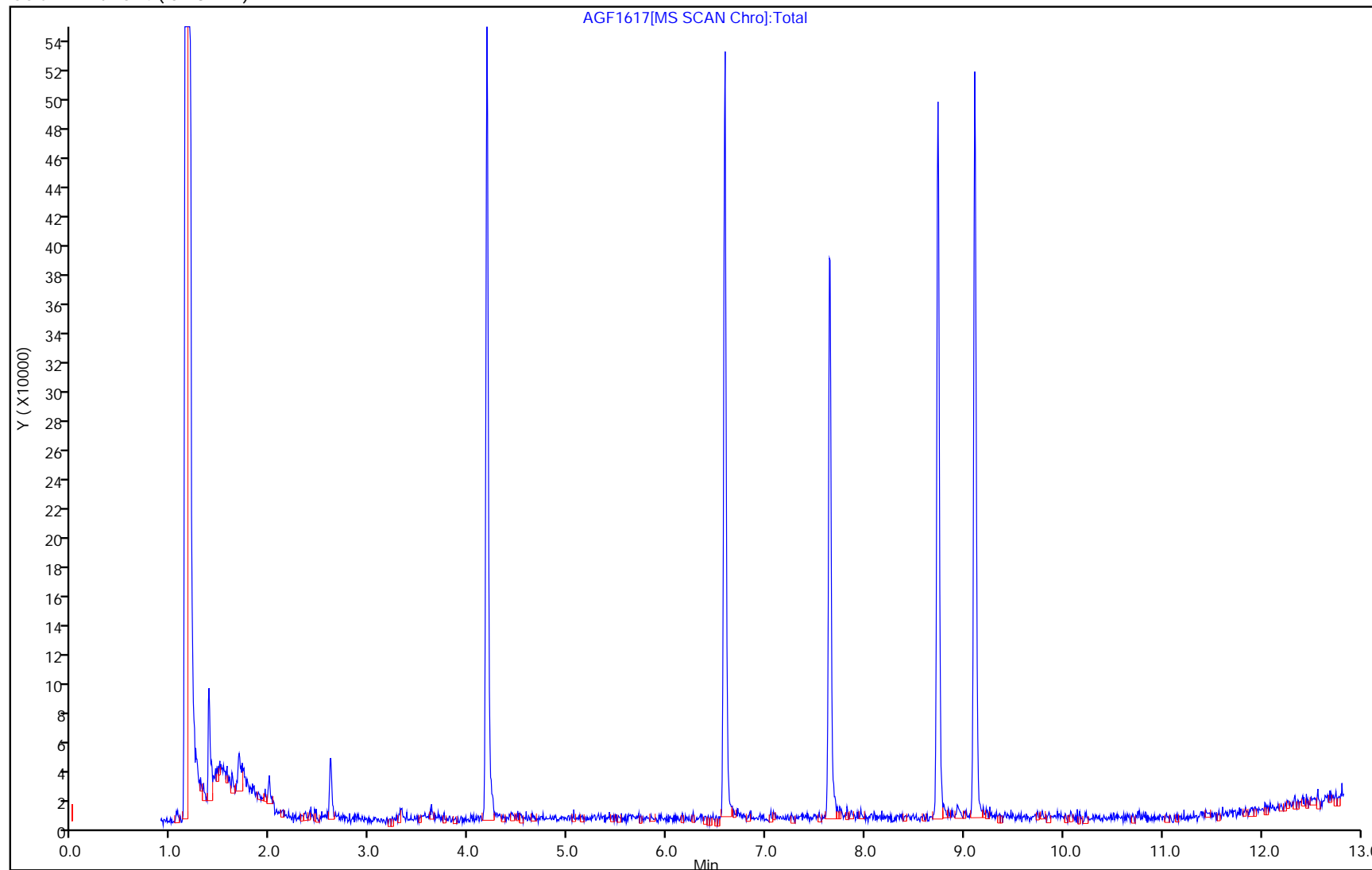
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:41:38

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1617.D
 Lims ID: 680-184600-F-2
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 16-Jun-2020 17:03:30 ALS Bottle#: 18 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-017
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:41:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.31	93.06
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.4	104.07

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: TB2023-2 Lab Sample ID: 680-184600-3
 Matrix: Water Lab File ID: AGF1614.D
 Analysis Method: 524.2 Date Collected: 06/02/2020 08:00
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 15:49
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND	*3	0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	118	*3	70-130
460-00-4	4-Bromofluorobenzene	91		70-130

Report Date: 17-Jun-2020 09:41:02

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1614.D
 Lims ID: 680-184600-C-3
 Client ID: TB2023-2
 Sample Type: Client
 Inject. Date: 16-Jun-2020 15:49:30 ALS Bottle#: 15 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-014
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimstup

Date: 17-Jun-2020 09:41:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	97	415236	10.0	
* 2 Chlorobenzene-d5	117	6.588	6.590	-0.002	92	265855	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.736	8.737	-0.001	94	105445	10.0	s
\$ 4 4-Bromofluorobenzene	95	7.647	7.634	0.013	86	151183	9.08	
\$ 5 1,2-Dichlorobenzene-d4	152	9.107	9.108	-0.001	93	123527	11.8	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:41:02

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1614.D

Injection Date: 16-Jun-2020 15:49:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: 680-184600-C-3

Lab Sample ID: 680-184600-3

Worklist Smp#: 14

Client ID: TB2023-2

Purge Vol: 5.000 mL

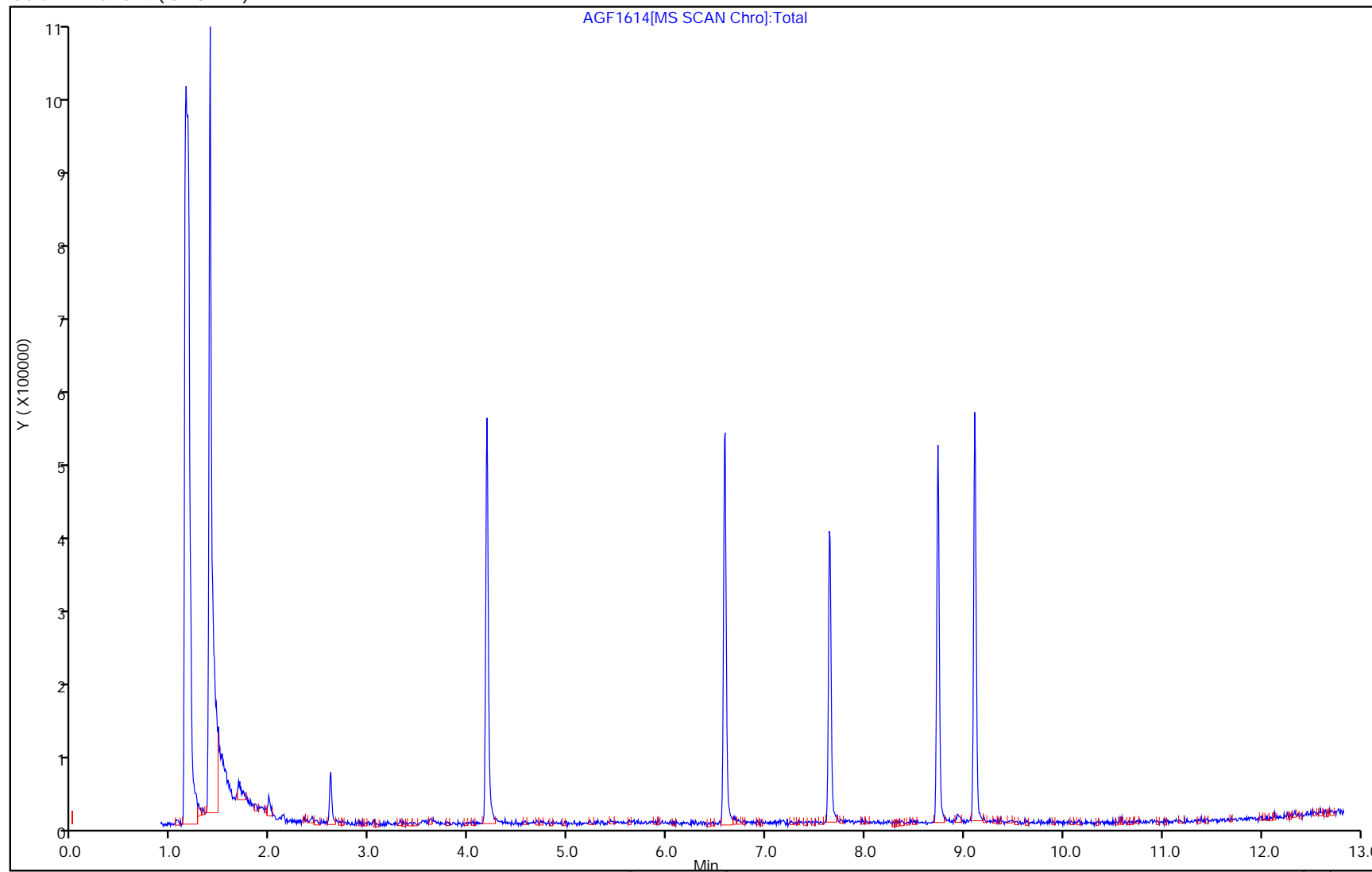
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:41:02

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1614.D
 Lims ID: 680-184600-C-3
 Client ID: TB2023-2
 Sample Type: Client
 Inject. Date: 16-Jun-2020 15:49:30 ALS Bottle#: 15 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-014
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:41:02 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:41:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.08	90.77
\$ 5 1,2-Dichlorobenzene-d4	10.0	11.8	118.25

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621037/7	AGF0307.D
Level 2	IC 680-621037/8	AGF0308.D
Level 3	IC 680-621037/9	AGF0309.D
Level 4	IC 680-621037/10	AGF0310.D
Level 5	IC 680-621037/11	AGF0311.D
Level 6	ICIS 680-621037/12	AGF0312.D
Level 7	IC 680-621037/13	AGF0313.D
Level 8	IC 680-621037/14	AGF0314.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 5													
Dichlorodifluoromethane	0.3439 0.3724	0.3728 0.3343	0.3893 0.3201	0.3922	0.3545	Ave	0.3599				7.2		20.0				
Chloromethane	0.5521 0.4613	0.4310 0.3985	0.4228 0.4266	0.4944	0.4450	Ave	0.4540				10.8		20.0				
Vinyl chloride	0.3935 0.3696	0.3953 0.3675	0.4525 0.3798	0.4306	0.3544	Ave	0.3929				8.5		20.0				
Bromomethane	0.0791 0.0777	0.0948 0.0796	0.0752 0.0839	0.0691	0.0650	Ave	0.0781				11.6		20.0				
Chloroethane	0.1513 0.2261	0.1523 0.1859	0.2401 0.2040	0.2168	0.1797	Ave	0.1945				16.9		20.0				
Trichlorofluoromethane	0.2873 0.3499	0.4029 0.3269	0.3378 0.3848	0.4094	0.3708	Ave	0.3587				11.5		20.0				
Freon 113	0.1600 0.1601	0.1446 0.1376	0.1573 0.1445	0.1832	0.1495	Ave	0.1546				9.1		20.0				
1,1-Dichloroethene	0.2202 0.2181	0.2294 0.2016	0.2364 0.2087	0.2397	0.2155	Ave	0.2212				6.0		20.0				
Acetone	++++ 0.0352	++++ 0.0284	0.0339 ++++	0.0376	0.0269	Ave	0.0324				14.1		20.0				
Methylene Chloride	2.0007 0.3458	1.0407 0.2650	0.7322 0.2810	0.4239	0.3591	Lin1	0.8499	0.2689						0.9950		0.9900	
tert-Butyl alcohol	0.0256 0.0358	0.0335 0.0325	0.0246 0.0371	0.0364	0.0309	Ave	0.0320				14.9		20.0				
Methyl tert-butyl ether	0.8945 0.9976	1.0021 0.8348	0.8972 0.9718	1.0165	0.7973	Ave	0.9265				8.9		20.0				
trans-1,2-Dichloroethene	0.1938 0.2600	0.2195 0.2157	0.2437 0.2166	0.2604	0.2405	Ave	0.2313				10.2		20.0				
1,1-Dichloroethane	0.4541 0.5800	0.5603 0.5229	0.5543 0.5388	0.5738	0.4962	Ave	0.5350				8.0		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	0.7405 1.0200	0.9657 0.8757	0.9933 1.0106	0.9825	0.9250	Ave		0.9392			9.9		20.0				
2,2-Dichloropropane	0.4358 0.4131	0.4006 0.3681	0.4276 0.3509	0.4269	0.3775	Ave		0.4000			7.8		20.0				
cis-1,2-Dichloroethene	0.5120 0.5325	0.4861 0.4623	0.5122 0.4462	0.5084	0.4215	Ave		0.4851			7.9		20.0				
2-Butanone (MEK)	++++ 0.0341	++++ 0.0387	0.0387 ++++	0.0424	0.0340	Ave		0.0376			9.5		20.0				
Chlorobromomethane	0.1548 0.1446	0.1824 0.1309	0.1654 0.1216	0.1529	0.1410	Ave		0.1492			12.9		20.0				
Chloroform	0.5105 0.4924	0.4735 0.4313	0.5614 0.4865	0.5184	0.4596	Ave		0.4917			8.1		20.0				
1,1,1-Trichloroethane	0.5733 0.6441	0.6108 0.5686	0.5834 0.6761	0.6374	0.5576	Ave		0.6064			7.0		20.0				
1,1-Dichloropropene	0.6402 0.6223	0.5935 0.5780	0.5560 0.6045	0.6193	0.5545	Ave		0.5960			5.3		20.0				
Carbon tetrachloride	0.4338 0.5115	0.4511 0.4530	0.4904 0.5504	0.4320	0.4248	Ave		0.4684			9.6		20.0				
Benzene	1.8342 1.9322	1.6823 1.7043	1.8469 1.9690	1.7654	1.6912	Ave		1.8032			6.1		20.0				
Tert-amyl methyl ether	0.7936 0.9194	0.7618 0.7836	0.9045 0.8911	0.9236	0.8556	Ave		0.8542			7.7		20.0				
1,2-Dichloroethane	0.7659 0.7060	0.6379 0.6218	0.5122 0.7220	0.6757	0.5929	Ave		0.6543			12.3		20.0				
Trichloroethene	0.3510 0.3639	0.2760 0.3086	0.3243 0.3513	0.3157	0.2874	Ave		0.3223			9.8		20.0				
1,2-Dichloropropane	0.5485 0.4910	0.2907 0.4686	0.4546 0.5089	0.4557	0.4474	Ave		0.4582			16.5		20.0				
Dibromomethane	0.2135 0.2654	0.2410 0.2316	0.2861 0.2652	0.2208	0.2282	Ave		0.2440			10.5		20.0				
Dichlorobromomethane	0.5794 0.5963	0.4580 0.5318	0.5675 0.6003	0.5234	0.4802	Ave		0.5421			9.8		20.0				
cis-1,3-Dichloropropene	0.6875 0.7058	0.5487 0.6340	0.6548 0.7462	0.6973	0.6414	Ave		0.6645			9.0		20.0				
4-Methyl-2-pentanone (MIBK)	0.5210 0.6372	0.4801 0.5577	0.5168 ++++	0.5508	0.4755	Ave		0.5342			10.3		20.0				
Toluene	1.1568 1.0989	0.9913 0.9542	0.9358 1.1130	1.0293	0.9806	Ave		1.0325			7.9		20.0				
trans-1,3-Dichloropropene	0.7515 0.7176	0.5813 0.6357	0.5695 0.7503	0.6410	0.6054	Ave		0.6565			11.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
 GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
 CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037
 SDG No.: _____
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloroethane	0.3715 0.3538	0.3080 0.3249	0.3169 0.3383	0.3378	0.2996	Ave		0.3314			7.2		20.0				
Tetrachloroethene	0.3578 0.5305	0.5032 0.5626	0.5365 0.5021	0.5549	0.5367	Ave		0.5105			12.8		20.0				
1,3-Dichloropropane	0.7861 0.8103	0.6750 0.7226	0.7399 0.7372	0.7506	0.6556	Ave		0.7347			7.0		20.0				
2-Hexanone	0.6051 0.8644	0.8010 0.9032	0.7444 +++++	0.8779	0.8097	Ave		0.8008			12.7		20.0				
Chlorodibromomethane	0.7236 0.6858	0.6858 0.7761	0.7058 0.7952	0.7050	0.6862	Ave		0.7204			5.9		20.0				
Ethylene Dibromide	0.3211 0.4183	0.3030 0.3611	0.3189 0.3854	0.3524	0.3353	Ave		0.3494			11.0		20.0				
Chlorobenzene	1.0587 1.0927	0.9473 1.0118	0.9392 1.0702	1.0575	0.9701	Ave		1.0184			5.9		20.0				
Ethylbenzene	3.6126 4.2375	4.1745 4.3283	4.0836 4.0329	4.2419	4.1125	Ave		4.1030			5.4		20.0				
1,1,1,2-Tetrachloroethane	0.8246 0.6985	0.7318 0.6961	0.6672 0.6814	0.7143	0.6673	Ave		0.7102			7.2		20.0				
m-Xylene & p-Xylene	2.5621 3.3798	3.0683 3.5146	3.2165 3.3601	3.3322	3.1299	Ave		3.1954			9.2		20.0				
o-Xylene	2.9046 3.3009	3.2687 3.5123	3.2735 3.3689	3.3295	3.2578	Ave		3.2770			5.2		20.0				
Styrene	1.9286 2.4983	2.2692 2.5431	2.0235 2.5699	2.1275	2.2463	Ave		2.2758			10.7		20.0				
Bromoform	0.3341 0.4115	0.4193 0.4464	0.3225 0.4854	0.4219	0.3822	Ave		0.4029			13.6		20.0				
Isopropylbenzene	2.9909 4.1183	3.6036 4.2061	3.9246 4.2332	3.7193	3.6921	Ave		3.8110			10.8		20.0				
Bromobenzene	0.8113 0.7880	0.7977 0.7440	0.8412 0.7630	0.7772	0.7328	Ave		0.7819			4.6		20.0				
1,1,2,2-Tetrachloroethane	1.1562 1.2118	1.1884 1.1455	1.2156 1.0608	1.3211	1.1350	Ave		1.1793			6.4		20.0				
1,2,3-Trichloropropane	0.2525 0.3509	0.3743 0.3095	0.3047 0.3269	0.3483	0.3436	Ave		0.3263			11.5		20.0				
N-Propylbenzene	4.7702 5.5090	4.9269 5.1809	5.1237 4.8472	5.0807	5.2772	Ave		5.0895			4.7		20.0				
2-Chlorotoluene	2.7478 3.0045	2.8767 2.8731	3.1170 3.1882	3.0479	2.8676	Ave		2.9654			5.0		20.0				
1,3,5-Trimethylbenzene	3.2144 3.5817	3.0376 3.3188	3.1251 3.3372	3.1579	3.4179	Ave		3.2738			5.4		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037
SDG No.: _____
Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	3.2636 3.3709	2.9790 3.1675	3.2203 3.3502	3.1368	3.1578	Ave		3.2058			3.9		20.0				
tert-Butylbenzene	2.4396 2.8336	2.7896 2.5809	2.6110 2.8133	2.8474	2.6882	Ave		2.7004			5.4		20.0				
1,2,4-Trimethylbenzene	2.5732 3.5355	3.1658 3.2263	3.1000 3.6219	3.4658	3.3764	Ave		3.2581			10.2		20.0				
sec-Butylbenzene	4.0401 4.3816	4.5102 4.4872	4.2065 4.3490	4.1674	4.5428	Ave		4.3356			4.2		20.0				
4-Isopropyltoluene	3.1164 3.5727	2.9414 3.6841	3.6296 3.6556	3.4097	3.5585	Ave		3.4460			8.0		20.0				
1,3-Dichlorobenzene	1.7186 1.6530	1.6427 1.4607	1.4443 1.5751	1.5495	1.4712	Ave		1.5644			6.5		20.0				
1,4-Dichlorobenzene	1.7381 1.5933	1.7040 1.6286	1.6486 1.6832	1.7391	1.5870	Ave		1.6652			3.6		20.0				
n-Butylbenzene	3.3071 4.0453	3.6402 3.7336	3.6871 3.7831	3.4979	3.8034	Ave		3.6872			5.9		20.0				
1,2-Dichlorobenzene	1.6720 1.6354	1.7468 1.5421	1.7382 1.5021	1.5298	1.5577	Ave		1.6155			6.0		20.0				
1,2-Dibromo-3-Chloropropane	0.1849 0.1985	0.2401 0.2096	0.1996 0.2196	0.1976	0.1779	Ave		0.2035			9.7		20.0				
1,2,4-Trichlorobenzene	0.7421 0.8556	0.8340 0.8227	0.7956 0.8107	0.8897	0.8051	Ave		0.8194			5.3		20.0				
Hexachlorobutadiene	0.3534 0.3716	0.3529 0.3704	0.4171 0.3663	0.3678	0.3658	Ave		0.3707			5.4		20.0				
Naphthalene	2.3619 3.0729	2.6980 2.8988	2.5006 2.8656	3.0083	2.7620	Ave		2.7710			8.8		20.0				
1,2,3-Trichlorobenzene	0.6863 0.8031	0.7476 0.7853	0.7559 0.7463	0.8246	0.7870	Ave		0.7670			5.6		20.0				
4-Bromofluorobenzene	0.3814 0.4118	0.3815 0.3690	0.4094 0.4126	0.4518	0.3915	Ave		0.4011			6.5		20.0				
1,2-Dichlorobenzene-d4 (Surr)	1.0631 0.9486	1.0189 0.9880	1.0251 0.8669	0.9948	1.0202	Ave		0.9907			6.1		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621037/7	AGF0307.D
Level 2	IC 680-621037/8	AGF0308.D
Level 3	IC 680-621037/9	AGF0309.D
Level 4	IC 680-621037/10	AGF0310.D
Level 5	IC 680-621037/11	AGF0311.D
Level 6	ICIS 680-621037/12	AGF0312.D
Level 7	IC 680-621037/13	AGF0313.D
Level 8	IC 680-621037/14	AGF0314.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	7869 351965	17926 886602	35937 1594960	84608	171211	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	12632 436073	20725 1056850	39025 2126047	106647	214877	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	9003 349412	19006 974470	41772 1892852	92873	171132	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	1809 73492	4557 211155	6945 418313	14901	31389	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	3461 213744	7324 493078	22168 1016397	46761	86780	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6573 330708	19372 866878	31180 1917819	88312	179039	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Freon 113	FB	Ave	3661 151373	6953 364976	14519 720115	39516	72197	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	5038 206159	11032 534673	21826 1040177	51712	104080	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	++++ 166264	++++ 377006	15630 ++++	40534	64898	++++ 100	++++ 250	10.0 ++++	25.0	50.0
Methylene Chloride	FB	Linl	45775 326834	50039 702882	67593 1400145	91428	173432	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butyl alcohol	FB	Ave	5848 338321	16095 860791	22684 1847019	78548	149197	5.00 200	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	20466 942975	48186 2213899	82821 4842731	219263	384999	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	4433 245781	10554 571955	22495 1079464	56170	116154	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	10389 548276	26940 1386722	51163 2684988	123770	239610	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tert-butyl ethyl ether	FB	Ave	13553 771322	37145 1857913	73353 4028735	169548	357332	0.400 16.0	0.800 40.0	1.60 80.0	4.00	8.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,2-Dichloropropane	FB	Ave	9971 390442	19260 976200	39473 1748455	92078	182278	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	11715 503328	23373 1225890	47281 2223608	109653	203540	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	++++ 161021	++++ 513582	17871 ++++	45696	82148	++++ 100	++++ 250	10.0 ++++	25.0	50.0
Chlorobromomethane	FB	Ave	3541 136646	8768 347047	15270 605930	32988	68078	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chloroform	FB	Ave	11679 465448	22767 1143764	51825 2424470	111826	221920	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	CBNZ d5	Ave	8024 408313	20497 1001196	38117 2082391	101789	189874	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	CBNZ d5	Ave	8961 394479	19918 1017911	36328 1861968	98894	188807	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	CBNZ d5	Ave	6072 324235	15138 797677	32042 1695215	68978	144650	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	CBNZ d5	Ave	25673 1224804	56456 3001242	120674 6064818	281909	575865	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tert-amyl methyl ether	FB	Ave	14526 695267	29302 1662386	66795 3552483	159380	330554	0.400 16.0	0.800 40.0	1.60 80.0	4.00	8.00
1,2-Dichloroethane	CBNZ d5	Ave	10720 447533	21409 1094924	33464 2223720	107898	201886	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	CBNZ d5	Ave	4913 230675	9264 543381	21192 1082039	50414	97871	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	CBNZ d5	Ave	7677 311262	9757 825123	29704 1567381	72770	152346	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	CBNZ d5	Ave	2988 168220	8089 407842	18695 816710	35254	77721	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorobromomethane	CBNZ d5	Ave	8109 377985	15369 936532	37079 1849012	83576	163510	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	9623 447400	18413 1116380	42786 2298310	111344	218419	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	36459 2019695	80559 4910626	168833 ++++	439805	809547	2.50 100	5.00 250	10.0 ++++	25.0	50.0
Toluene	CBNZ d5	Ave	16191 696598	33267 1680285	61146 3428078	164373	333922	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	10518 454865	19508 1119443	37211 2310975	102368	206138	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	5200 224268	10335 572088	20709 1042149	53943	102025	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	DCBd 4	Ave	2477 176421	7677 454482	16610 830615	42353	82716	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037
SDG No.: _____
Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3-Dichloropropane	CBNZ d5	Ave	11003 513642	22654 1272392	48342 2270684	119868	223258	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	DCBd 4	Ave	20947 1437372	61105 3648222	115233 +++++	335023	623918	2.50 100	5.00 250	10.0 +++++	25.0	50.0
Chlorodibromomethane	DCBd 4	Ave	5010 228055	10464 626968	21851 1315418	53806	105755	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	4495 265180	10169 635890	20835 1186992	56280	114162	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	14819 692672	31790 1781694	61363 3296238	168877	330333	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	DCBd 4	Ave	25012 1409184	63692 3496448	126427 6670865	323748	633778	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	DCBd 4	Ave	5709 232293	11166 562343	20656 1127095	54515	102843	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
m-Xylene & p-Xylene	DCBd 4	Ave	17739 1123946	46814 2839183	99583 5557977	254317	482350	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	DCBd 4	Ave	20110 1097720	49871 2837299	101349 5572620	254115	502054	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	DCBd 4	Ave	13353 830830	34622 2054387	62647 4250922	162372	346171	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	DCBd 4	Ave	2313 136840	6397 360573	9985 802910	32200	58894	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	20708 1369565	54981 3397792	121507 7002214	283862	568987	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5617 262049	12171 601003	26045 1262152	59319	112926	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8005 402982	18132 925384	37636 1754719	100827	174909	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1748 116679	5711 250022	9435 540663	26582	52951	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	33027 1832025	75171 4185275	158630 8017904	387772	813263	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	19025 999160	43891 2320936	96502 5273676	232622	441923	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	22255 1191108	46346 2680953	96752 5520222	241018	526729	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	22596 1121006	45451 2558774	99700 5541673	239404	486655	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	16891 942312	42562 2084901	80836 4653631	217316	414272	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	17816 1175727	48302 2606269	95975 5991087	264513	520331	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037

SDG No.: _____

Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
sec-Butylbenzene	DCBd 4	Ave	27972 1457121	68813 3624819	130234 7193845	318068	700098	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	21577 1188093	44878 2976122	112371 6046892	260233	548398	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	11899 549723	25063 1180009	44717 2605351	118258	226726	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	12034 529847	25998 1315639	51040 2784218	132735	244567	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	22897 1345281	55539 3016038	114152 6257659	266969	586148	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	11576 543850	26652 1245744	53814 2484606	116759	240060	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1280 66001	3663 169332	6179 363301	15084	27412	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	5138 284531	12724 664556	24633 1341054	67907	124068	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	2447 123563	5385 299195	12912 605958	28072	56374	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	16353 1021900	41164 2341679	77418 4740107	229598	425654	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	4752 267075	11406 634364	23404 1234515	62932	121277	0.500 20.0	1.00 50.0	2.00 100	5.00	10.0
4-Bromofluorobenzene	FB	Ave	174521 194623	183430 195715	188950 205615	194915	189050	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0
1,2-Dichlorobenzene-d4 (Surr)	DCBd 4	Ave	147210 157727	155463 159620	158684 143402	151857	157227	10.0 10.0	10.0 10.0	10.0 10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 621037
 SDG No.: _____
 Instrument ID: CMSAG GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N
 Calibration Start Date: 06/03/2020 14:08 Calibration End Date: 06/03/2020 17:02 Calibration ID: 76069

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-621037/7	AGF0307.D
Level 2	IC 680-621037/8	AGF0308.D
Level 3	IC 680-621037/9	AGF0309.D
Level 4	IC 680-621037/10	AGF0310.D
Level 5	IC 680-621037/11	AGF0311.D
Level 6	ICIS 680-621037/12	AGF0312.D
Level 7	IC 680-621037/13	AGF0313.D
Level 8	IC 680-621037/14	AGF0314.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT						
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	
	LVL 7 #	LVL 8 #					LVL 7	LVL 8					
Methylene Chloride	11.9						30						

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 03-Jun-2020 14:08:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-007
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:23 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: proctors

Date: 03-Jun-2020 14:48:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.184	0.000	97	457586	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.586	6.586	0.000	93	279934	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	95	138472	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.644	7.645	-0.001	85	174521	10.0	9.51	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	91	147210	10.0	10.7	
7 Dichlorodifluoromethane	85	1.301	1.302	-0.001	36	7869	0.5000	0.4778	a
8 Chloromethane	50	1.483	1.478	0.005	42	12632	0.5000	0.6081	M
9 Vinyl chloride	62	1.514	1.515	-0.001	95	9003	0.5000	0.5008	
10 Bromomethane	94	1.751	1.746	0.005	11	1809	0.5000	0.5065	M
11 Chloroethane	64	1.800	1.800	0.000	56	3461	0.5000	0.3888	
12 Trichlorofluoromethane	101	1.958	1.959	-0.001	94	6573	0.5000	0.4004	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.268	2.269	-0.001	56	3661	0.5000	0.5175	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	92	5038	0.5000	0.4977	
15 Acetone	58	2.353	2.342	0.011	89	9122	2.50	6.16	
16 Methylene Chloride	84	2.609	2.609	-0.001	99	45775	0.5000	0.5597	
17 2-Methyl-2-propanol	59	2.657	2.664	-0.007	59	5848	5.00	3.99	M
18 Methyl tert-butyl ether	73	2.736	2.743	-0.007	99	20466	0.5000	0.4828	
19 trans-1,2-Dichloroethene	96	2.773	2.767	0.006	85	4433	0.5000	0.4189	M
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	97	10389	0.5000	0.4243	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	87	13553	0.4000	0.3154	M
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	93	9971	0.5000	0.5447	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	81	11715	0.5000	0.5277	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	95	3410	2.50	1.98	
26 Chlorobromomethane	130	3.600	3.594	0.006	81	3541	0.5000	0.5187	M
27 Chloroform	83	3.630	3.619	0.011	97	11679	0.5000	0.5191	
28 1,1,1-Trichloroethane	97	3.740	3.734	0.006	94	8024	0.5000	0.4727	
30 1,1-Dichloropropene	75	3.843	3.844	-0.001	90	8961	0.5000	0.5371	
29 Carbon tetrachloride	117	3.843	3.850	-0.007	82	6072	0.5000	0.4631	
31 Benzene	78	4.001	4.002	-0.001	94	25673	0.5000	0.5086	
33 Tert-amyl methyl ether	73	4.032	4.026	0.006	95	14526	0.4000	0.3717	
32 1,2-Dichloroethane	62	4.032	4.032	0.000	77	10720	0.5000	0.5853	

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	90	4913	0.5000	0.5446	
35 1,2-Dichloropropane	63	4.634	4.628	0.006	92	7677	0.5000	0.5986	
36 Dibromomethane	93	4.737	4.738	-0.001	69	2988	0.5000	0.4375	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	94	8109	0.5000	0.5344	
38 cis-1,3-Dichloropropene	75	5.169	5.170	-0.001	90	9623	0.5000	0.5174	
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	97	36459	2.50	2.44	
40 Toluene	92	5.406	5.419	-0.013	94	16191	0.5000	0.5602	Ma
41 trans-1,3-Dichloropropene	75	5.613	5.613	0.000	94	10518	0.5000	0.5723	
42 1,1,2-Trichloroethane	83	5.771	5.778	-0.007	84	5200	0.5000	0.5606	
43 Tetrachloroethene	164	5.862	5.863	-0.001	63	2477	0.5000	0.3504	
44 1,3-Dichloropropane	76	5.917	5.911	0.006	82	11003	0.5000	0.5350	
45 2-Hexanone	43	5.953	5.948	0.005	96	20947	2.50	1.89	
46 Chlorodibromomethane	129	6.111	6.112	-0.001	70	5010	0.5000	0.5022	
47 Ethylene Dibromide	107	6.215	6.216	-0.001	79	4495	0.5000	0.4595	
48 Chlorobenzene	112	6.616	6.611	0.005	93	14819	0.5000	0.5198	
50 Ethylbenzene	91	6.683	6.678	0.005	97	25012	0.5000	0.4402	
49 1,1,1,2-Tetrachloroethane	131	6.689	6.684	0.005	42	5709	0.5000	0.5806	a
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	93	17739	0.5000	0.4009	
52 o-Xylene	91	7.139	7.140	-0.001	85	20110	0.5000	0.4432	
53 Styrene	104	7.163	7.164	-0.001	87	13353	0.5000	0.4237	
54 Bromoform	173	7.388	7.377	0.011	37	2313	0.5000	0.4146	
55 Isopropylbenzene	105	7.467	7.468	-0.001	96	20708	0.5000	0.3924	
56 Bromobenzene	156	7.802	7.797	0.005	92	5617	0.5000	0.5188	
57 1,1,2,2-Tetrachloroethane	83	7.808	7.803	0.005	79	8005	0.5000	0.4902	
58 1,2,3-Trichloropropane	110	7.845	7.845	0.000	37	1748	0.5000	0.3868	
59 n-Propylbenzene	91	7.851	7.851	0.000	96	33027	0.5000	0.4686	
60 2-Chlorotoluene	91	7.960	7.955	0.005	94	19025	0.5000	0.4633	
61 1,3,5-Trimethylbenzene	105	8.009	8.010	0.000	90	22255	0.5000	0.4909	
62 4-Chlorotoluene	91	8.063	8.058	0.005	95	22596	0.5000	0.5090	
63 tert-Butylbenzene	119	8.319	8.320	-0.001	87	16891	0.5000	0.4517	
64 1,2,4-Trimethylbenzene	105	8.374	8.374	0.000	95	17816	0.5000	0.3949	
65 sec-Butylbenzene	105	8.532	8.526	0.006	98	27972	0.5000	0.4659	
67 4-Isopropyltoluene	119	8.672	8.666	0.006	96	21577	0.5000	0.4522	
66 1,3-Dichlorobenzene	146	8.678	8.678	0.000	86	11899	0.5000	0.5493	
68 1,4-Dichlorobenzene	146	8.757	8.764	-0.007	89	12034	0.5000	0.5219	
70 n-Butylbenzene	91	9.067	9.068	-0.001	91	22897	0.5000	0.4485	
69 1,2-Dichlorobenzene	146	9.128	9.135	-0.007	41	11576	0.5000	0.5175	
71 1,2-Dibromo-3-Chloropropane	157	9.949	9.962	-0.013	8	1280	0.5000	0.4543	M
72 1,2,4-Trichlorobenzene	180	10.885	10.898	-0.013	82	5138	0.5000	0.4528	M
73 Hexachlorobutadiene	225	11.049	11.050	-0.001	70	2447	0.5000	0.4768	M
74 Naphthalene	128	11.177	11.178	-0.001	97	16353	0.5000	0.4262	
75 1,2,3-Trichlorobenzene	180	11.439	11.427	0.012	88	4752	0.5000	0.4474	
S 76 Xylenes, Total	1				0		1.00	0.8441	
S 77 Trihalomethanes, Total	1				0			1.97	
S 78 1,3-Dichloropropene, Total	1				0		1.00	1.09	

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.05

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D

Injection Date: 03-Jun-2020 14:08:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

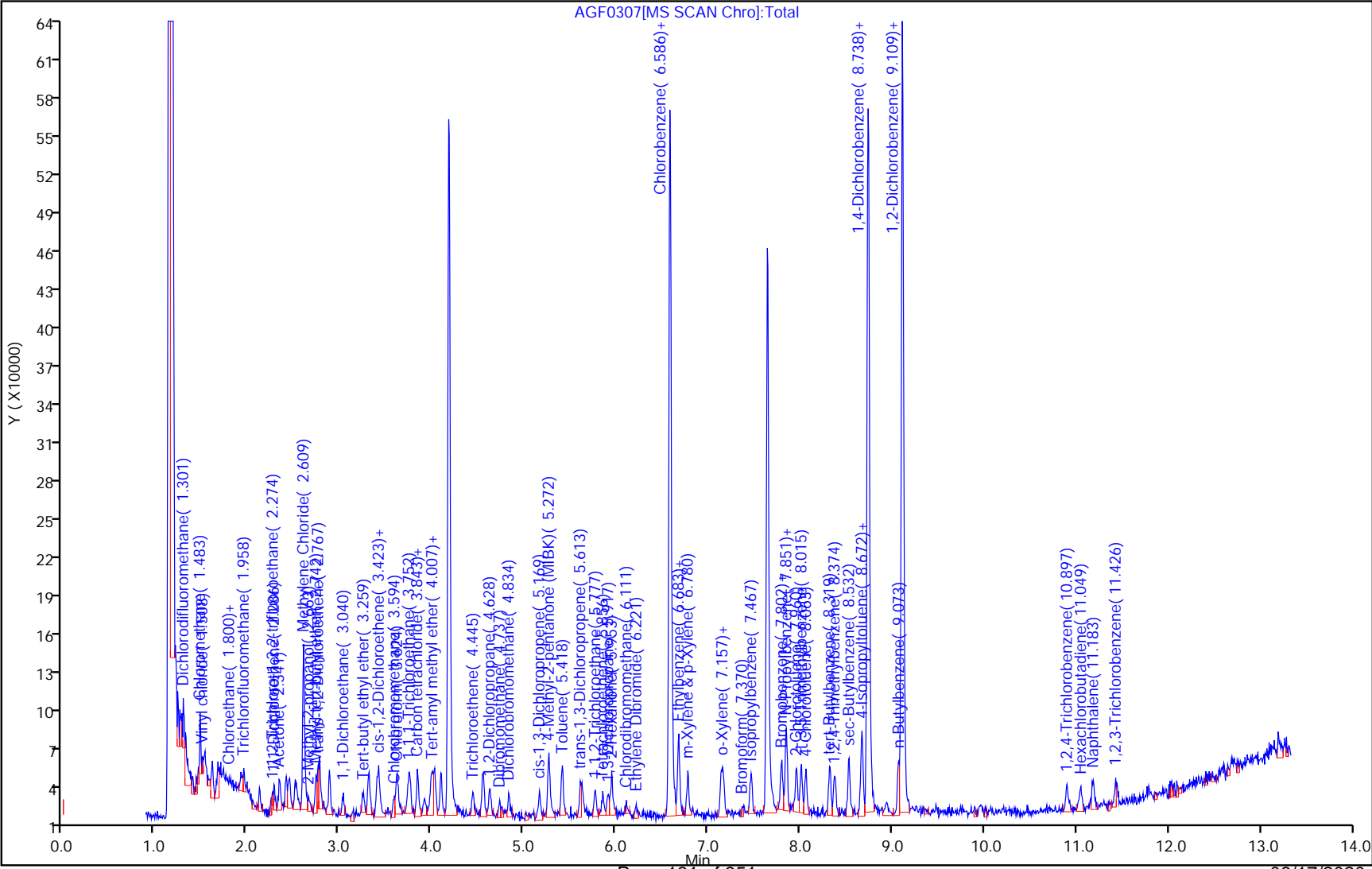
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

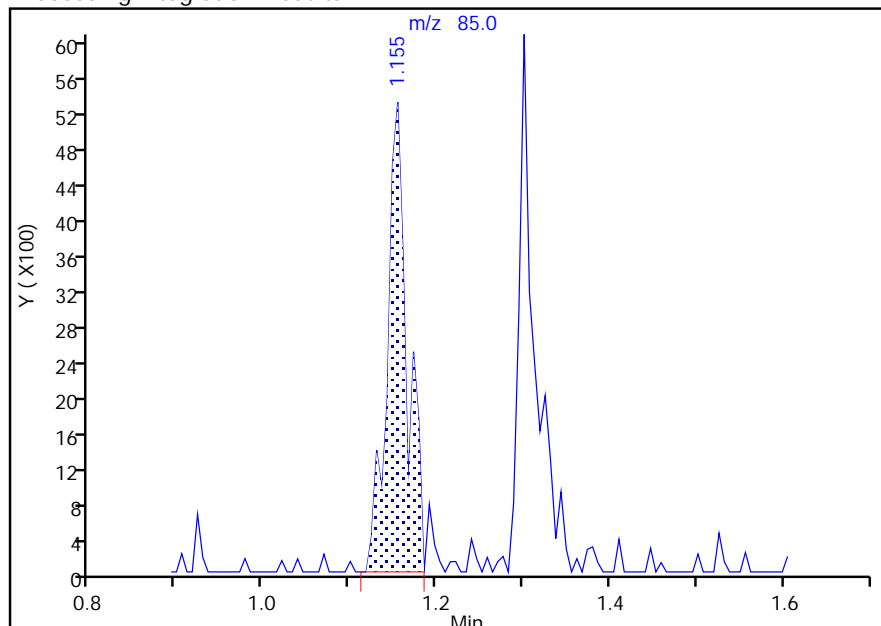
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D
 Injection Date: 03-Jun-2020 14:08:30 Instrument ID: CMSAG
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

7 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

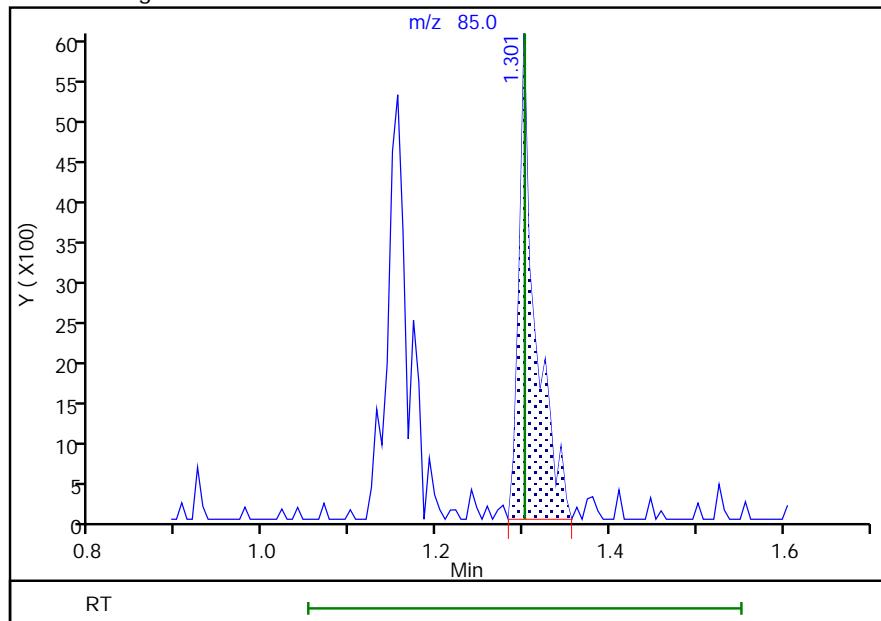
RT: 1.16
 Area: 8471
 Amount: 0.508254
 Amount Units: ug/l

Processing Integration Results



RT: 1.30
 Area: 7869
 Amount: 0.477756
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:58:15

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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Report Date: 04-Jun-2020 12:47:24

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

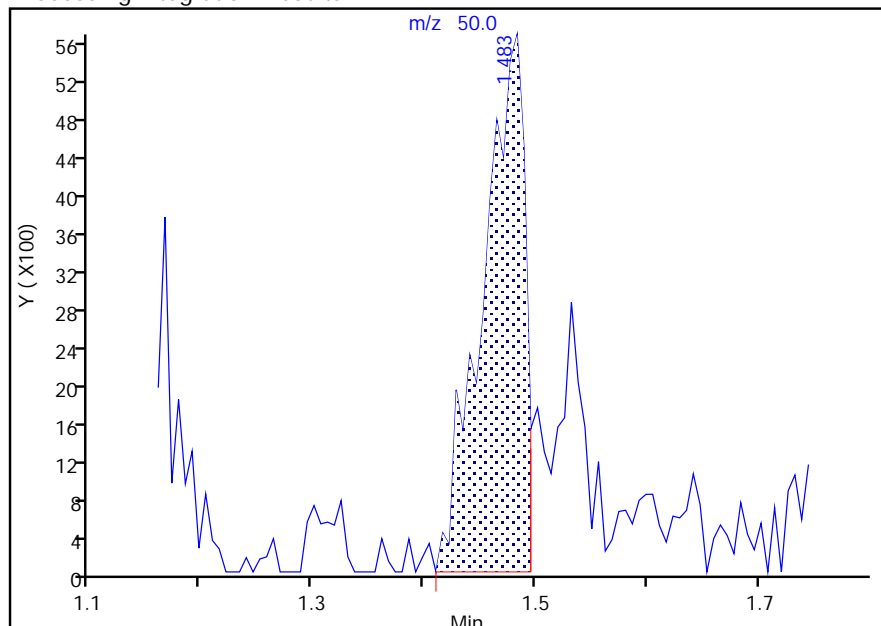
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Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

8 Chloromethane, CAS: 74-87-3

Signal: 1

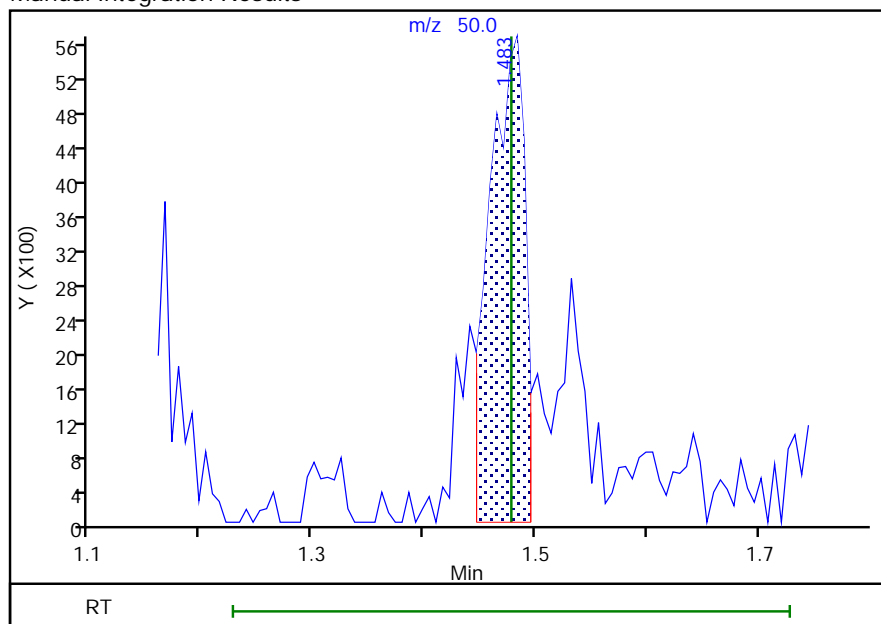
RT: 1.48
Area: 14949
Amount: 0.698384
Amount Units: ug/l

Processing Integration Results



RT: 1.48
Area: 12632
Amount: 0.608092
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:41:46

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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Report Date: 04-Jun-2020 12:47:24

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

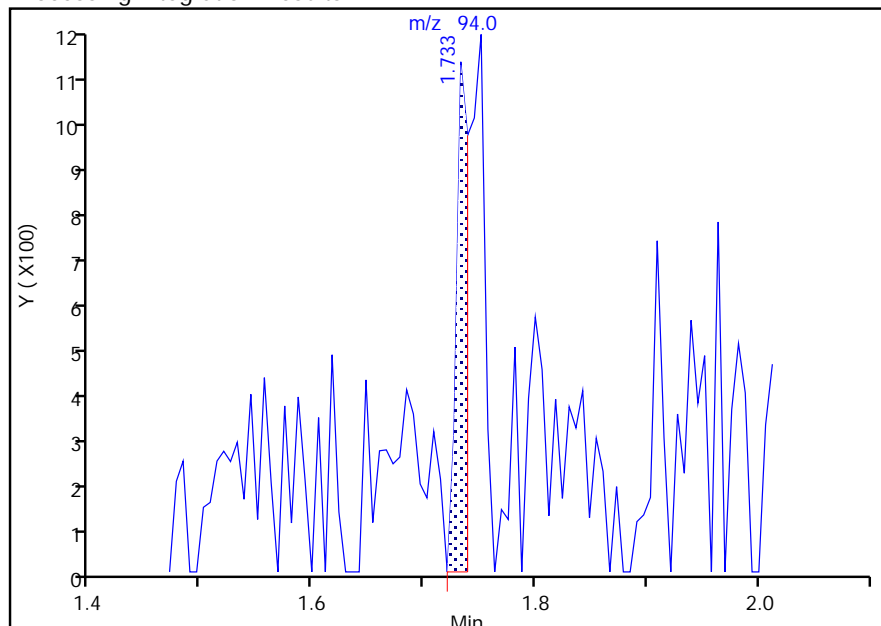
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Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

10 Bromomethane, CAS: 74-83-9

Signal: 1

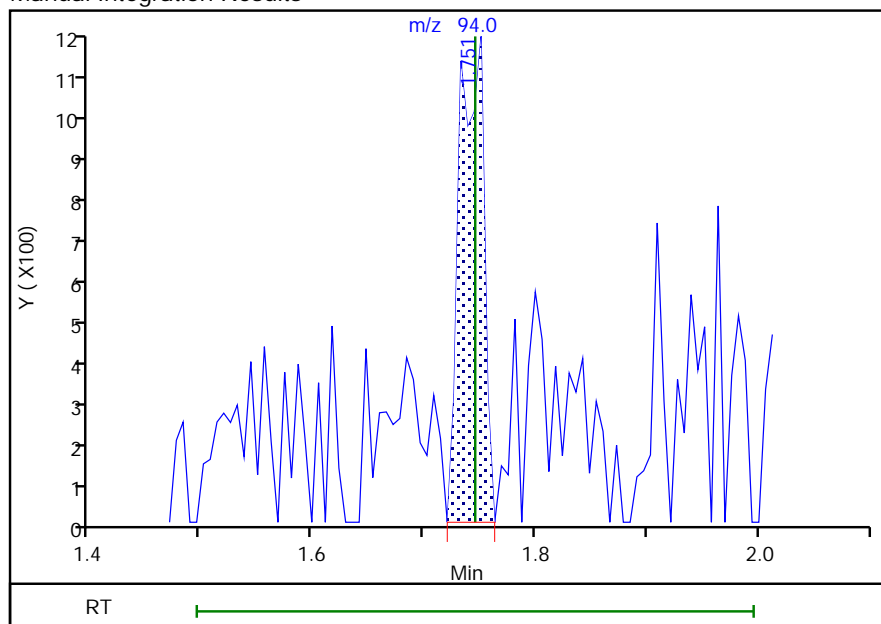
RT: 1.73
Area: 886
Amount: 0.417443
Amount Units: ug/l

Processing Integration Results



RT: 1.75
Area: 1809
Amount: 0.506455
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:17

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

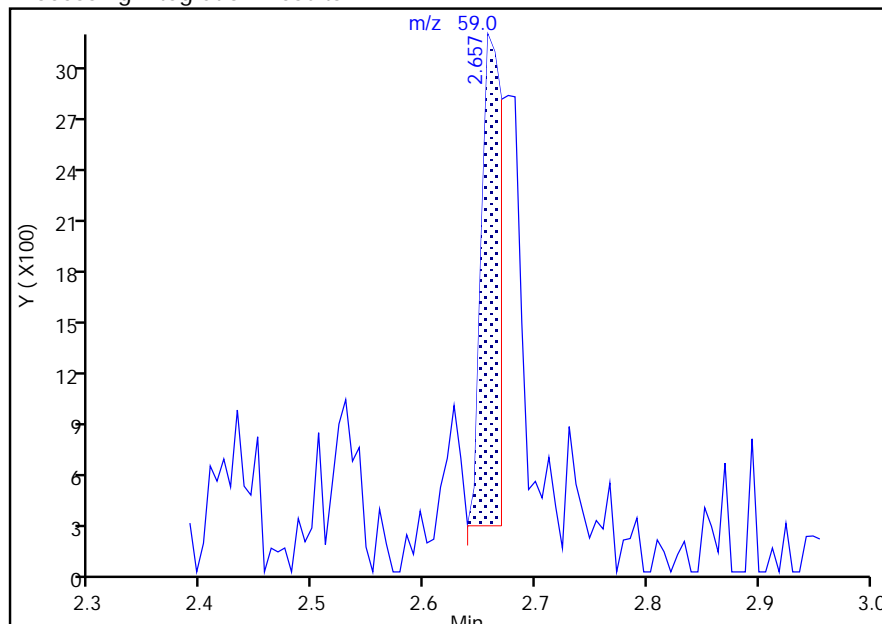
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Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

17 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

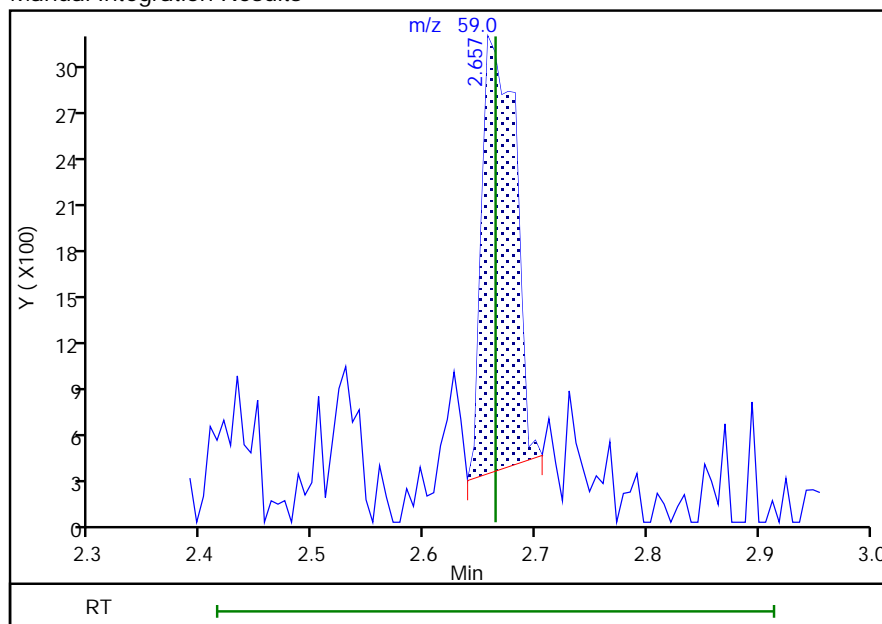
RT: 2.66
 Area: 3688
 Amount: 4.948195
 Amount Units: ug/l

Processing Integration Results



RT: 2.66
 Area: 5848
 Amount: 3.990141
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:29

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

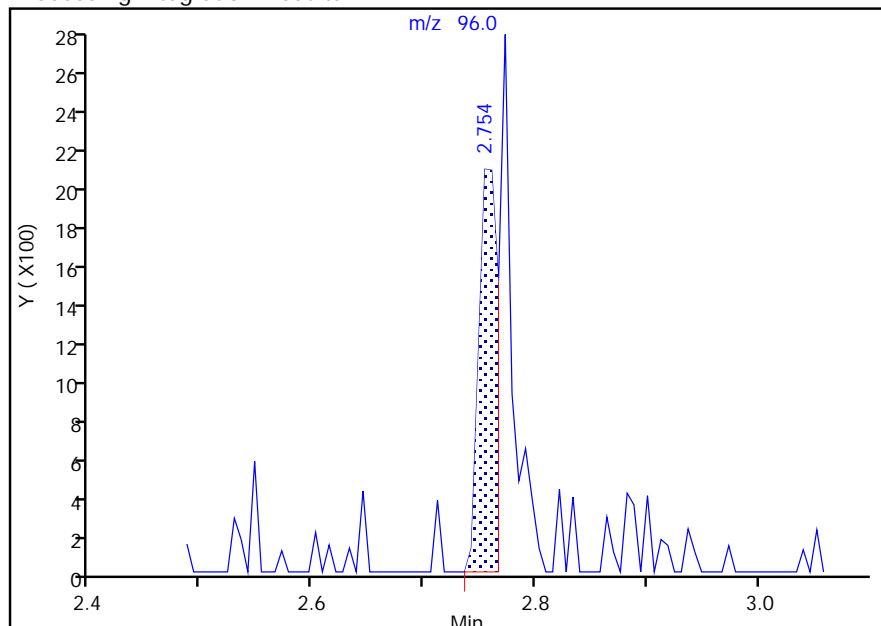
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Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

19 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

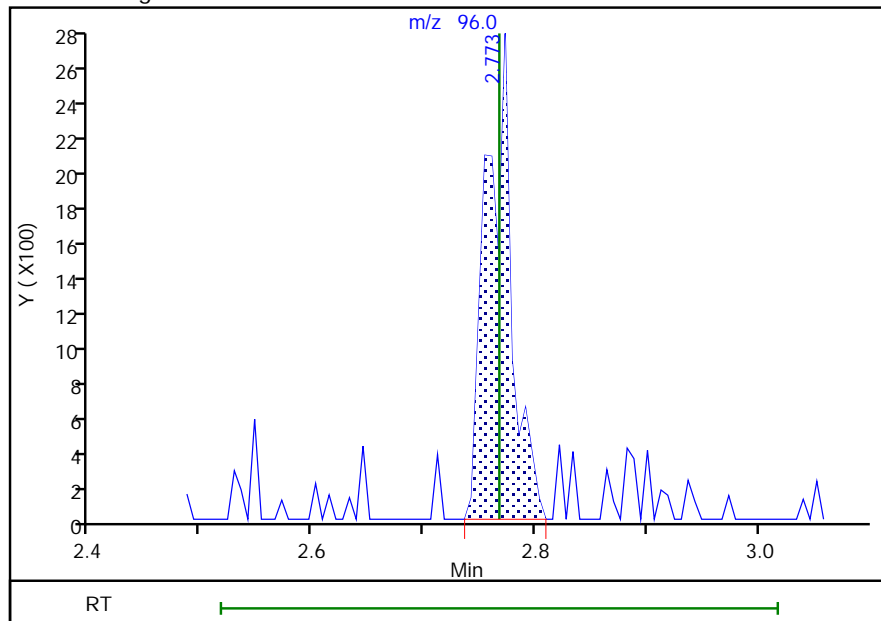
RT: 2.75
Area: 2504
Amount: 0.266132
Amount Units: ug/l

Processing Integration Results



RT: 2.77
Area: 4433
Amount: 0.418888
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:39

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

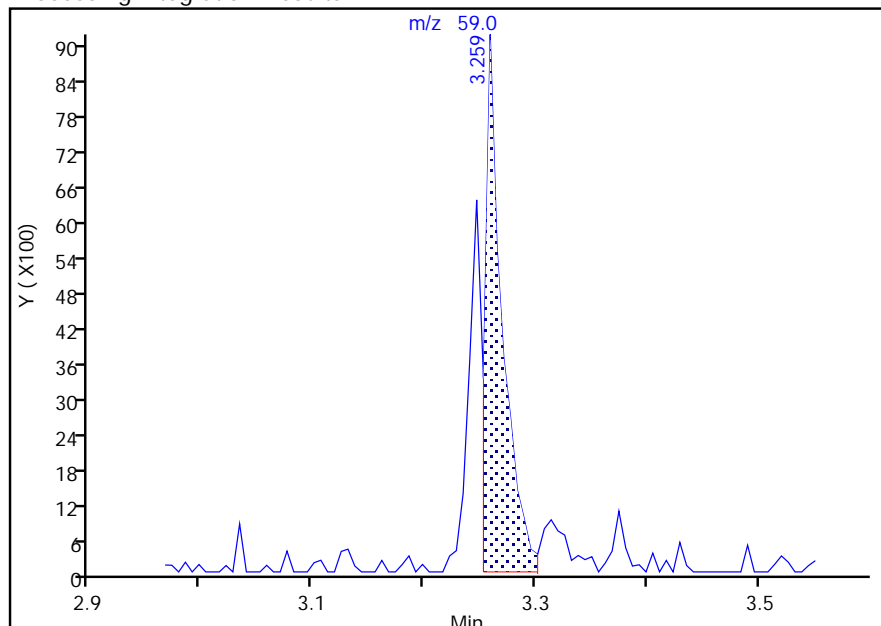
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Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

22 Tert-butyl ethyl ether, CAS: 637-92-3

Signal: 1

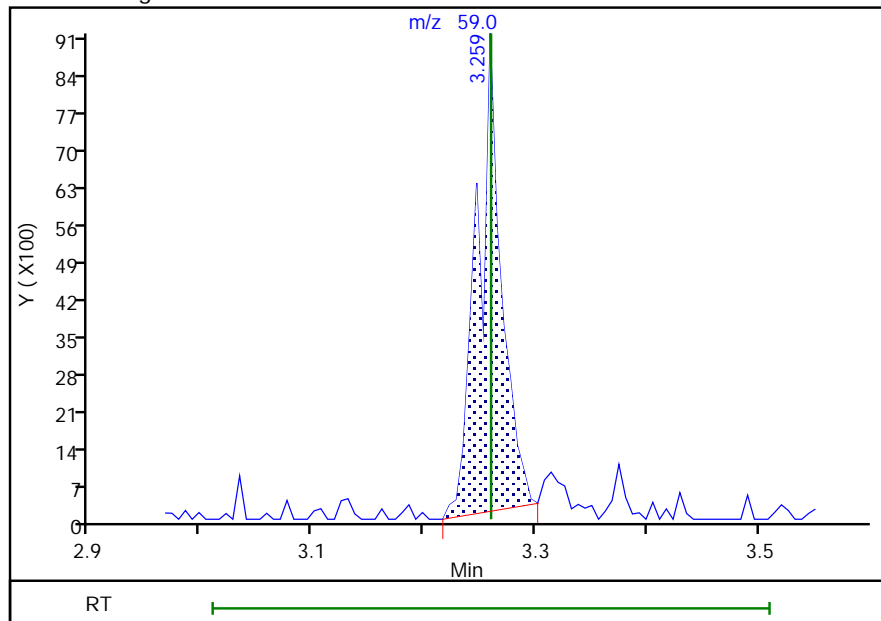
RT: 3.26
Area: 9993
Amount: 0.238043
Amount Units: ug/l

Processing Integration Results



RT: 3.26
Area: 13553
Amount: 0.315375
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:38:51

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

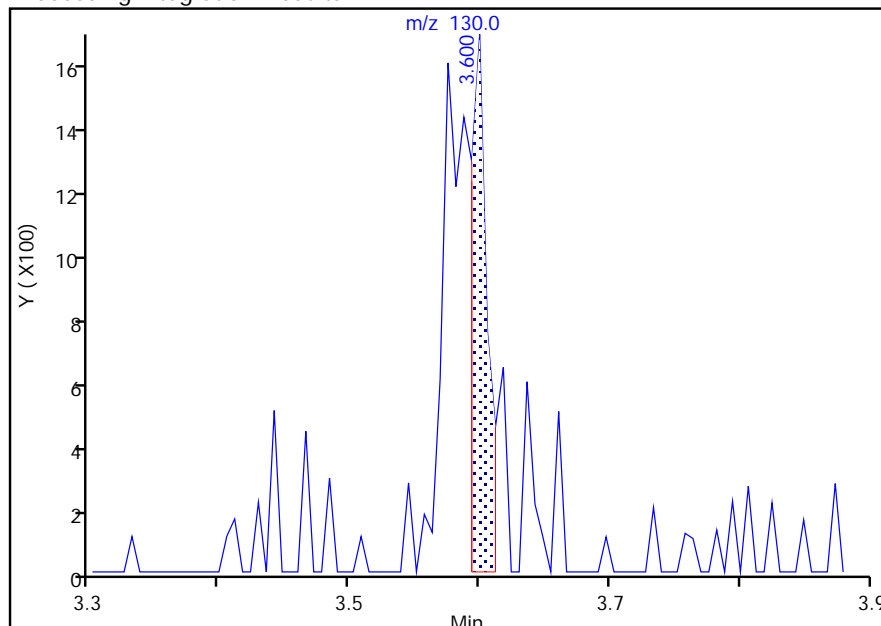
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Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

26 Chlorobromomethane, CAS: 74-97-5

Signal: 1

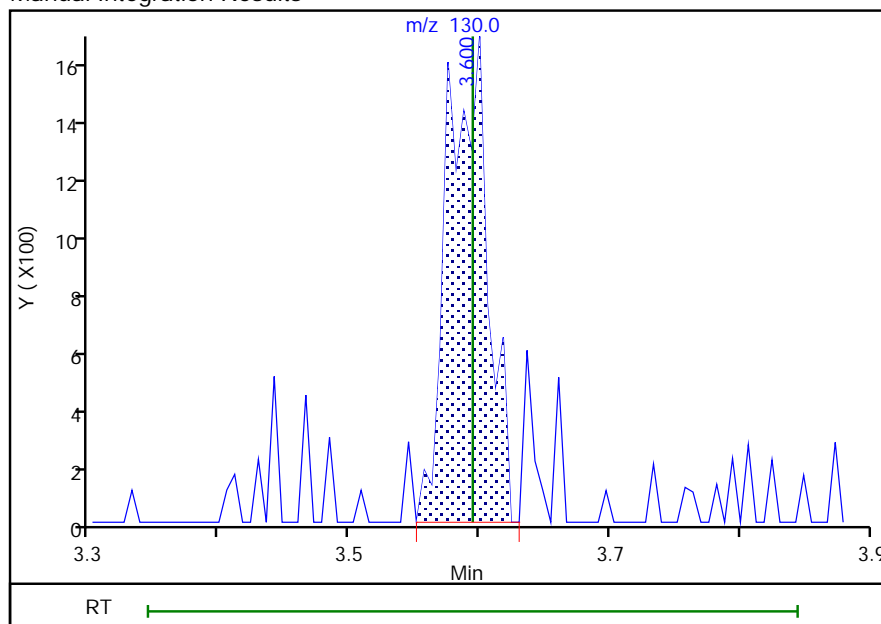
RT: 3.60
Area: 1484
Amount: 0.086888
Amount Units: ug/l

Processing Integration Results



RT: 3.60
Area: 3541
Amount: 0.518717
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:59:02

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

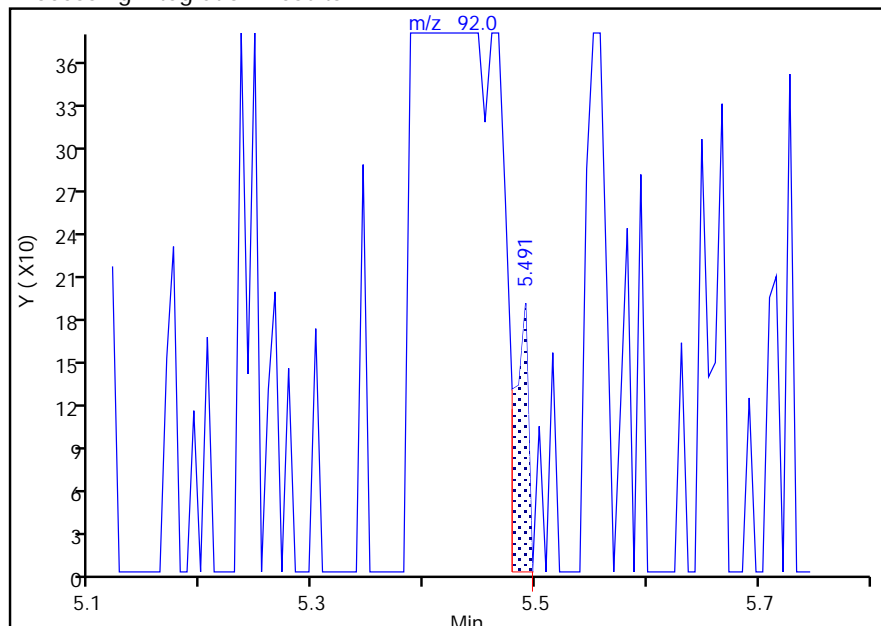
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D
 Injection Date: 03-Jun-2020 14:08:30 Instrument ID: CMSAG
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

40 Toluene, CAS: 108-88-3

Signal: 1

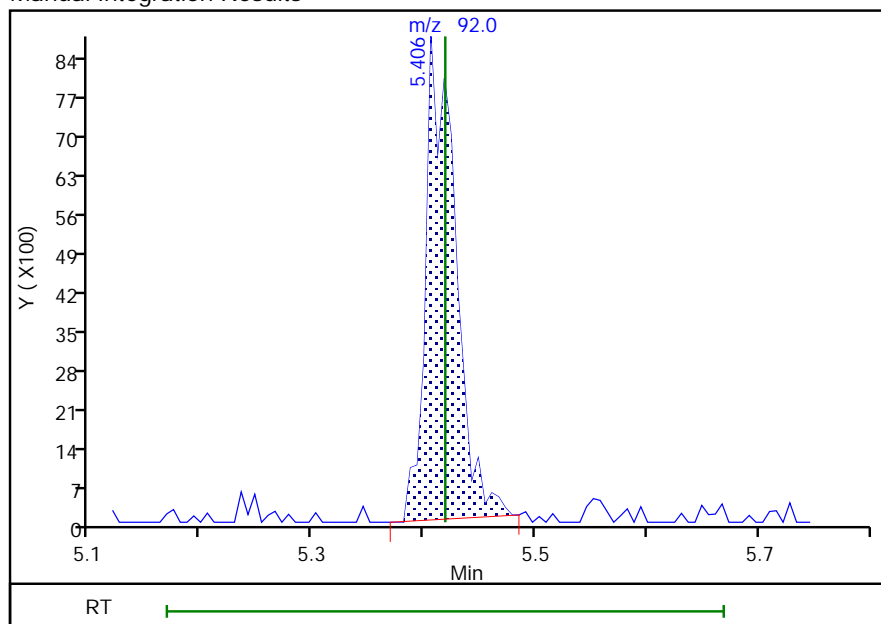
RT: 5.49
 Area: 165
 Amount: 0.277632
 Amount Units: ug/l

Processing Integration Results



RT: 5.41
 Area: 16191
 Amount: 0.560184
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 03-Jun-2020 14:48:14

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

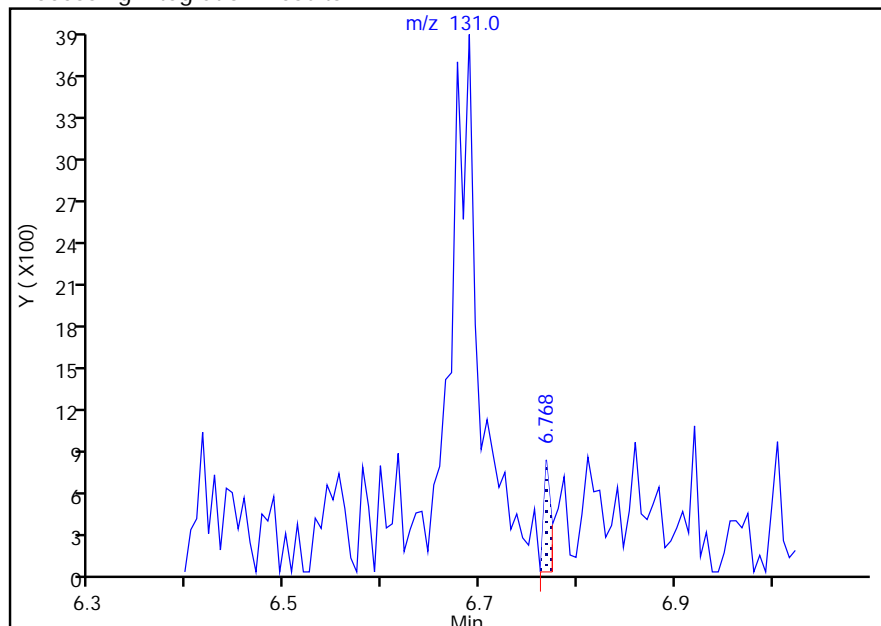
Eurofins TestAmerica, Savannah

Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

49 1,1,1,2-Tetrachloroethane, CAS: 630-20-6
Signal: 1

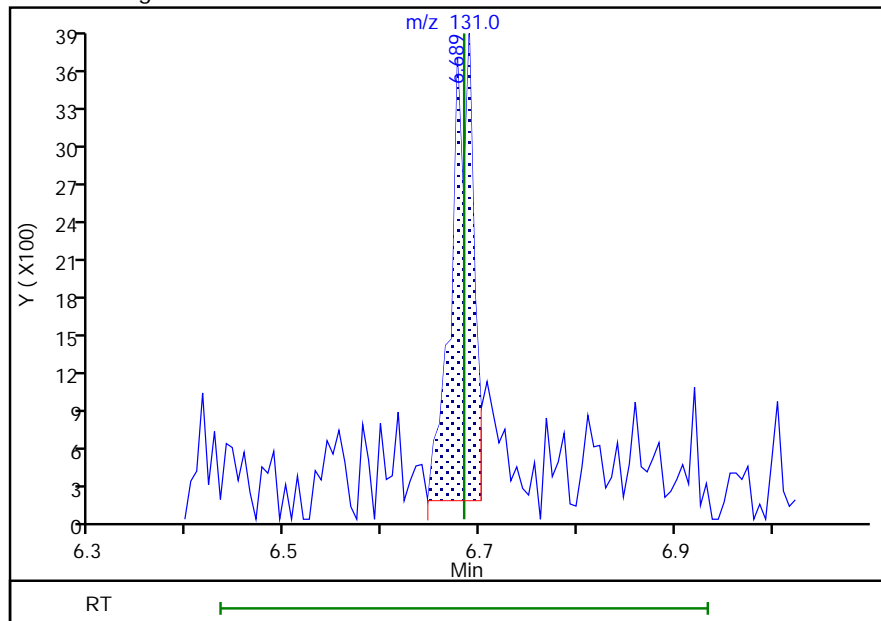
RT: 6.77
Area: 419
Amount: 0.279748
Amount Units: ug/l

Processing Integration Results



RT: 6.69
Area: 5709
Amount: 0.580558
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 11:04:54

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

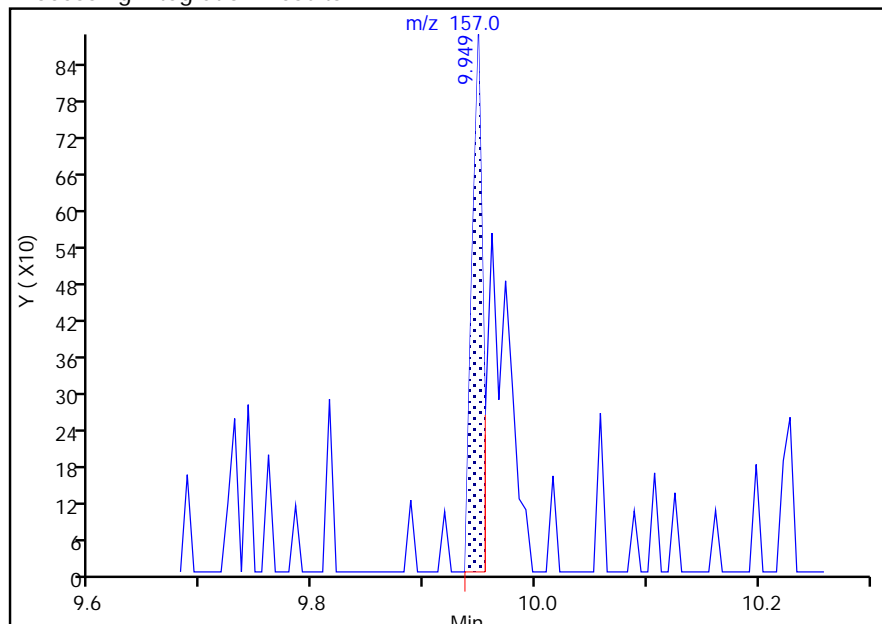
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 Injection Date: 03-Jun-2020 14:08:30 Instrument ID: CMSAG
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

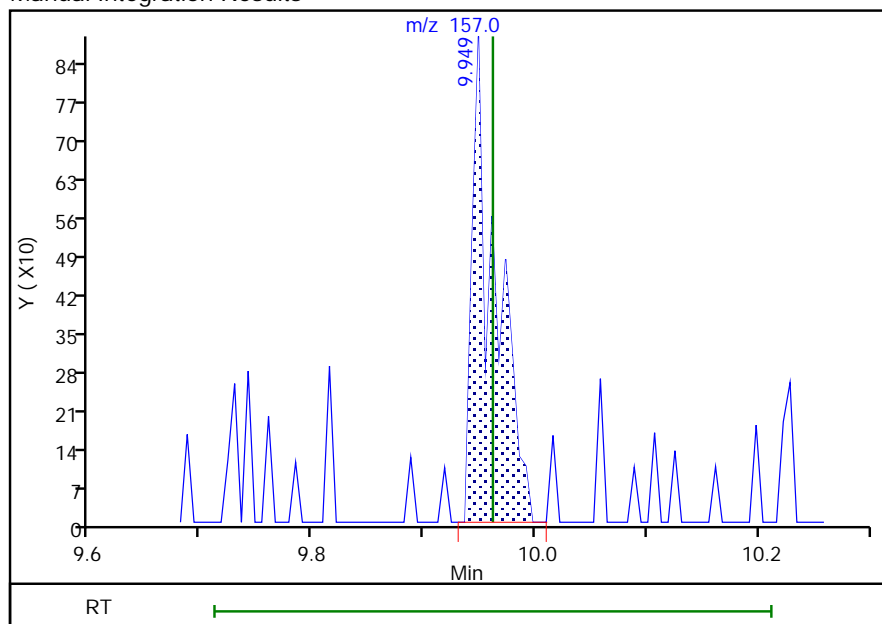
RT: 9.95
 Area: 602
 Amount: 0.485533
 Amount Units: ug/l

Processing Integration Results



RT: 9.95
 Area: 1280
 Amount: 0.454304
 Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:42:56
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

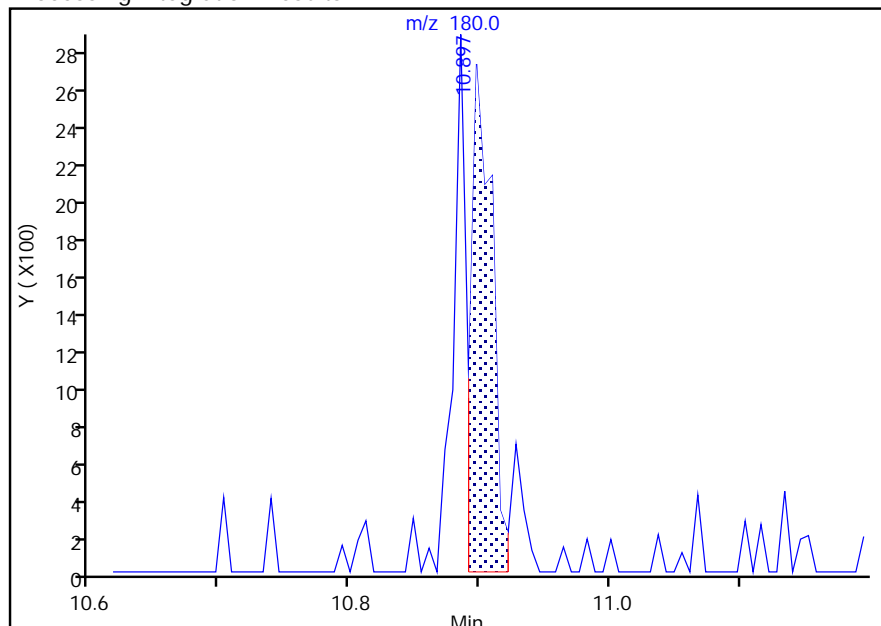
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

72 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

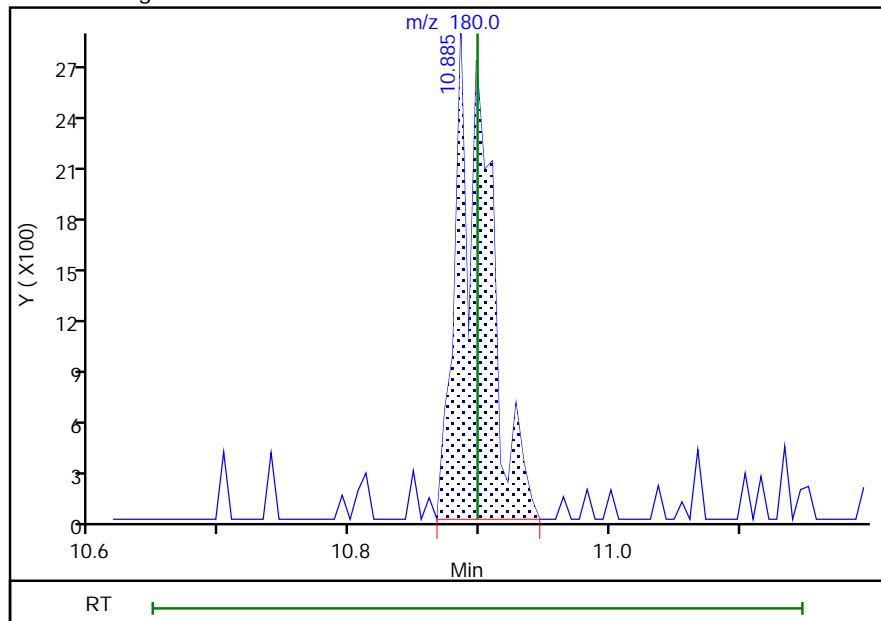
RT: 10.90
Area: 3087
Amount: 0.284933
Amount Units: ug/l

Processing Integration Results



RT: 10.89
Area: 5138
Amount: 0.452811
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:39:52

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:24

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

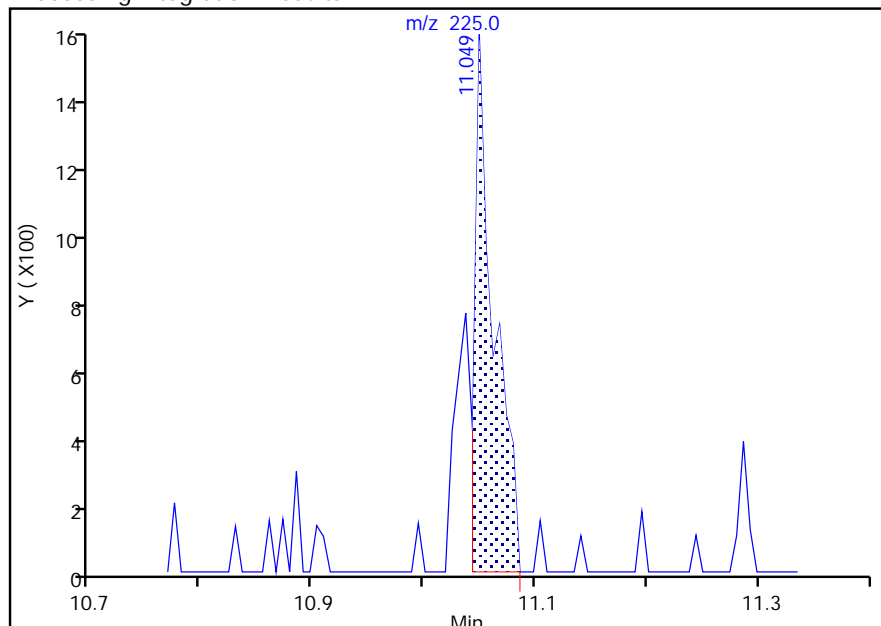
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0307.D		
Injection Date:	03-Jun-2020 14:08:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	7

73 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

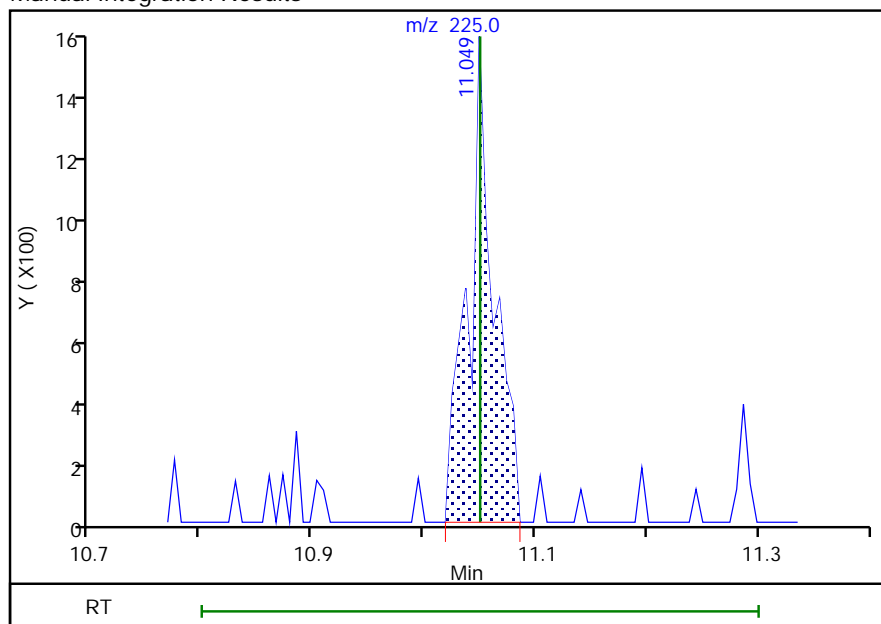
RT: 11.05
Area: 1822
Amount: 0.366128
Amount Units: ug/l

Processing Integration Results



RT: 11.05
Area: 2447
Amount: 0.476752
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:39:58

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 03-Jun-2020 14:33:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-008
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:29 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:57:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.189	4.184	0.005	98	480827	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	89	335598	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	96	152573	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.645	-0.002	84	183430	10.0	9.51	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	93	155463	10.0	10.3	
7 Dichlorodifluoromethane	85	1.300	1.302	-0.002	95	17926	1.00	1.04	
8 Chloromethane	50	1.471	1.478	-0.007	96	20725	1.00	0.9495	
9 Vinyl chloride	62	1.513	1.515	-0.002	96	19006	1.00	1.01	
10 Bromomethane	94	1.738	1.746	-0.008	72	4557	1.00	1.21	Ma
11 Chloroethane	64	1.805	1.800	0.005	89	7324	1.00	0.7830	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	93	19372	1.00	1.12	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.273	2.269	0.004	78	6953	1.00	0.9353	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	91	11032	1.00	1.04	
15 Acetone	58	2.353	2.342	0.011	84	11429	5.00	7.34	
16 Methylene Chloride	84	2.614	2.609	0.005	98	50039	1.00	0.7097	M
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	95	16095	10.0	10.5	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	97	48186	1.00	1.08	
19 trans-1,2-Dichloroethene	96	2.760	2.767	-0.007	79	10554	1.00	0.9491	
20 1,1-Dichloroethane	63	3.046	3.041	0.005	99	26940	1.00	1.05	
22 Tert-butyl ethyl ether	59	3.253	3.260	-0.007	85	37145	0.8000	0.8226	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	91	19260	1.00	1.00	
24 cis-1,2-Dichloroethene	61	3.423	3.418	0.005	78	23373	1.00	1.00	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	90	4333	5.00	2.40	
26 Chlorobromomethane	130	3.593	3.594	-0.001	92	8768	1.00	1.22	
27 Chloroform	83	3.617	3.619	-0.002	96	22767	1.00	0.9630	
28 1,1,1-Trichloroethane	97	3.745	3.734	0.011	95	20497	1.00	1.01	
30 1,1-Dichloropropene	75	3.842	3.844	-0.002	86	19918	1.00	1.00	
29 Carbon tetrachloride	117	3.849	3.850	-0.001	85	15138	1.00	0.9631	
31 Benzene	78	4.001	4.002	-0.001	99	56456	1.00	0.9329	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	95	29302	0.8000	0.7135	
32 1,2-Dichloroethane	62	4.031	4.032	-0.001	80	21409	1.00	0.9750	

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Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.445	4.446	-0.002	85	9264	1.00	0.8565	
35 1,2-Dichloropropane	63	4.627	4.628	-0.001	79	9757	1.00	0.6345	
36 Dibromomethane	93	4.736	4.738	-0.002	81	8089	1.00	0.9879	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	96	15369	1.00	0.8448	
38 cis-1,3-Dichloropropene	75	5.174	5.170	0.004	94	18413	1.00	0.8257	Ma
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	98	80559	5.00	4.49	
40 Toluene	92	5.411	5.419	-0.008	97	33267	1.00	0.9601	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	90	19508	1.00	0.8854	
42 1,1,2-Trichloroethane	83	5.776	5.778	-0.002	87	10335	1.00	0.9294	
43 Tetrachloroethene	164	5.855	5.863	-0.008	88	7677	1.00	0.9856	
44 1,3-Dichloropropane	76	5.910	5.911	-0.001	97	22654	1.00	0.9188	
45 2-Hexanone	43	5.953	5.948	0.005	98	61105	5.00	5.00	
46 Chlorodibromomethane	129	6.111	6.112	-0.001	92	10464	1.00	0.9520	
47 Ethylene Dibromide	107	6.220	6.216	0.004	93	10169	1.00	0.8671	
48 Chlorobenzene	112	6.609	6.611	-0.002	88	31790	1.00	0.9301	
50 Ethylbenzene	91	6.682	6.678	0.004	99	63692	1.00	1.02	
49 1,1,1,2-Tetrachloroethane	131	6.682	6.684	-0.002	42	11166	1.00	1.03	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	98	46814	1.00	0.9602	
52 o-Xylene	91	7.139	7.140	-0.001	89	49871	1.00	1.00	
53 Styrene	104	7.169	7.164	0.005	95	34622	1.00	1.00	
54 Bromoform	173	7.388	7.377	0.011	84	6397	1.00	1.04	
55 Isopropylbenzene	105	7.467	7.468	-0.001	98	54981	1.00	0.9456	
56 Bromobenzene	156	7.795	7.797	-0.002	87	12171	1.00	1.02	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	94	18132	1.00	1.01	
58 1,2,3-Trichloropropane	110	7.838	7.845	-0.007	58	5711	1.00	1.15	Ma
59 n-Propylbenzene	91	7.850	7.851	-0.001	96	75171	1.00	0.9681	
60 2-Chlorotoluene	91	7.960	7.955	0.005	94	43891	1.00	0.9701	
61 1,3,5-Trimethylbenzene	105	8.008	8.010	-0.001	91	46346	1.00	0.9279	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	97	45451	1.00	0.9293	
63 tert-Butylbenzene	119	8.324	8.320	0.004	89	42562	1.00	1.03	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	96	48302	1.00	0.9717	
65 sec-Butylbenzene	105	8.525	8.526	-0.001	98	68813	1.00	1.04	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	94	44878	1.00	0.8536	
66 1,3-Dichlorobenzene	146	8.677	8.678	-0.001	89	25063	1.00	1.05	
68 1,4-Dichlorobenzene	146	8.762	8.764	-0.002	89	25998	1.00	1.02	
70 n-Butylbenzene	91	9.066	9.068	-0.002	97	55539	1.00	0.9872	
69 1,2-Dichlorobenzene	146	9.133	9.135	-0.002	88	26652	1.00	1.08	a
71 1,2-Dibromo-3-Chloropropane	157	9.960	9.962	-0.002	61	3663	1.00	1.18	
72 1,2,4-Trichlorobenzene	180	10.909	10.898	0.011	87	12724	1.00	1.02	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	87	5385	1.00	0.9522	
74 Naphthalene	128	11.183	11.178	0.005	96	41164	1.00	0.9736	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	89	11406	1.00	0.9747	
S 76 Xylenes, Total	1				0		2.00	1.96	
S 77 Trihalomethanes, Total	1				0			3.80	
S 78 1,3-Dichloropropene, Total	1				0		2.00	1.71	

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.10

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D

Injection Date: 03-Jun-2020 14:33:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

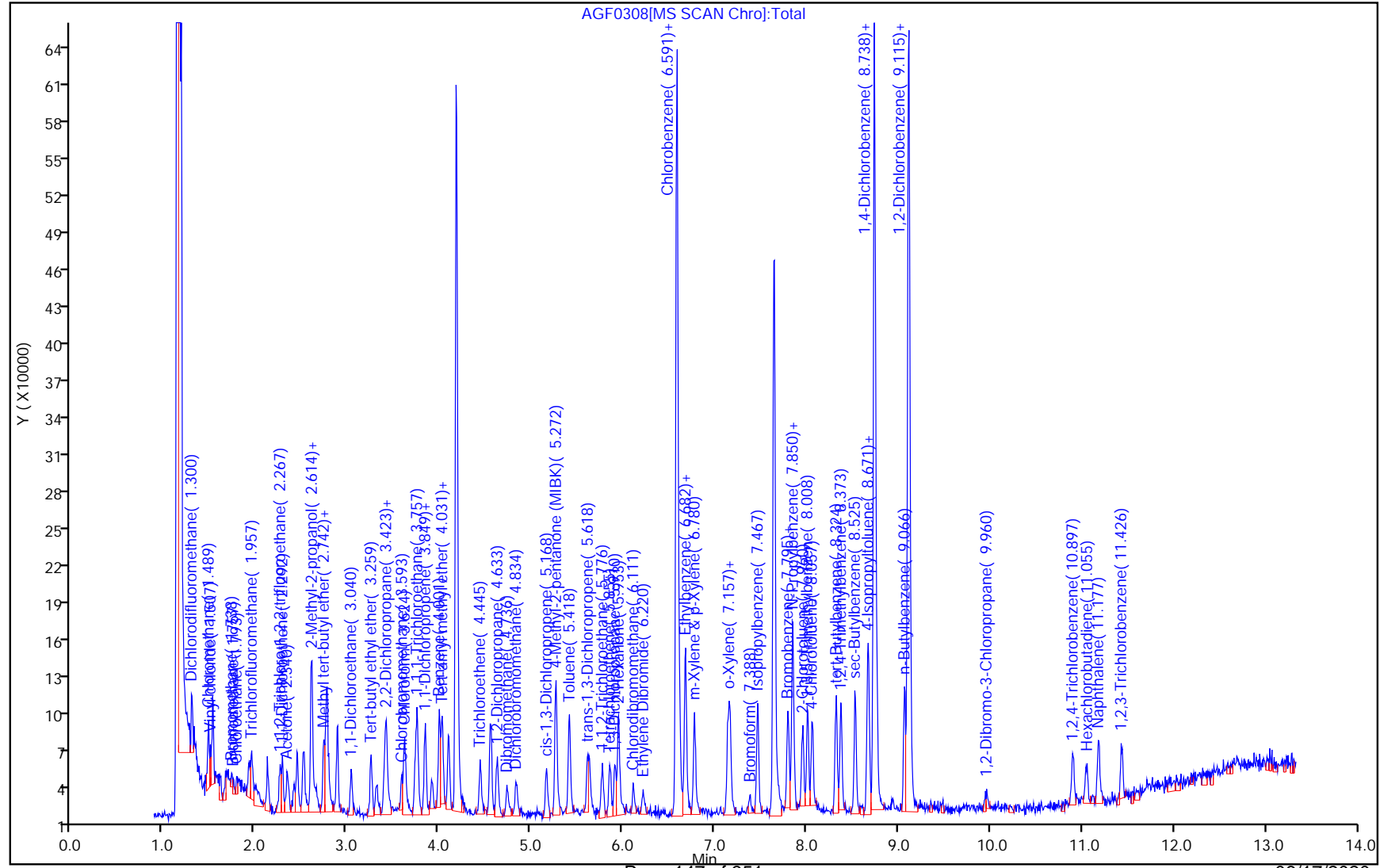
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

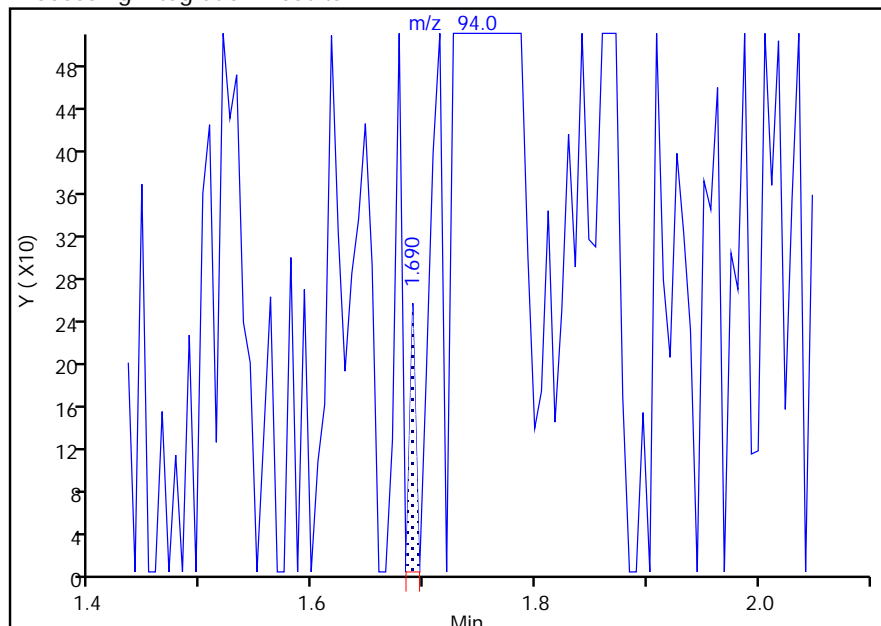
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Injection Date: 03-Jun-2020 14:33:30 Instrument ID: CMSAG
Lims ID: ic
Client ID:
Operator ID: rd ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: CMSAG_524New Limit Group: 524.2
Column: Rtx-624 (0.18 mm) Detector: MS SCAN

10 Bromomethane, CAS: 74-83-9

Signal: 1

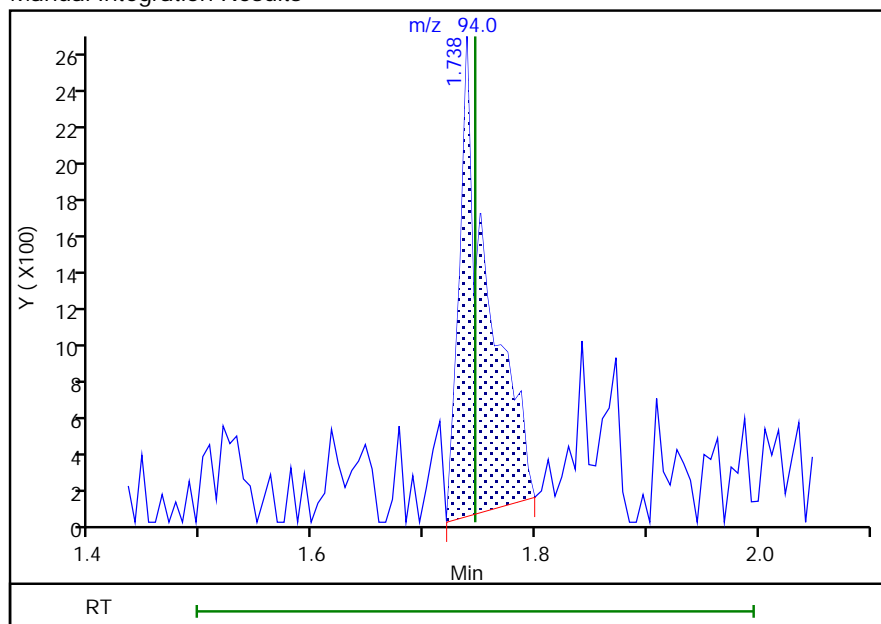
RT: 1.69
Area: 92
Amount: 0.028793
Amount Units: ug/l

Processing Integration Results



RT: 1.74
Area: 4557
Amount: 1.214130
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:44:25

Audit Action: Manually Integrated

Audit Reason: Assign Peak

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Eurofins TestAmerica, Savannah

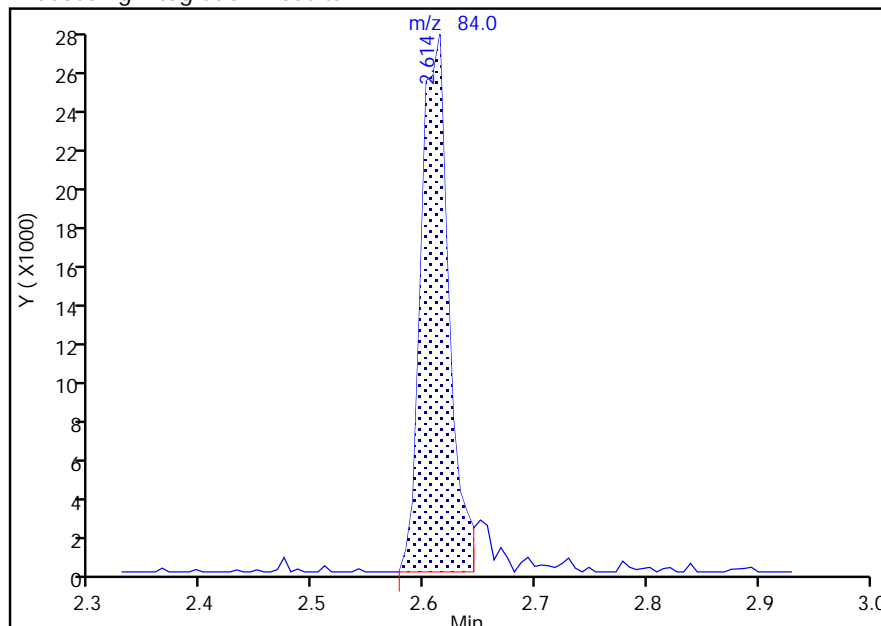
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D		
Injection Date:	03-Jun-2020 14:33:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

16 Methylene Chloride, CAS: 75-09-2

Signal: 1

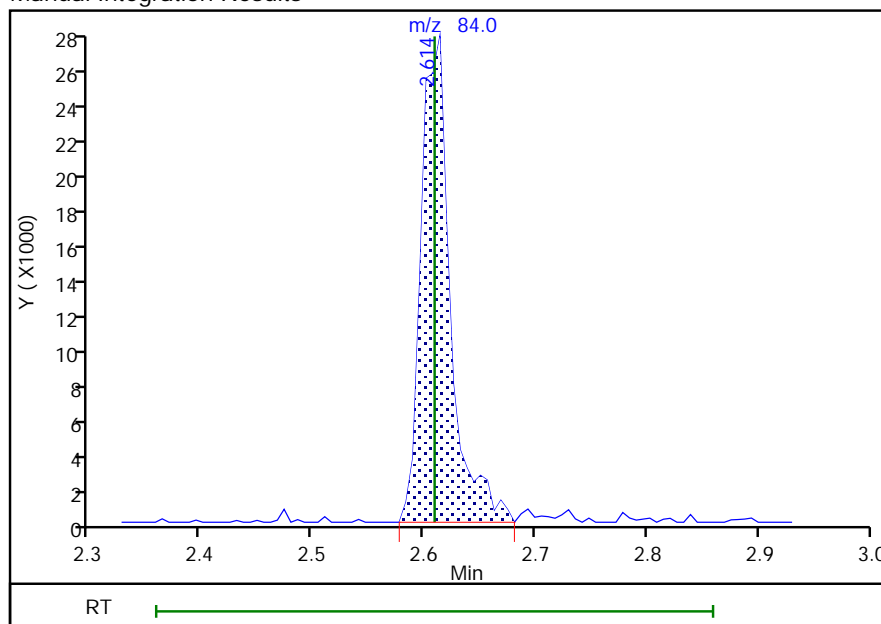
RT: 2.61
Area: 47282
Amount: 1.459217
Amount Units: ug/l

Processing Integration Results



RT: 2.61
Area: 50039
Amount: 0.709711
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:46:19

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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Report Date: 04-Jun-2020 12:47:29

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

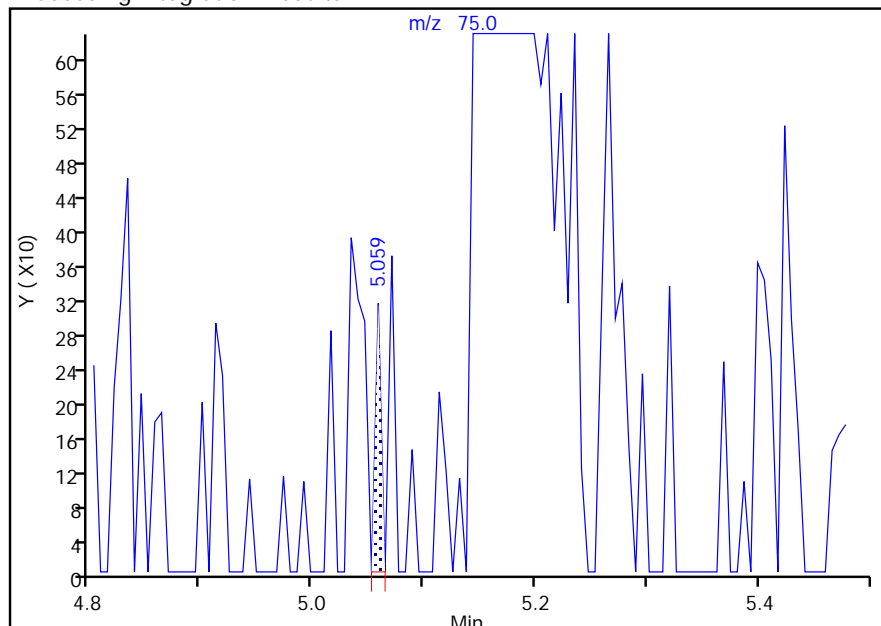
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D		
Injection Date:	03-Jun-2020 14:33:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

38 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

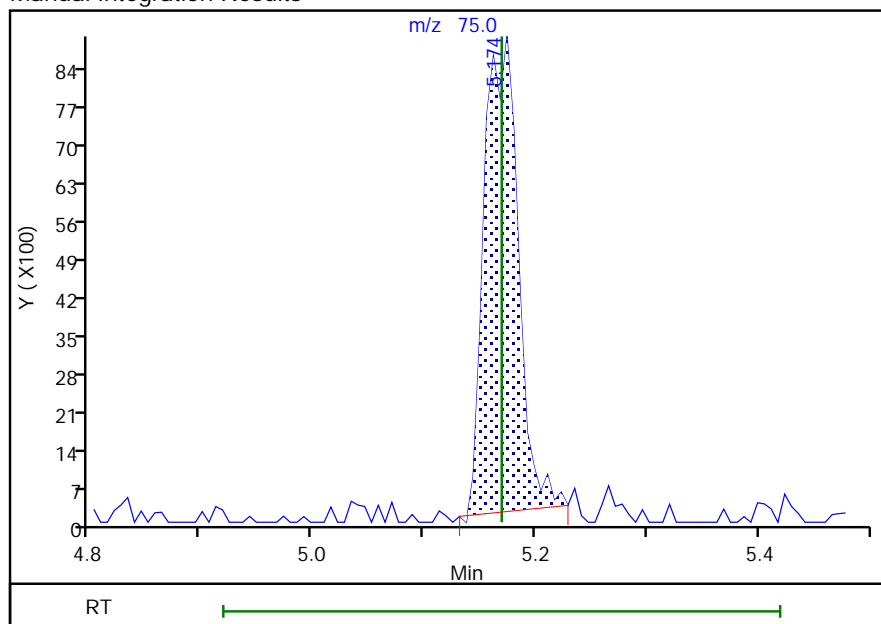
RT: 5.06
Area: 114
Amount: 0.005697
Amount Units: ug/l

Processing Integration Results



RT: 5.17
Area: 18413
Amount: 0.825731
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:44:40

Audit Action: Manually Integrated

Audit Reason: Assign Peak

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Report Date: 04-Jun-2020 12:47:29

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Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

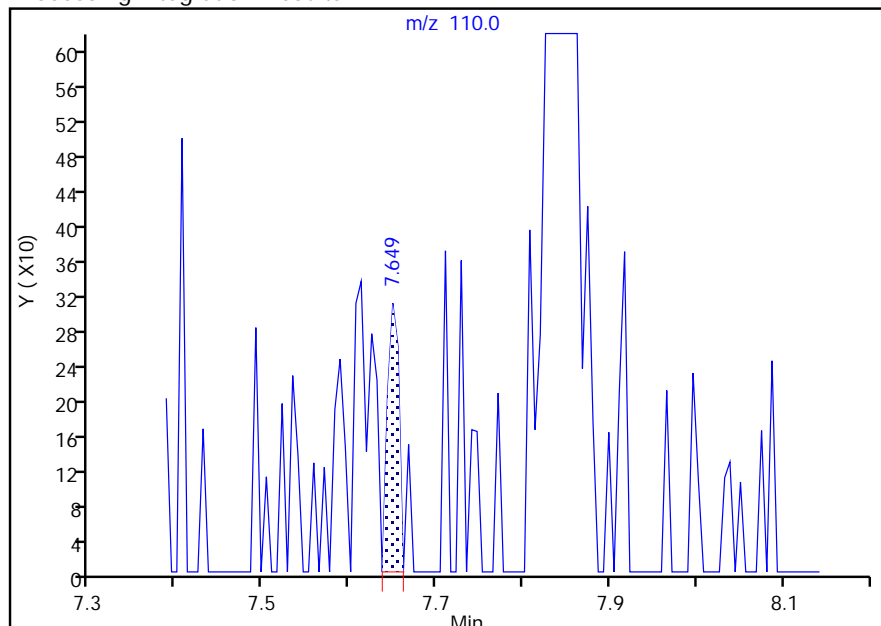
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D		
Injection Date:	03-Jun-2020 14:33:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	8

58 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

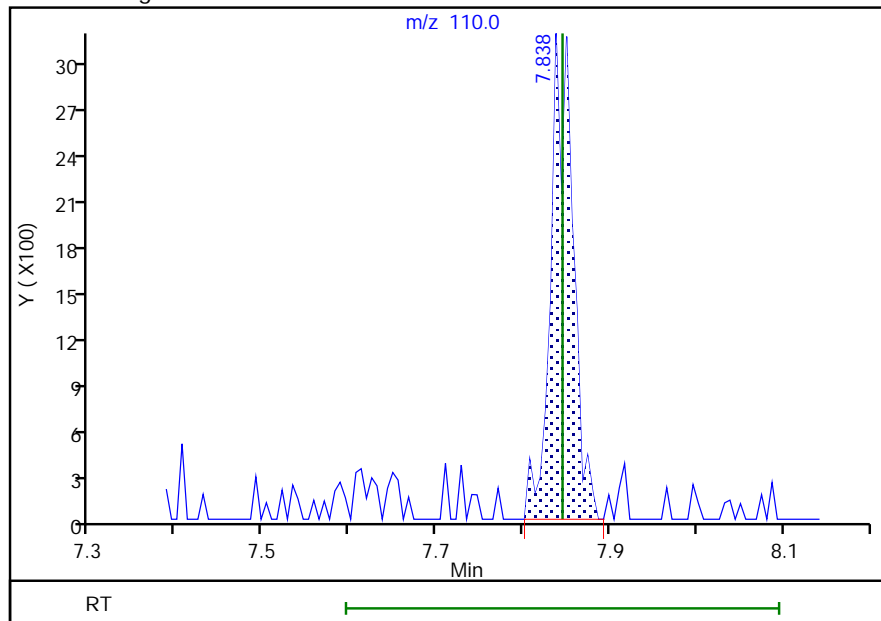
RT: 7.65
Area: 281
Amount: 0.065347
Amount Units: ug/l

Processing Integration Results



RT: 7.84
Area: 5711
Amount: 1.147042
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:44:52

Audit Action: Manually Integrated

Audit Reason: Assign Peak

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September 2020

Report Date: 04-Jun-2020 12:47:29

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

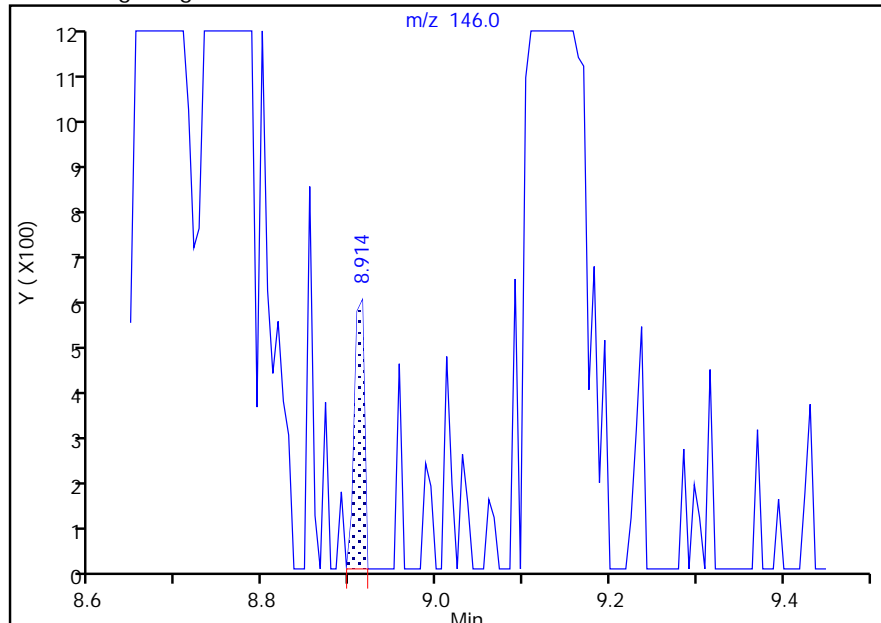
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0308.D	Instrument ID:	CMSAG
Injection Date:	03-Jun-2020 14:33:30	ALS Bottle#:	8
Lims ID:	ic	Dil. Factor:	1.0000
Client ID:		Worklist Smp#:	8
Operator ID:	rd	Limit Group:	524.2
Purge Vol:	5.000 mL	Detector:	MS SCAN
Method:	CMSAG_524New		
Column:	Rtx-624 (0.18 mm)		

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

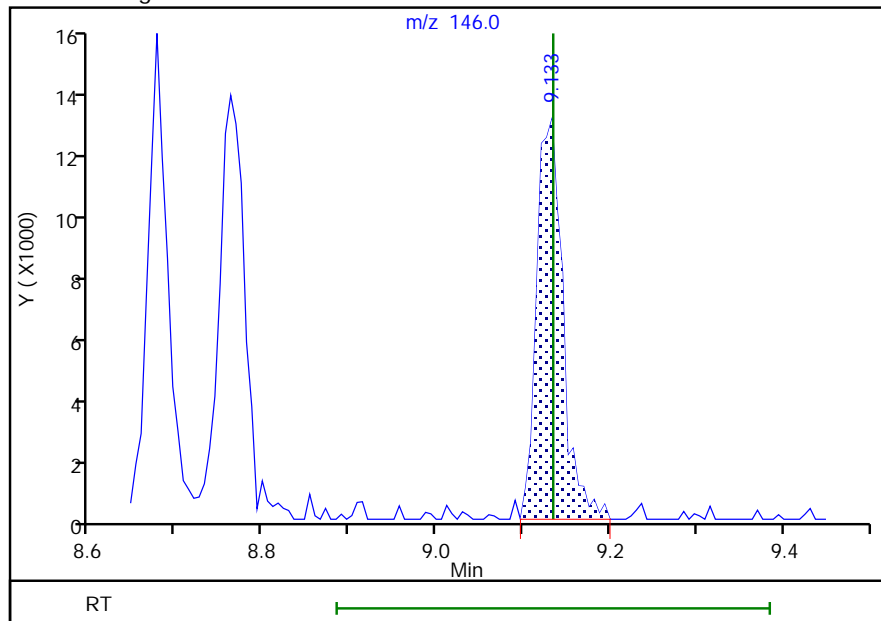
RT: 8.91
Area: 442
Amount: 0.020681
Amount Units: ug/l

Processing Integration Results



RT: 9.13
Area: 26652
Amount: 1.081292
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:45:00

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak

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September 2020

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 03-Jun-2020 14:58:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-009
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:35 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:55:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.189	4.184	0.005	97	461546	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	92	326694	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	97	154800	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.645	-0.002	84	188950	10.0	10.2	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	91	158684	10.0	10.3	
7 Dichlorodifluoromethane	85	1.307	1.302	0.005	98	35937	2.00	2.16	
8 Chloromethane	50	1.483	1.478	0.005	98	39025	2.00	1.86	
9 Vinyl chloride	62	1.513	1.515	-0.002	96	41772	2.00	2.30	
10 Bromomethane	94	1.751	1.746	0.005	83	6945	2.00	1.93	
11 Chloroethane	64	1.805	1.800	0.005	97	22168	2.00	2.47	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	97	31180	2.00	1.88	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.267	2.269	-0.002	91	14519	2.00	2.03	
13 1,1-Dichloroethene	96	2.298	2.293	0.005	94	21826	2.00	2.14	
15 Acetone	58	2.347	2.342	0.004	83	15630	10.0	10.5	
16 Methylene Chloride	84	2.608	2.609	-0.001	96	67593	2.00	2.29	
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	93	22684	20.0	15.3	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	98	82821	2.00	1.94	
19 trans-1,2-Dichloroethene	96	2.766	2.767	-0.001	97	22495	2.00	2.11	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	98	51163	2.00	2.07	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	91	73353	1.60	1.69	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	88	39473	2.00	2.14	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	90	47281	2.00	2.11	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	99	17871	10.0	10.3	
26 Chlorobromomethane	130	3.593	3.594	-0.001	93	15270	2.00	2.22	
27 Chloroform	83	3.624	3.619	0.005	99	51825	2.00	2.28	
28 1,1,1-Trichloroethane	97	3.745	3.734	0.011	95	38117	2.00	1.92	
30 1,1-Dichloropropene	75	3.843	3.844	-0.001	89	36328	2.00	1.87	
29 Carbon tetrachloride	117	3.843	3.850	-0.007	81	32042	2.00	2.09	
31 Benzene	78	4.007	4.002	0.005	96	120674	2.00	2.05	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	93	66795	1.60	1.69	
32 1,2-Dichloroethane	62	4.037	4.032	0.005	78	33464	2.00	1.57	

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	91	21192	2.00	2.01	
35 1,2-Dichloropropane	63	4.633	4.628	0.005	86	29704	2.00	1.98	
36 Dibromomethane	93	4.743	4.738	0.005	84	18695	2.00	2.35	
37 Dichlorobromomethane	83	4.840	4.835	0.005	96	37079	2.00	2.09	
38 cis-1,3-Dichloropropene	75	5.162	5.170	-0.008	98	42786	2.00	1.97	
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	99	168833	10.0	9.67	
40 Toluene	92	5.418	5.419	-0.001	91	61146	2.00	1.81	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	96	37211	2.00	1.73	
42 1,1,2-Trichloroethane	83	5.770	5.778	-0.008	93	20709	2.00	1.91	
43 Tetrachloroethene	164	5.855	5.863	-0.008	90	16610	2.00	2.10	
44 1,3-Dichloropropane	76	5.916	5.911	0.005	94	48342	2.00	2.01	
45 2-Hexanone	43	5.953	5.948	0.005	99	115233	10.0	9.30	
46 Chlorodibromomethane	129	6.117	6.112	0.005	97	21851	2.00	1.96	
47 Ethylene Dibromide	107	6.220	6.216	0.004	99	20835	2.00	1.83	
48 Chlorobenzene	112	6.616	6.611	0.005	88	61363	2.00	1.84	
50 Ethylbenzene	91	6.676	6.678	-0.002	99	126427	2.00	1.99	
49 1,1,1,2-Tetrachloroethane	131	6.682	6.684	-0.002	42	20656	2.00	1.88	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	98	99583	2.00	2.01	
52 o-Xylene	91	7.145	7.140	0.005	90	101349	2.00	2.00	
53 Styrene	104	7.175	7.164	0.011	93	62647	2.00	1.78	
54 Bromoform	173	7.388	7.377	0.011	90	9985	2.00	1.60	
55 Isopropylbenzene	105	7.467	7.468	-0.001	97	121507	2.00	2.06	
56 Bromobenzene	156	7.801	7.797	0.004	94	26045	2.00	2.15	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	95	37636	2.00	2.06	
58 1,2,3-Trichloropropane	110	7.844	7.845	-0.001	60	9435	2.00	1.87	
59 N-Propylbenzene	91	7.850	7.851	-0.001	95	158630	2.00	2.01	
60 2-Chlorotoluene	91	7.960	7.955	0.005	95	96502	2.00	2.10	
61 1,3,5-Trimethylbenzene	105	8.014	8.010	0.005	91	96752	2.00	1.91	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	98	99700	2.00	2.01	
63 tert-Butylbenzene	119	8.318	8.320	-0.002	85	80836	2.00	1.93	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	97	95975	2.00	1.90	
65 sec-Butylbenzene	105	8.531	8.526	0.005	98	130234	2.00	1.94	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	112371	2.00	2.11	
66 1,3-Dichlorobenzene	146	8.677	8.678	-0.001	88	44717	2.00	1.85	
68 1,4-Dichlorobenzene	146	8.762	8.764	-0.002	88	51040	2.00	1.98	
70 n-Butylbenzene	91	9.066	9.068	-0.002	96	114152	2.00	2.00	
69 1,2-Dichlorobenzene	146	9.133	9.135	-0.002	94	53814	2.00	2.15	a
71 1,2-Dibromo-3-Chloropropane	157	9.954	9.962	-0.008	80	6179	2.00	1.96	M
72 1,2,4-Trichlorobenzene	180	10.903	10.898	0.005	93	24633	2.00	1.94	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	86	12912	2.00	2.25	
74 Naphthalene	128	11.177	11.178	-0.001	98	77418	2.00	1.80	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	90	23404	2.00	1.97	
S 76 Xylenes, Total	1				0		4.00	4.01	
S 77 Trihalomethanes, Total	1				0			7.94	
S 78 1,3-Dichloropropene, Total	1				0		4.00	3.71	

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 0.20

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D

Injection Date: 03-Jun-2020 14:58:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

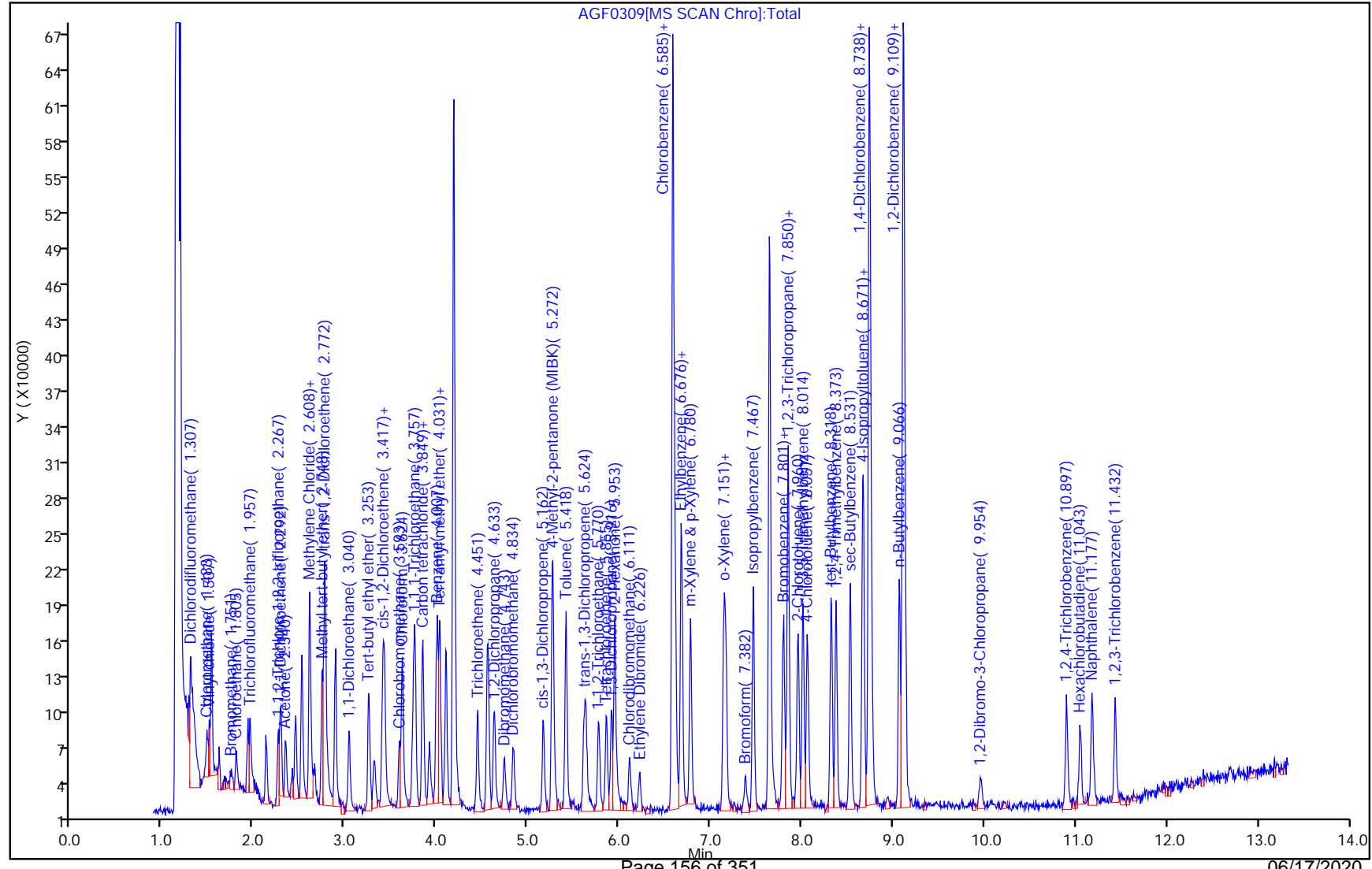
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

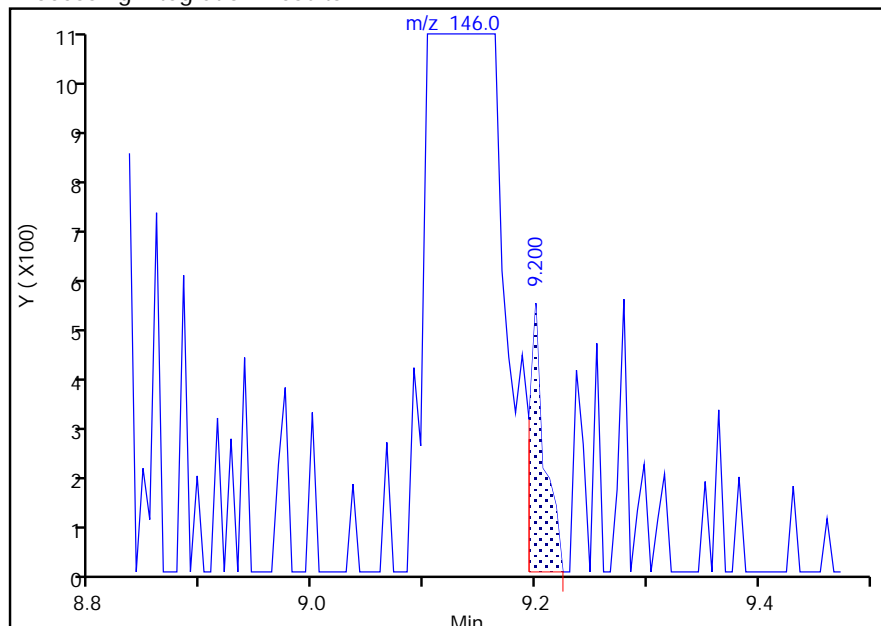
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Injection Date:	03-Jun-2020 14:58:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

69 1,2-Dichlorobenzene, CAS: 95-50-1

Signal: 1

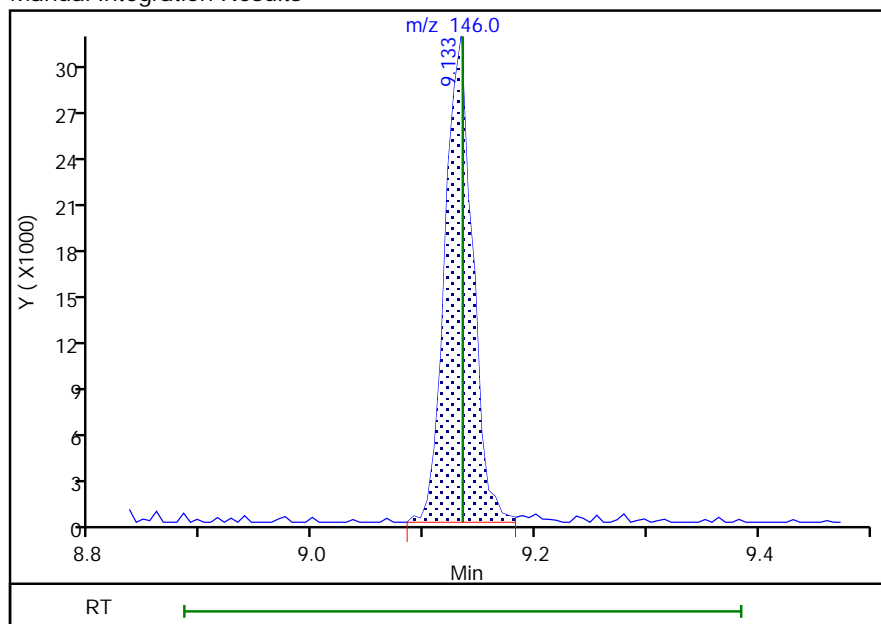
RT: 9.20
Area: 491
Amount: 0.022280
Amount Units: ug/l

Processing Integration Results



RT: 9.13
Area: 53814
Amount: 2.151865
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:55:11

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

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September 2020

Report Date: 04-Jun-2020 12:47:35

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

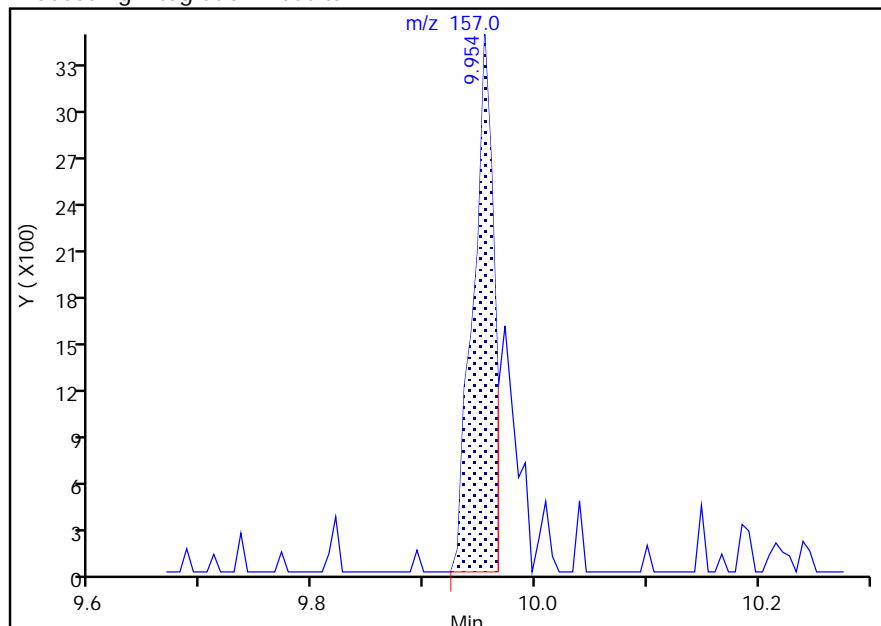
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0309.D		
Injection Date:	03-Jun-2020 14:58:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	9

71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

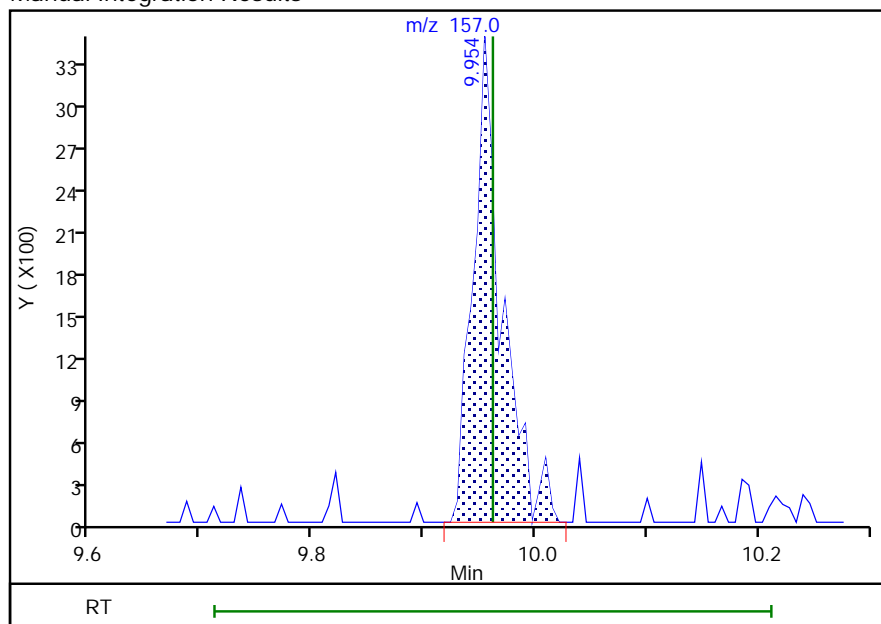
RT: 9.95
Area: 4453
Amount: 1.420099
Amount Units: ug/l

Processing Integration Results



RT: 9.95
Area: 6179
Amount: 1.961761
Amount Units: ug/l

Manual Integration Results



Reviewer: proctors, 04-Jun-2020 12:43:39

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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September 2020

Report Date: 04-Jun-2020 12:47:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0310.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 03-Jun-2020 15:23:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-010
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:37 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: panhorstp

Date: 03-Jun-2020 17:26:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.183	4.184	-0.001	96	431402	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	92	319377	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	96	152644	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.643	7.645	-0.002	81	194915	10.0	11.3	
\$ 5 1,2-Dichlorobenzene-d4	152	9.109	9.110	-0.001	91	151857	10.0	10.0	
7 Dichlorodifluoromethane	85	1.300	1.302	-0.002	99	84608	5.00	5.45	
8 Chloromethane	50	1.483	1.478	0.005	99	106647	5.00	5.45	
9 Vinyl chloride	62	1.513	1.515	-0.002	97	92873	5.00	5.48	
10 Bromomethane	94	1.744	1.746	-0.002	95	14901	5.00	4.42	
11 Chloroethane	64	1.811	1.800	0.011	96	46761	5.00	5.57	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	98	88312	5.00	5.71	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.267	2.269	-0.002	92	39516	5.00	5.92	
13 1,1-Dichloroethene	96	2.298	2.293	0.005	93	51712	5.00	5.42	
15 Acetone	58	2.346	2.342	0.004	87	40534	25.0	29.0	
16 Methylene Chloride	84	2.608	2.609	-0.001	97	91428	5.00	4.72	
17 2-Methyl-2-propanol	59	2.669	2.664	0.005	98	78548	50.0	56.8	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	97	219263	5.00	5.49	
19 trans-1,2-Dichloroethene	96	2.766	2.767	-0.001	97	56170	5.00	5.63	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	99	123770	5.00	5.36	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	89	169548	4.00	4.18	
25 2,2-Dichloropropane	77	3.411	3.406	0.005	79	92078	5.00	5.34	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	92	109653	5.00	5.24	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	100	45696	25.0	28.2	
26 Chlorobromomethane	130	3.587	3.594	-0.007	95	32988	5.00	5.13	
27 Chloroform	83	3.624	3.619	0.005	99	111826	5.00	5.27	
28 1,1,1-Trichloroethane	97	3.739	3.734	0.005	96	101789	5.00	5.26	
30 1,1-Dichloropropene	75	3.849	3.844	0.005	93	98894	5.00	5.20	
29 Carbon tetrachloride	117	3.842	3.850	-0.008	73	68978	5.00	4.61	
31 Benzene	78	4.001	4.002	-0.001	97	281909	5.00	4.90	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	97	159380	4.00	4.33	
32 1,2-Dichloroethane	62	4.031	4.032	-0.001	87	107898	5.00	5.16	

Report Date: 04-Jun-2020 12:47:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0310.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	90	50414	5.00	4.90	
35 1,2-Dichloropropane	63	4.627	4.628	-0.001	82	72770	5.00	4.97	
36 Dibromomethane	93	4.743	4.738	0.005	91	35254	5.00	4.52	
37 Dichlorobromomethane	83	4.840	4.835	0.005	97	83576	5.00	4.83	
38 cis-1,3-Dichloropropene	75	5.168	5.170	-0.002	95	111344	5.00	5.25	
39 4-Methyl-2-pentanone (MIBK)	43	5.272	5.267	0.005	99	439805	25.0	25.8	
40 Toluene	92	5.418	5.419	-0.001	93	164373	5.00	4.98	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	97	102368	5.00	4.88	
42 1,1,2-Trichloroethane	83	5.776	5.778	-0.002	93	53943	5.00	5.10	
43 Tetrachloroethene	164	5.861	5.863	-0.002	85	42353	5.00	5.43	
44 1,3-Dichloropropane	76	5.916	5.911	0.005	97	119868	5.00	5.11	
45 2-Hexanone	43	5.947	5.948	-0.001	98	335023	25.0	27.4	
46 Chlorodibromomethane	129	6.111	6.112	-0.001	97	53806	5.00	4.89	
47 Ethylene Dibromide	107	6.220	6.216	0.004	99	56280	5.00	5.04	
48 Chlorobenzene	112	6.616	6.611	0.005	89	168877	5.00	5.19	
50 Ethylbenzene	91	6.682	6.678	0.004	99	323748	5.00	5.17	
49 1,1,1,2-Tetrachloroethane	131	6.676	6.684	-0.008	41	54515	5.00	5.03	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	98	254317	5.00	5.21	
52 o-Xylene	91	7.151	7.140	0.011	90	254115	5.00	5.08	
53 Styrene	104	7.163	7.164	-0.001	90	162372	5.00	4.67	
54 Bromoform	173	7.376	7.377	-0.001	90	32200	5.00	5.24	
55 Isopropylbenzene	105	7.461	7.468	-0.007	98	283862	5.00	4.88	
56 Bromobenzene	156	7.795	7.797	-0.002	89	59319	5.00	4.97	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	95	100827	5.00	5.60	
58 1,2,3-Trichloropropane	110	7.844	7.845	-0.001	82	26582	5.00	5.34	
59 N-Propylbenzene	91	7.850	7.851	-0.001	96	387772	5.00	4.99	
60 2-Chlorotoluene	91	7.960	7.955	0.005	96	232622	5.00	5.14	
61 1,3,5-Trimethylbenzene	105	8.008	8.010	-0.001	92	241018	5.00	4.82	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	99	239404	5.00	4.89	
63 tert-Butylbenzene	119	8.318	8.320	-0.002	89	217316	5.00	5.27	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	97	264513	5.00	5.32	
65 sec-Butylbenzene	105	8.525	8.526	-0.001	98	318068	5.00	4.81	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	260233	5.00	4.95	
66 1,3-Dichlorobenzene	146	8.671	8.678	-0.007	84	118258	5.00	4.95	
68 1,4-Dichlorobenzene	146	8.762	8.764	-0.002	89	132735	5.00	5.22	
70 n-Butylbenzene	91	9.066	9.068	-0.002	96	266969	5.00	4.74	
69 1,2-Dichlorobenzene	146	9.133	9.135	-0.002	90	116759	5.00	4.73	
71 1,2-Dibromo-3-Chloropropane	157	9.960	9.962	-0.002	82	15084	5.00	4.86	
72 1,2,4-Trichlorobenzene	180	10.897	10.898	-0.001	90	67907	5.00	5.43	
73 Hexachlorobutadiene	225	11.049	11.050	-0.001	87	28072	5.00	4.96	
74 Naphthalene	128	11.183	11.178	0.005	99	229598	5.00	5.43	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	93	62932	5.00	5.38	
S 76 Xylenes, Total	1				0		10.0	10.3	
S 77 Trihalomethanes, Total	1				0			20.2	
S 78 1,3-Dichloropropene, Total	1				0		10.0	10.1	

Reagents:

524mmix_00170

Amount Added: 0.50

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0310.D

Injection Date: 03-Jun-2020 15:23:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

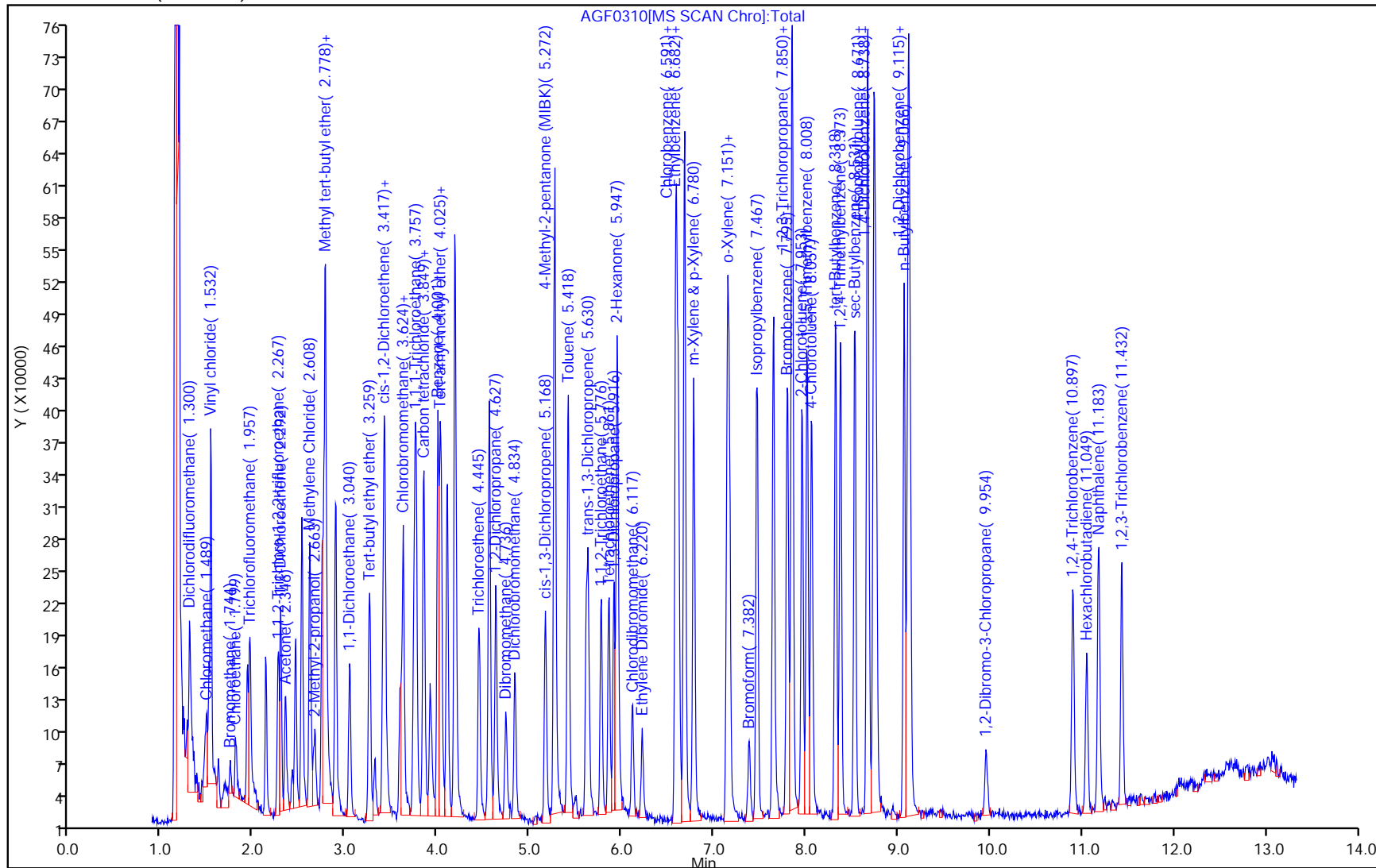
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:40

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0311.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 03-Jun-2020 15:48:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-011
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11

Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:40 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:53:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.189	4.184	0.005	97	482906	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.585	6.586	-0.001	92	340514	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	96	154110	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.649	7.645	0.004	85	189050	10.0	9.76	
\$ 5 1,2-Dichlorobenzene-d4	152	9.115	9.110	0.005	88	157227	10.0	10.3	
7 Dichlorodifluoromethane	85	1.300	1.302	-0.002	99	171211	10.0	9.85	
8 Chloromethane	50	1.477	1.478	-0.001	100	214877	10.0	9.80	
9 Vinyl chloride	62	1.513	1.515	-0.002	98	171132	10.0	9.02	
10 Bromomethane	94	1.744	1.746	-0.002	93	31389	10.0	8.33	
11 Chloroethane	64	1.799	1.800	-0.001	99	86780	10.0	9.24	
12 Trichlorofluoromethane	101	1.957	1.959	-0.002	97	179039	10.0	10.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.267	2.269	-0.002	90	72197	10.0	9.67	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	94	104080	10.0	9.74	
15 Acetone	58	2.340	2.342	-0.002	85	64898	50.0	41.5	
16 Methylene Chloride	84	2.608	2.609	-0.001	97	173432	10.0	10.2	
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	98	149197	100.0	96.5	
18 Methyl tert-butyl ether	73	2.748	2.743	0.005	97	384999	10.0	8.61	
19 trans-1,2-Dichloroethene	96	2.766	2.767	-0.001	99	116154	10.0	10.4	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	100	239610	10.0	9.27	
22 Tert-butyl ethyl ether	59	3.259	3.260	-0.001	87	357332	8.00	7.88	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	93	182278	10.0	9.44	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	94	203540	10.0	8.69	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	100	82148	50.0	45.3	
26 Chlorobromomethane	130	3.593	3.594	-0.001	95	68078	10.0	9.45	
27 Chloroform	83	3.624	3.619	0.005	99	221920	10.0	9.35	
28 1,1,1-Trichloroethane	97	3.739	3.734	0.005	95	189874	10.0	9.20	
30 1,1-Dichloropropene	75	3.849	3.844	0.005	92	188807	10.0	9.30	
29 Carbon tetrachloride	117	3.849	3.850	-0.001	89	144650	10.0	9.07	
31 Benzene	78	4.001	4.002	-0.001	98	575865	10.0	9.38	
33 Tert-amyl methyl ether	73	4.031	4.026	0.005	96	330554	8.00	8.01	
32 1,2-Dichloroethane	62	4.031	4.032	-0.001	91	201886	10.0	9.06	

Report Date: 04-Jun-2020 12:47:40

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0311.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.451	4.446	0.005	93	97871	10.0	8.92	
35 1,2-Dichloropropane	63	4.633	4.628	0.005	91	152346	10.0	9.76	
36 Dibromomethane	93	4.736	4.738	-0.002	88	77721	10.0	9.36	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	96	163510	10.0	8.86	
38 cis-1,3-Dichloropropene	75	5.168	5.170	-0.002	96	218419	10.0	9.65	
39 4-Methyl-2-pentanone (MIBK)	43	5.266	5.267	-0.001	98	809547	50.0	44.5	
40 Toluene	92	5.411	5.419	-0.008	93	333922	10.0	9.50	
41 trans-1,3-Dichloropropene	75	5.612	5.613	-0.001	97	206138	10.0	9.22	
42 1,1,2-Trichloroethane	83	5.770	5.778	-0.008	93	102025	10.0	9.04	
43 Tetrachloroethene	164	5.861	5.863	-0.002	95	82716	10.0	10.5	
44 1,3-Dichloropropane	76	5.910	5.911	-0.001	97	223258	10.0	8.92	
45 2-Hexanone	43	5.947	5.948	-0.001	99	623918	50.0	50.6	
46 Chlorodibromomethane	129	6.117	6.112	0.005	97	105755	10.0	9.53	
47 Ethylene Dibromide	107	6.220	6.216	0.004	98	114162	10.0	9.59	
48 Chlorobenzene	112	6.616	6.611	0.005	94	330333	10.0	9.53	
50 Ethylbenzene	91	6.676	6.678	-0.002	99	633778	10.0	10.0	
49 1,1,1,2-Tetrachloroethane	131	6.676	6.684	-0.008	61	102843	10.0	9.40	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	96	482350	10.0	9.79	
52 o-Xylene	91	7.145	7.140	0.005	92	502054	10.0	9.94	
53 Styrene	104	7.163	7.164	-0.001	90	346171	10.0	9.87	
54 Bromoform	173	7.382	7.377	0.005	89	58894	10.0	9.49	
55 Isopropylbenzene	105	7.467	7.468	-0.001	97	568987	10.0	9.69	
56 Bromobenzene	156	7.795	7.797	-0.002	89	112926	10.0	9.37	
57 1,1,2,2-Tetrachloroethane	83	7.801	7.803	-0.002	97	174909	10.0	9.62	
58 1,2,3-Trichloropropane	110	7.844	7.845	-0.001	93	52951	10.0	10.5	
59 N-Propylbenzene	91	7.850	7.851	-0.001	98	813263	10.0	10.4	
60 2-Chlorotoluene	91	7.960	7.955	0.005	96	441923	10.0	9.67	
61 1,3,5-Trimethylbenzene	105	8.014	8.010	0.005	88	526729	10.0	10.4	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	98	486655	10.0	9.85	
63 tert-Butylbenzene	119	8.318	8.320	-0.002	92	414272	10.0	9.95	
64 1,2,4-Trimethylbenzene	105	8.373	8.374	-0.001	97	520331	10.0	10.4	
65 sec-Butylbenzene	105	8.525	8.526	-0.001	98	700098	10.0	10.5	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	548398	10.0	10.3	
66 1,3-Dichlorobenzene	146	8.677	8.678	-0.001	81	226726	10.0	9.40	
68 1,4-Dichlorobenzene	146	8.768	8.764	0.004	87	244567	10.0	9.53	
70 n-Butylbenzene	91	9.066	9.068	-0.002	97	586148	10.0	10.3	
69 1,2-Dichlorobenzene	146	9.127	9.135	-0.008	88	240060	10.0	9.64	
71 1,2-Dibromo-3-Chloropropane	157	9.960	9.962	-0.002	86	27412	10.0	8.74	
72 1,2,4-Trichlorobenzene	180	10.903	10.898	0.005	92	124068	10.0	9.82	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	91	56374	10.0	9.87	
74 Naphthalene	128	11.177	11.178	-0.001	98	425654	10.0	9.97	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	90	121277	10.0	10.3	
S 76 Xylenes, Total	1				0		20.0	19.7	
S 77 Trihalomethanes, Total	1				0			37.2	
S 78 1,3-Dichloropropene, Total	1				0		20.0	18.9	

Reagents:

524mmix_00170

Amount Added: 1.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:40

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0311.D

Injection Date: 03-Jun-2020 15:48:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

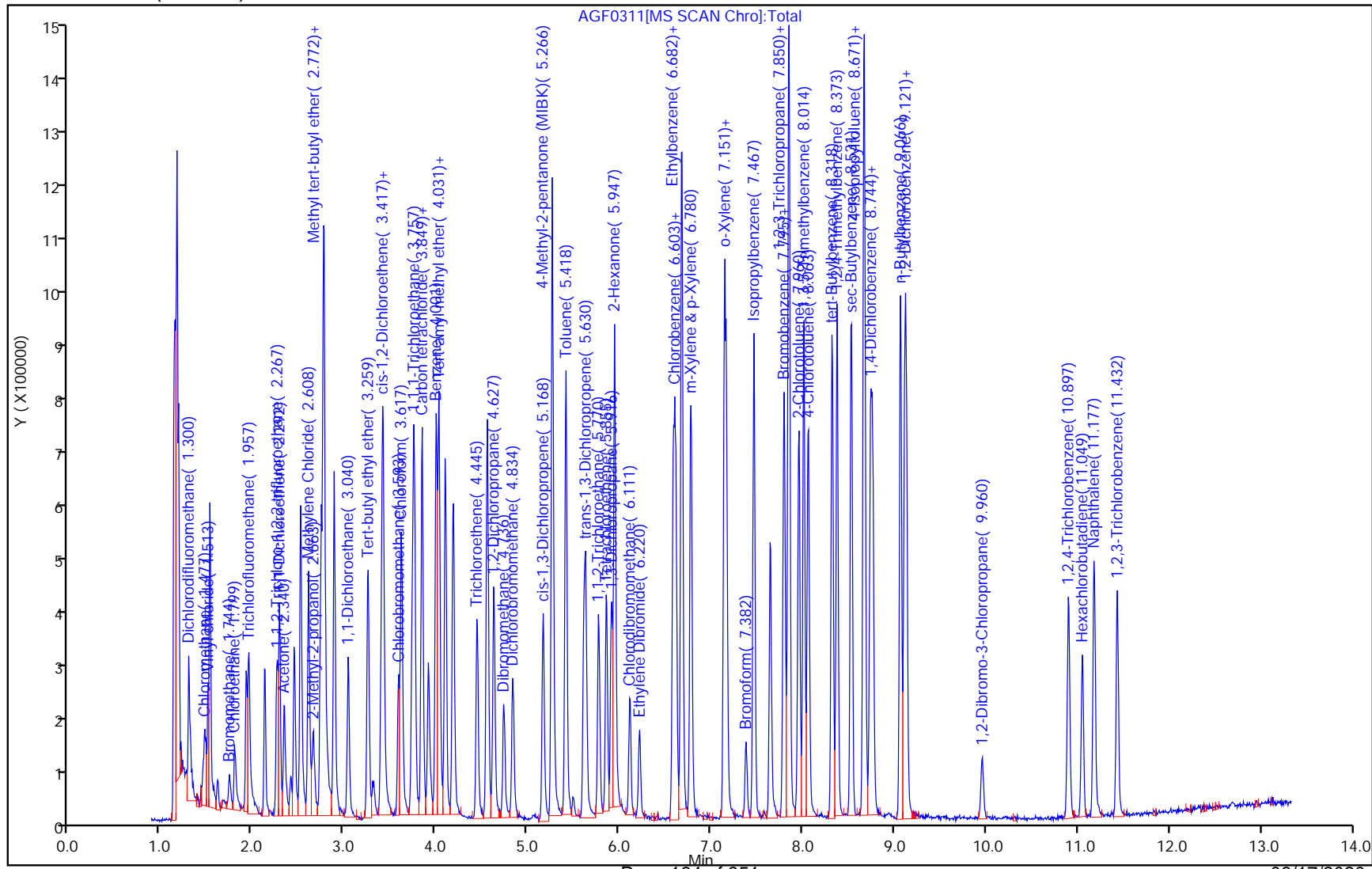
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:42

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D
 Lims ID: icis
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 03-Jun-2020 16:12:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-012
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:42 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:41:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.184	0.000	97	472626	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.586	6.586	0.000	92	316943	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.739	8.739	0.000	96	166276	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.645	7.645	0.000	85	194623	10.0	10.3	
\$ 5 1,2-Dichlorobenzene-d4	152	9.110	9.110	0.000	89	157727	10.0	9.57	
7 Dichlorodifluoromethane	85	1.302	1.302	0.000	100	351965	20.0	20.7	
8 Chloromethane	50	1.478	1.478	0.000	99	436073	20.0	20.3	
9 Vinyl chloride	62	1.515	1.515	0.000	97	349412	20.0	18.8	
10 Bromomethane	94	1.746	1.746	0.000	97	73492	20.0	19.9	
11 Chloroethane	64	1.800	1.800	0.000	100	213744	20.0	23.2	
12 Trichlorofluoromethane	101	1.959	1.959	0.000	93	330708	20.0	19.5	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.269	2.269	0.000	90	151373	20.0	20.7	
13 1,1-Dichloroethene	96	2.293	2.293	0.000	94	206159	20.0	19.7	
15 Acetone	58	2.342	2.342	0.000	85	166264	100.0	108.6	
16 Methylene Chloride	84	2.609	2.609	0.000	98	326834	20.0	22.6	
17 2-Methyl-2-propanol	59	2.664	2.664	0.000	98	338321	200.0	223.5	
18 Methyl tert-butyl ether	73	2.743	2.743	0.000	98	942975	20.0	21.5	
19 trans-1,2-Dichloroethene	96	2.767	2.767	0.000	99	245781	20.0	22.5	
20 1,1-Dichloroethane	63	3.041	3.041	0.000	99	548276	20.0	21.7	
22 Tert-butyl ethyl ether	59	3.260	3.260	0.000	88	771322	16.0	17.4	
25 2,2-Dichloropropane	77	3.406	3.406	0.000	93	390442	20.0	20.7	
24 cis-1,2-Dichloroethene	61	3.418	3.418	0.000	91	503328	20.0	22.0	
23 2-Butanone (MEK)	72	3.424	3.424	0.000	100	161021	100.0	90.7	
26 Chlorobromomethane	130	3.594	3.594	0.000	94	136646	20.0	19.4	
27 Chloroform	83	3.619	3.619	0.000	97	465448	20.0	20.0	
28 1,1,1-Trichloroethane	97	3.734	3.734	0.000	95	408313	20.0	21.2	
30 1,1-Dichloropropene	75	3.844	3.844	0.000	90	394479	20.0	20.9	
29 Carbon tetrachloride	117	3.850	3.850	0.000	82	324235	20.0	21.8	
31 Benzene	78	4.002	4.002	0.000	96	1224804	20.0	21.4	
33 Tert-amyl methyl ether	73	4.026	4.026	0.000	95	695267	16.0	17.2	
32 1,2-Dichloroethane	62	4.032	4.032	0.000	96	447533	20.0	21.6	

Report Date: 04-Jun-2020 12:47:42

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.446	4.446	0.000	95	230675	20.0	22.6	
35 1,2-Dichloropropane	63	4.628	4.628	0.000	89	311262	20.0	21.4	
36 Dibromomethane	93	4.738	4.738	0.000	87	168220	20.0	21.8	
37 Dichlorobromomethane	83	4.835	4.835	0.000	99	377985	20.0	22.0	
38 cis-1,3-Dichloropropene	75	5.170	5.170	0.000	99	447400	20.0	21.2	
39 4-Methyl-2-pentanone (MIBK)	43	5.267	5.267	0.000	99	2019695	100.0	119.3	
40 Toluene	92	5.419	5.419	0.000	93	696598	20.0	21.3	
41 trans-1,3-Dichloropropene	75	5.613	5.613	0.000	97	454865	20.0	21.9	
42 1,1,2-Trichloroethane	83	5.778	5.778	0.000	94	224268	20.0	21.4	
43 Tetrachloroethene	164	5.863	5.863	0.000	91	176421	20.0	20.8	
44 1,3-Dichloropropane	76	5.911	5.911	0.000	98	513642	20.0	22.1	
45 2-Hexanone	43	5.948	5.948	0.000	99	1437372	100.0	107.9	
46 Chlorodibromomethane	129	6.112	6.112	0.000	96	228055	20.0	19.0	
47 Ethylene Dibromide	107	6.216	6.216	0.000	97	265180	20.0	23.9	
48 Chlorobenzene	112	6.611	6.611	0.000	93	692672	20.0	21.5	
50 Ethylbenzene	91	6.678	6.678	0.000	99	1409184	20.0	20.7	
49 1,1,1,2-Tetrachloroethane	131	6.684	6.684	0.000	90	232293	20.0	19.7	
51 m-Xylene & p-Xylene	91	6.781	6.781	0.000	99	1123946	20.0	21.2	
52 o-Xylene	91	7.140	7.140	0.000	97	1097720	20.0	20.1	
53 Styrene	104	7.164	7.164	0.000	93	830830	20.0	22.0	
54 Bromoform	173	7.377	7.377	0.000	91	136840	20.0	20.4	
55 Isopropylbenzene	105	7.468	7.468	0.000	97	1369565	20.0	21.6	
56 Bromobenzene	156	7.797	7.797	0.000	89	262049	20.0	20.2	
57 1,1,2,2-Tetrachloroethane	83	7.803	7.803	0.000	97	402982	20.0	20.6	
58 1,2,3-Trichloropropane	110	7.845	7.845	0.000	89	116679	20.0	21.5	
59 N-Propylbenzene	91	7.851	7.851	0.000	97	1832025	20.0	21.6	
60 2-Chlorotoluene	91	7.955	7.955	0.000	96	999160	20.0	20.3	
61 1,3,5-Trimethylbenzene	105	8.010	8.010	0.000	91	1191108	20.0	21.9	
62 4-Chlorotoluene	91	8.058	8.058	0.000	98	1121006	20.0	21.0	
63 tert-Butylbenzene	119	8.320	8.320	0.000	96	942312	20.0	21.0	
64 1,2,4-Trimethylbenzene	105	8.374	8.374	0.000	97	1175727	20.0	21.7	
65 sec-Butylbenzene	105	8.526	8.526	0.000	96	1457121	20.0	20.2	
67 4-Isopropyltoluene	119	8.666	8.666	0.000	95	1188093	20.0	20.7	
66 1,3-Dichlorobenzene	146	8.678	8.678	0.000	91	549723	20.0	21.1	
68 1,4-Dichlorobenzene	146	8.764	8.764	0.000	86	529847	20.0	19.1	
70 n-Butylbenzene	91	9.068	9.068	0.000	97	1345281	20.0	21.9	
69 1,2-Dichlorobenzene	146	9.135	9.135	0.000	90	543850	20.0	20.2	
71 1,2-Dibromo-3-Chloropropane	157	9.962	9.962	0.000	87	66001	20.0	19.5	Ma
72 1,2,4-Trichlorobenzene	180	10.898	10.898	0.000	92	284531	20.0	20.9	
73 Hexachlorobutadiene	225	11.050	11.050	0.000	86	123563	20.0	20.0	
74 Naphthalene	128	11.178	11.178	0.000	98	1021900	20.0	22.2	
75 1,2,3-Trichlorobenzene	180	11.427	11.427	0.000	93	267075	20.0	20.9	
S 76 Xylenes, Total	1				0		40.0	41.3	
S 78 1,3-Dichloropropene, Total	1				0		40.0	43.1	

Report Date: 04-Jun-2020 12:47:42

Chrom Revision: 2.3 05-May-2020 17:48:18

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:43

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D

Injection Date: 03-Jun-2020 16:12:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ics

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

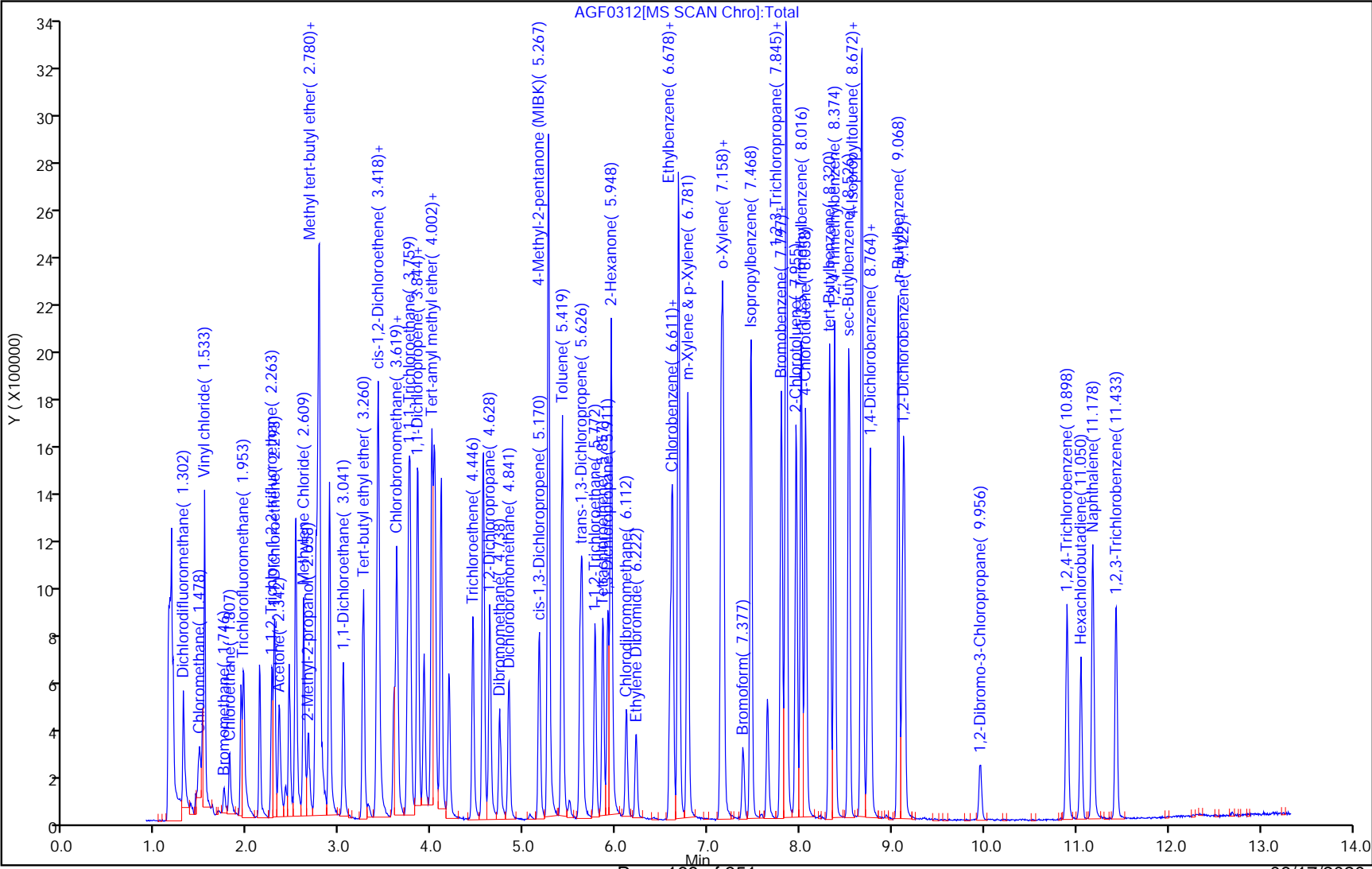
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:43

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

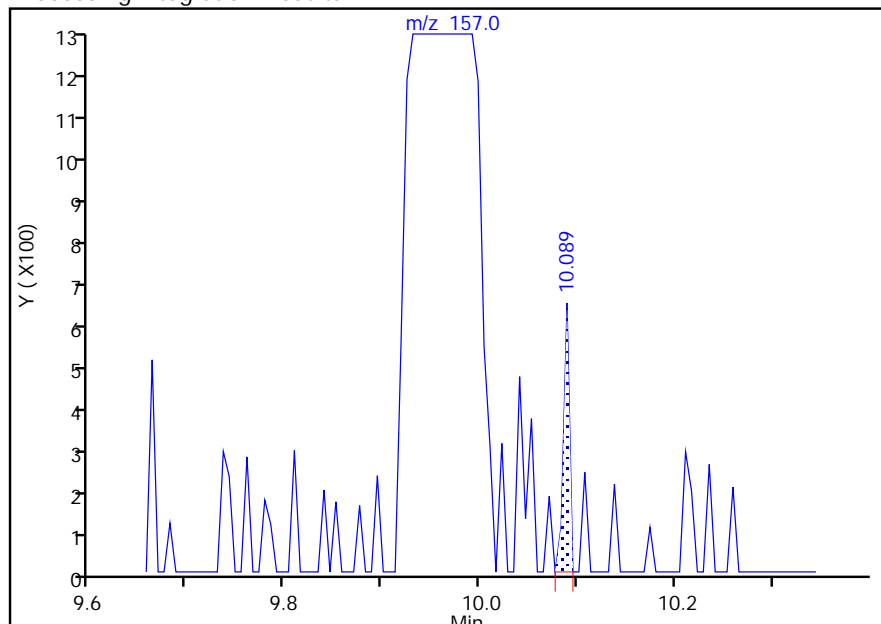
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0312.D
 Injection Date: 03-Jun-2020 16:12:30 Instrument ID: CMSAG
 Lims ID: icis
 Client ID:
 Operator ID: rd ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

71 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

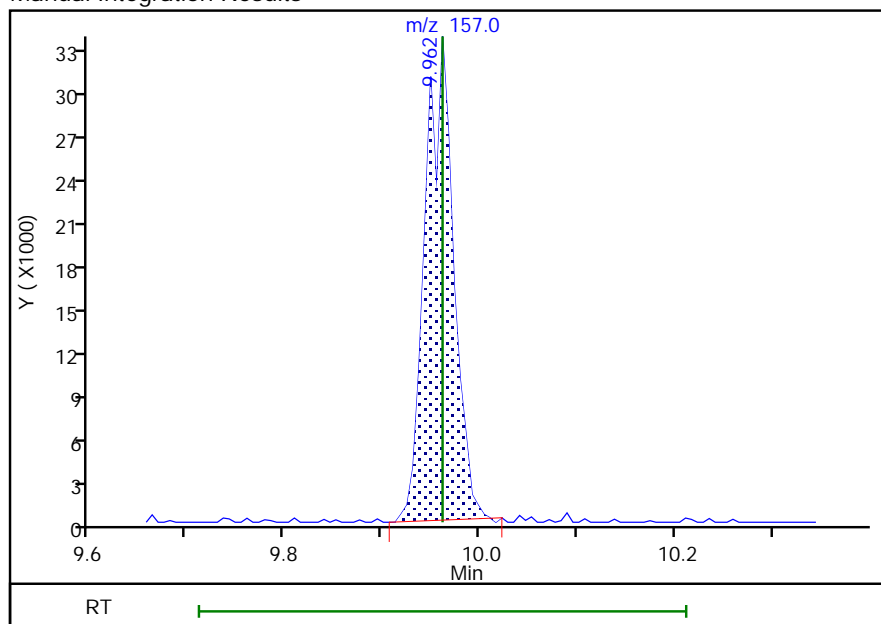
RT: 10.09
 Area: 273
 Amount: 0.110552
 Amount Units: ug/l

Processing Integration Results



RT: 9.96
 Area: 66001
 Amount: 19.508315
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:41:15

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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06/17/2020

September 2020

Report Date: 04-Jun-2020 12:47:45

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0313.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 03-Jun-2020 16:37:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-013
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:44 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:49:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.186	4.184	0.002	97	530381	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.588	6.586	0.002	89	352191	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.741	8.739	0.002	97	161564	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.647	7.645	0.002	89	195715	10.0	9.20	
\$ 5 1,2-Dichlorobenzene-d4	152	9.112	9.110	0.002	88	159620	10.0	9.97	
7 Dichlorodifluoromethane	85	1.304	1.302	0.002	99	886602	50.0	46.4	
8 Chloromethane	50	1.480	1.478	0.002	99	1056850	50.0	43.9	
9 Vinyl chloride	62	1.511	1.515	-0.005	98	974470	50.0	46.8	
10 Bromomethane	94	1.748	1.746	0.002	98	211155	50.0	51.0	
11 Chloroethane	64	1.808	1.800	0.008	99	493078	50.0	47.8	
12 Trichlorofluoromethane	101	1.961	1.959	0.001	97	866878	50.0	45.6	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.265	2.269	-0.004	90	364976	50.0	44.5	
13 1,1-Dichloroethene	96	2.295	2.293	0.002	92	534673	50.0	45.6	
15 Acetone	58	2.344	2.342	0.002	85	377006	250.0	219.5	
16 Methylene Chloride	84	2.611	2.609	0.002	96	702882	50.0	46.1	
17 2-Methyl-2-propanol	59	2.666	2.664	0.002	98	860791	500.0	506.7	
18 Methyl tert-butyl ether	73	2.745	2.743	0.002	98	2213899	50.0	45.1	
19 trans-1,2-Dichloroethene	96	2.769	2.767	0.002	97	571955	50.0	46.6	
20 1,1-Dichloroethane	63	3.043	3.041	0.002	99	1386722	50.0	48.9	
22 Tert-butyl ethyl ether	59	3.256	3.260	-0.004	88	1857913	40.0	37.3	
25 2,2-Dichloropropane	77	3.408	3.406	0.002	95	976200	50.0	46.0	
24 cis-1,2-Dichloroethene	61	3.420	3.418	0.002	92	1225890	50.0	47.6	
23 2-Butanone (MEK)	72	3.426	3.424	0.002	100	513582	250.0	257.7	
26 Chlorobromomethane	130	3.590	3.594	-0.004	96	347047	50.0	43.9	
27 Chloroform	83	3.621	3.619	0.002	98	1143764	50.0	43.9	
28 1,1,1-Trichloroethane	97	3.742	3.734	0.008	97	1001196	50.0	46.9	
30 1,1-Dichloropropene	75	3.846	3.844	0.002	91	1017911	50.0	48.5	
29 Carbon tetrachloride	117	3.846	3.850	-0.004	81	797677	50.0	48.4	
31 Benzene	78	3.998	4.002	-0.004	98	3001242	50.0	47.3	
33 Tert-amyl methyl ether	73	4.028	4.026	0.002	96	1662386	40.0	36.7	
32 1,2-Dichloroethane	62	4.028	4.032	-0.004	97	1094924	50.0	47.5	

Report Date: 04-Jun-2020 12:47:45

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0313.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.448	4.446	0.002	93	543381	50.0	47.9	
35 1,2-Dichloropropane	63	4.630	4.628	0.002	89	825123	50.0	51.1	
36 Dibromomethane	93	4.734	4.738	-0.004	89	407842	50.0	47.5	
37 Dichlorobromomethane	83	4.837	4.835	0.002	98	936532	50.0	49.1	
38 cis-1,3-Dichloropropene	75	5.171	5.170	0.001	98	1116380	50.0	47.7	
39 4-Methyl-2-pentanone (MIBK)	43	5.263	5.267	-0.004	98	4910626	250.0	261.0	
40 Toluene	92	5.421	5.419	0.002	94	1680285	50.0	46.2	
41 trans-1,3-Dichloropropene	75	5.609	5.613	-0.004	97	1119443	50.0	48.4	
42 1,1,2-Trichloroethane	83	5.774	5.778	-0.004	93	572088	50.0	49.0	
43 Tetrachloroethene	164	5.859	5.863	-0.004	89	454482	50.0	55.1	
44 1,3-Dichloropropane	76	5.913	5.911	0.002	93	1272392	50.0	49.2	
45 2-Hexanone	43	5.944	5.948	-0.004	99	3648222	250.0	282.0	
46 Chlorodibromomethane	129	6.114	6.112	0.002	96	626968	50.0	53.9	
47 Ethylene Dibromide	107	6.217	6.216	0.001	97	635890	50.0	51.7	
48 Chlorobenzene	112	6.613	6.611	0.002	87	1781694	50.0	49.7	
50 Ethylbenzene	91	6.680	6.678	0.002	99	3496448	50.0	52.7	
49 1,1,1,2-Tetrachloroethane	131	6.680	6.684	-0.004	66	562343	50.0	49.0	
51 m-Xylene & p-Xylene	91	6.777	6.781	-0.004	98	2839183	50.0	55.0	
52 o-Xylene	91	7.142	7.140	0.002	91	2837299	50.0	53.6	
53 Styrene	104	7.166	7.164	0.002	91	2054387	50.0	55.9	
54 Bromoform	173	7.385	7.377	0.008	92	360573	50.0	55.4	
55 Isopropylbenzene	105	7.470	7.468	0.002	96	3397792	50.0	55.2	
56 Bromobenzene	156	7.793	7.797	-0.004	92	601003	50.0	47.6	
57 1,1,2,2-Tetrachloroethane	83	7.805	7.803	0.002	98	925384	50.0	48.6	
58 1,2,3-Trichloropropane	110	7.847	7.845	0.002	92	250022	50.0	47.4	
59 N-Propylbenzene	91	7.853	7.851	0.002	95	4185275	50.0	50.9	
60 2-Chlorotoluene	91	7.957	7.955	0.002	96	2320936	50.0	48.4	
61 1,3,5-Trimethylbenzene	105	8.011	8.010	0.002	92	2680953	50.0	50.7	
62 4-Chlorotoluene	91	8.060	8.058	0.002	99	2558774	50.0	49.4	
63 tert-Butylbenzene	119	8.322	8.320	0.002	94	2084901	50.0	47.8	
64 1,2,4-Trimethylbenzene	105	8.370	8.374	-0.004	99	2606269	50.0	49.5	
65 sec-Butylbenzene	105	8.528	8.526	0.002	99	3624819	50.0	51.7	
67 4-Isopropyltoluene	119	8.668	8.666	0.002	96	2976122	50.0	53.5	
66 1,3-Dichlorobenzene	146	8.674	8.678	-0.004	92	1180009	50.0	46.7	
68 1,4-Dichlorobenzene	146	8.759	8.764	-0.005	90	1315639	50.0	48.9	
70 n-Butylbenzene	91	9.064	9.068	-0.004	98	3016038	50.0	50.6	
69 1,2-Dichlorobenzene	146	9.130	9.135	-0.005	89	1245744	50.0	47.7	
71 1,2-Dibromo-3-Chloropropane	157	9.957	9.962	-0.005	91	169332	50.0	51.5	
72 1,2,4-Trichlorobenzene	180	10.900	10.898	0.002	93	664556	50.0	50.2	
73 Hexachlorobutadiene	225	11.052	11.050	0.002	89	299195	50.0	50.0	
74 Naphthalene	128	11.180	11.178	0.002	99	2341679	50.0	52.3	
75 1,2,3-Trichlorobenzene	180	11.429	11.427	0.002	95	634364	50.0	51.2	
S 76 Xylenes, Total	1				0		100.0	108.6	
S 77 Trihalomethanes, Total	1				0			202.2	
S 78 1,3-Dichloropropene, Total	1				0		100.0	96.1	

Reagents:

524mmix_00170

Amount Added: 5.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:45

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0313.D

Injection Date: 03-Jun-2020 16:37:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

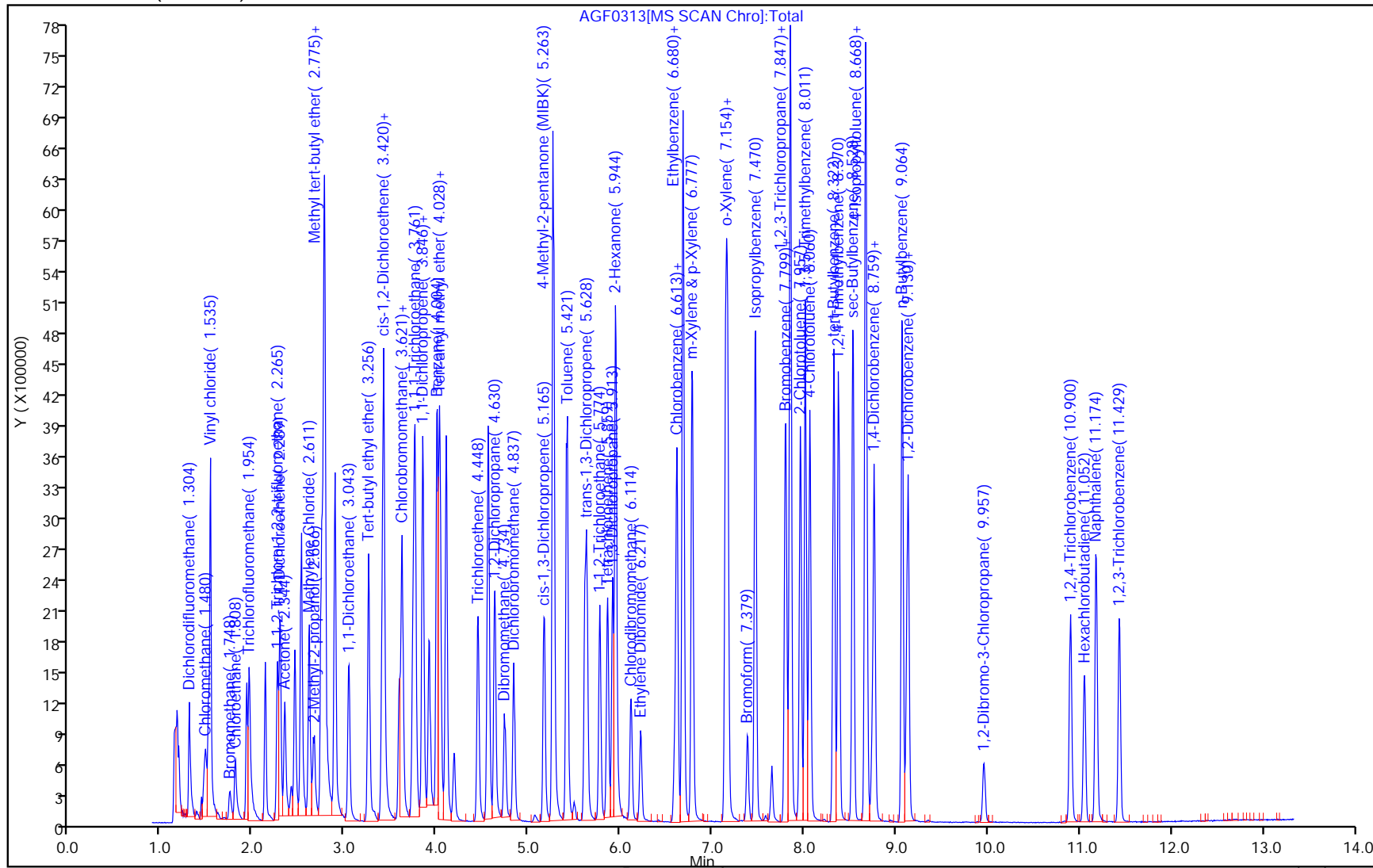
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Lims ID: ic
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 03-Jun-2020 17:02:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-014
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:47 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 10:52:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.184	0.000	98	498330	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.586	6.586	0.000	90	308012	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.738	8.739	-0.001	94	165413	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.644	7.645	-0.001	90	205615	10.0	10.3	
\$ 5 1,2-Dichlorobenzene-d4	152	9.116	9.110	0.006	78	143402	10.0	8.75	
7 Dichlorodifluoromethane	85	1.301	1.302	-0.001	98	1594960	100.0	88.9	
8 Chloromethane	50	1.483	1.478	0.005	98	2126047	100.0	94.0	M
9 Vinyl chloride	62	1.514	1.515	-0.001	98	1892852	100.0	96.7	
10 Bromomethane	94	1.739	1.746	-0.007	98	418313	100.0	107.5	
11 Chloroethane	64	1.800	1.800	0.000	99	1016397	100.0	104.8	
12 Trichlorofluoromethane	101	1.952	1.959	-0.007	99	1917819	100.0	107.3	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.262	2.269	-0.007	89	720115	100.0	93.5	
13 1,1-Dichloroethene	96	2.292	2.293	-0.001	92	1040177	100.0	94.4	
15 Acetone	58	2.341	2.342	-0.001	85	1945552	500.0	1205.4	
16 Methylene Chloride	84	2.608	2.609	-0.001	97	1400145	100.0	101.3	
17 2-Methyl-2-propanol	59	2.663	2.664	-0.001	99	1847019	1000.0	1157.2	
18 Methyl tert-butyl ether	73	2.742	2.743	-0.001	97	4842731	100.0	104.9	
19 trans-1,2-Dichloroethene	96	2.761	2.767	-0.007	95	1079464	100.0	93.7	
20 1,1-Dichloroethane	63	3.040	3.041	-0.001	99	2684988	100.0	100.7	
22 Tert-butyl ethyl ether	59	3.253	3.260	-0.007	87	4028735	80.0	86.1	
25 2,2-Dichloropropane	77	3.405	3.406	-0.001	96	1748455	100.0	87.7	
24 cis-1,2-Dichloroethene	61	3.417	3.418	-0.001	91	2223608	100.0	92.0	
23 2-Butanone (MEK)	72	3.423	3.424	-0.001	100	2404094	500.0	1283.6	
26 Chlorobromomethane	130	3.588	3.594	-0.006	95	605930	100.0	81.5	
27 Chloroform	83	3.624	3.619	0.005	98	2424470	100.0	98.9	
28 1,1,1-Trichloroethane	97	3.740	3.734	0.006	98	2082391	100.0	111.5	
30 1,1-Dichloropropene	75	3.843	3.844	-0.001	90	1861968	100.0	101.4	
29 Carbon tetrachloride	117	3.843	3.850	-0.007	92	1695215	100.0	117.5	
31 Benzene	78	4.001	4.002	-0.001	97	6064818	100.0	109.2	
33 Tert-amyl methyl ether	73	4.032	4.026	0.006	98	3552483	80.0	83.5	
32 1,2-Dichloroethane	62	4.032	4.032	0.000	97	2223720	100.0	110.3	

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.445	4.446	-0.001	94	1082039	100.0	109.0	
35 1,2-Dichloropropane	63	4.627	4.628	-0.001	90	1567381	100.0	111.1	
36 Dibromomethane	93	4.737	4.738	-0.001	90	816710	100.0	108.7	
37 Dichlorobromomethane	83	4.834	4.835	-0.001	99	1849012	100.0	110.7	
38 cis-1,3-Dichloropropene	75	5.169	5.170	-0.001	98	2298310	100.0	112.3	
39 4-Methyl-2-pentanone (MIBK)	43	5.260	5.267	-0.007	92	19872835	500.0	1207.9	eMa
40 Toluene	92	5.412	5.419	-0.007	93	3428078	100.0	107.8	
41 trans-1,3-Dichloropropene	75	5.613	5.613	0.000	97	2310975	100.0	114.3	
42 1,1,2-Trichloroethane	83	5.771	5.778	-0.007	93	1042149	100.0	102.1	
43 Tetrachloroethene	164	5.862	5.863	-0.001	91	830615	100.0	98.4	
44 1,3-Dichloropropane	76	5.917	5.911	0.006	97	2270684	100.0	100.3	
45 2-Hexanone	43	5.941	5.948	-0.007	96	17277798	500.0	1304.3	e
46 Chlorodibromomethane	129	6.117	6.112	0.005	98	1315418	100.0	110.4	
47 Ethylene Dibromide	107	6.221	6.216	0.005	98	1186992	100.0	110.3	
48 Chlorobenzene	112	6.616	6.611	0.005	96	3296238	100.0	105.1	
50 Ethylbenzene	91	6.677	6.678	-0.001	99	6670865	100.0	98.3	
49 1,1,1,2-Tetrachloroethane	131	6.683	6.684	-0.001	65	1127095	100.0	95.9	
51 m-Xylene & p-Xylene	91	6.780	6.781	-0.001	96	5557977	100.0	105.2	
52 o-Xylene	91	7.145	7.140	0.005	92	5572620	100.0	102.8	
53 Styrene	104	7.163	7.164	-0.001	92	4250922	100.0	112.9	
54 Bromoform	173	7.382	7.377	0.005	92	802910	100.0	120.5	
55 Isopropylbenzene	105	7.467	7.468	-0.001	96	7002214	100.0	111.1	
56 Bromobenzene	156	7.790	7.797	-0.007	92	1262152	100.0	97.6	
57 1,1,2,2-Tetrachloroethane	83	7.802	7.803	-0.001	98	1754719	100.0	90.0	
58 1,2,3-Trichloropropane	110	7.845	7.845	-0.001	87	540663	100.0	100.2	
59 n-Propylbenzene	91	7.851	7.851	0.000	97	8017904	100.0	95.2	
60 2-Chlorotoluene	91	7.960	7.955	0.005	95	5273676	100.0	107.5	
61 1,3,5-Trimethylbenzene	105	8.009	8.010	0.000	94	5520222	100.0	101.9	
62 4-Chlorotoluene	91	8.057	8.058	-0.001	98	5541673	100.0	104.5	
63 tert-Butylbenzene	119	8.319	8.320	-0.001	89	4653631	100.0	104.2	
64 1,2,4-Trimethylbenzene	105	8.374	8.374	0.000	96	5991087	100.0	111.2	
65 sec-Butylbenzene	105	8.526	8.526	0.000	98	7193845	100.0	100.3	
67 4-Isopropyltoluene	119	8.665	8.666	-0.001	96	6046892	100.0	106.1	
66 1,3-Dichlorobenzene	146	8.678	8.678	0.000	91	2605351	100.0	100.7	
68 1,4-Dichlorobenzene	146	8.763	8.764	-0.001	90	2784218	100.0	101.1	
70 n-Butylbenzene	91	9.067	9.068	-0.001	97	6257659	100.0	102.6	
69 1,2-Dichlorobenzene	146	9.134	9.135	-0.001	93	2484606	100.0	93.0	
71 1,2-Dibromo-3-Chloropropane	157	9.961	9.962	-0.001	93	363301	100.0	107.9	
72 1,2,4-Trichlorobenzene	180	10.897	10.898	-0.001	93	1341054	100.0	98.9	
73 Hexachlorobutadiene	225	11.055	11.050	0.005	90	605958	100.0	98.8	
74 Naphthalene	128	11.177	11.178	-0.001	99	4740107	100.0	103.4	
75 1,2,3-Trichlorobenzene	180	11.432	11.427	0.005	94	1234515	100.0	97.3	
S 76 Xylenes, Total	1				0		200.0	208.0	
S 77 Trihalomethanes, Total	1				0			440.5	
S 78 1,3-Dichloropropene, Total	1				0		200.0	226.6	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524mmix_00170

Amount Added: 10.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D

Injection Date: 03-Jun-2020 17:02:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ic

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

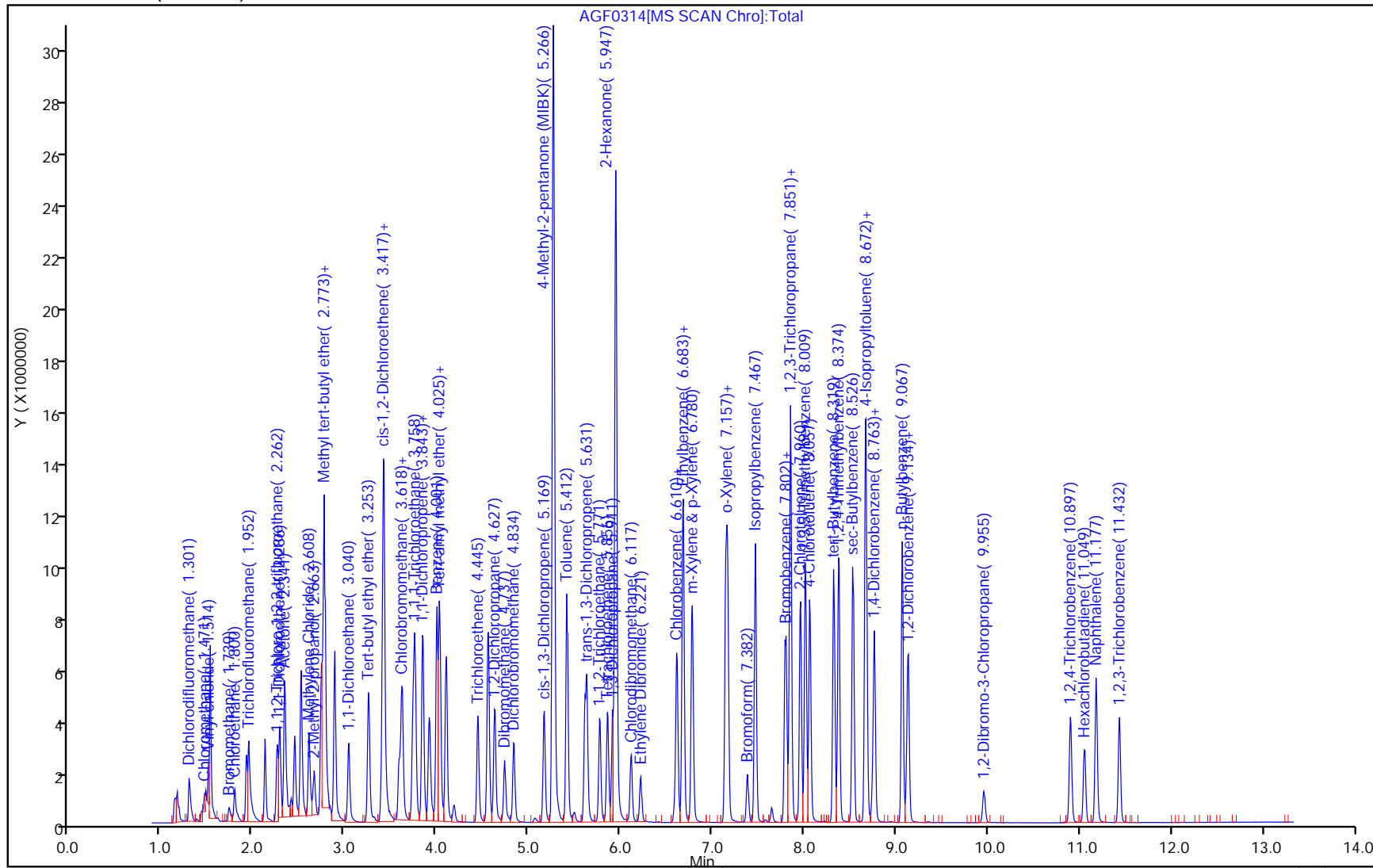
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

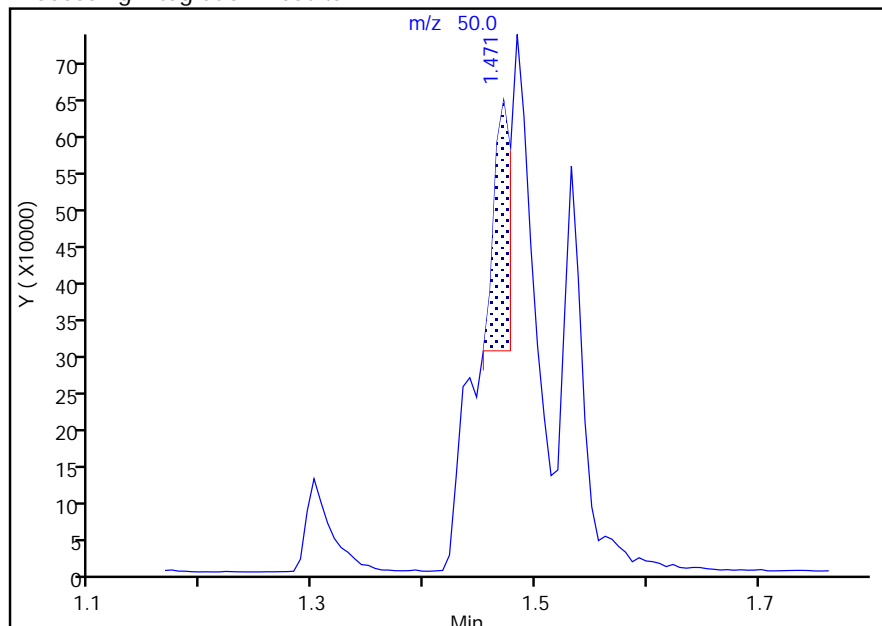
Data File:	\\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D		
Injection Date:	03-Jun-2020 17:02:30	Instrument ID:	CMSAG
Lims ID:	ic		
Client ID:			
Operator ID:	rd	ALS Bottle#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	CMSAG_524New	Limit Group:	524.2
Column:	Rtx-624 (0.18 mm)	Detector:	MS SCAN
		Worklist Smp#:	14

8 Chloromethane, CAS: 74-87-3

Signal: 1

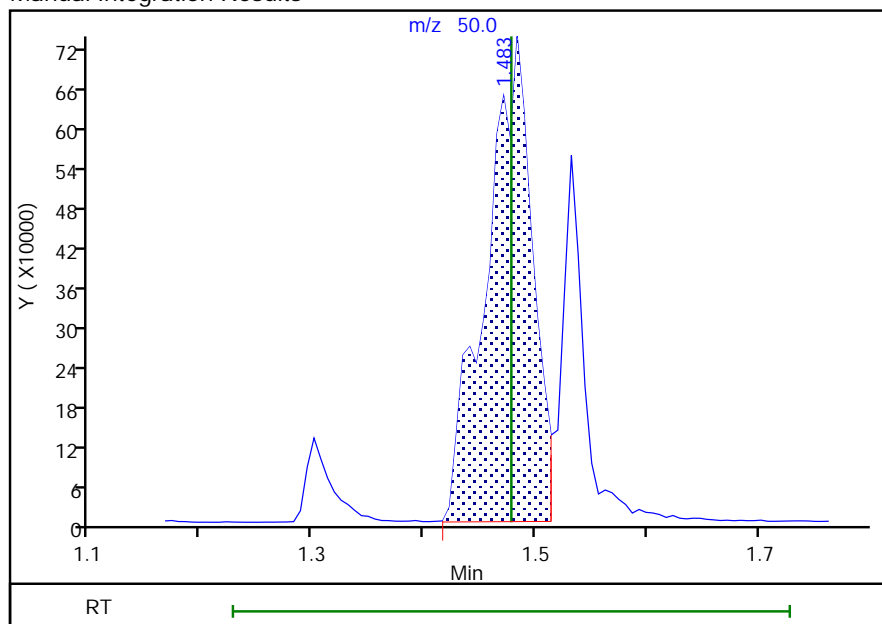
RT: 1.47
 Area: 357174
 Amount: 18.505430
 Amount Units: ug/l

Processing Integration Results



RT: 1.48
 Area: 2126047
 Amount: 93.977939
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:51:47

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 04-Jun-2020 12:47:48

Chrom Revision: 2.3 05-May-2020 17:48:18
Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

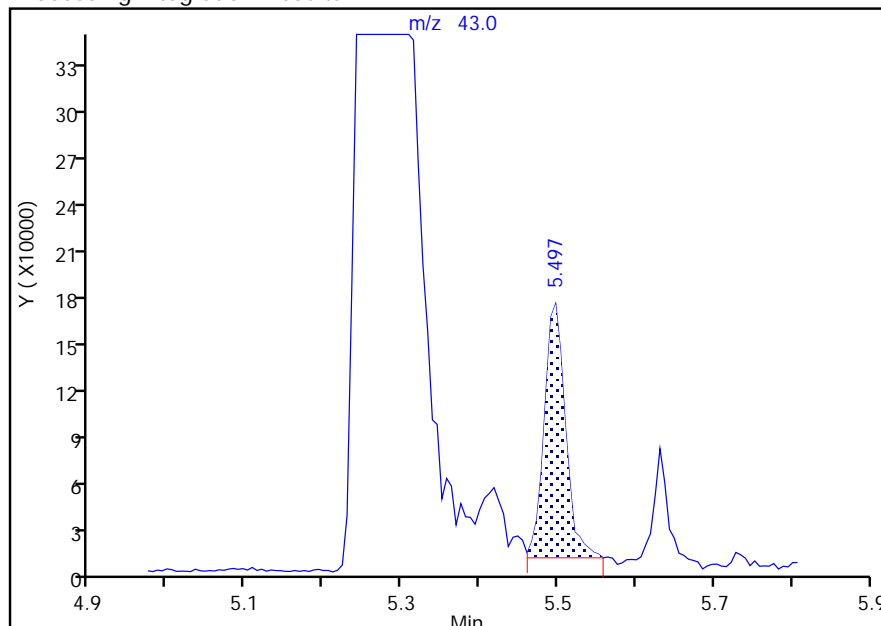
Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Injection Date: 03-Jun-2020 17:02:30 Instrument ID: CMSAG
 Lims ID: ic
 Client ID:
 Operator ID: rd ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: CMSAG_524New Limit Group: 524.2
 Column: Rtx-624 (0.18 mm) Detector: MS SCAN

39 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

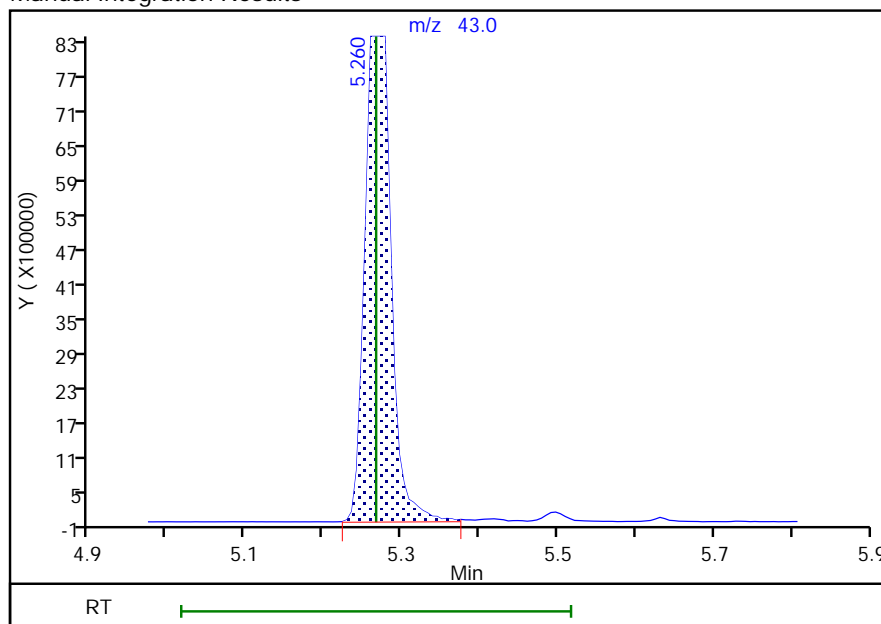
RT: 5.50
 Area: 302612
 Amount: 19.938136
 Amount Units: ug/l

Processing Integration Results



RT: 5.26
 Area: 19872835
 Amount: 1207.8686
 Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 04-Jun-2020 10:52:18

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

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06/17/2020

September 2020

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: ICV 680-621037/16 Calibration Date: 06/03/2020 17:52
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF0316.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3599	0.3407		18.9	20.0	-5.3	30.0
Chloromethane	Ave	0.4540	0.3906		17.2	20.0	-14.0	30.0
Vinyl chloride	Ave	0.3929	0.3629		18.5	20.0	-7.6	30.0
Bromomethane	Ave	0.0781	0.0789		20.2	20.0	1.1	30.0
Chloroethane	Ave	0.1945	0.2135		21.9	20.0	9.7	30.0
Trichlorofluoromethane	Ave	0.3587	0.3482		19.4	20.0	-2.9	30.0
Freon 113	Ave	0.1546	0.1499		19.4	20.0	-3.0	30.0
1,1-Dichloroethene	Ave	0.2212	0.2024		18.3	20.0	-8.5	30.0
Acetone	Ave	0.0324	0.0318		98.3	100	-1.7	30.0
Methylene Chloride	Lin1		0.3211		20.7	20.0	3.6	30.0
tert-Butyl alcohol	Ave	0.0320	0.0314		196	200	-2.1	30.0
Methyl tert-butyl ether	Ave	0.9265	0.8659		18.7	20.0	-6.5	30.0
trans-1,2-Dichloroethene	Ave	0.2313	0.2350		20.3	20.0	1.6	30.0
1,1-Dichloroethane	Ave	0.5350	0.4904		18.3	20.0	-8.3	30.0
2,2-Dichloropropane	Ave	0.4000	0.3460		17.3	20.0	-13.5	30.0
cis-1,2-Dichloroethene	Ave	0.4851	0.4356		18.0	20.0	-10.2	30.0
2-Butanone (MEK)	Ave	0.0376	0.0382		102	100	1.5	30.0
Chlorobromomethane	Ave	0.1492	0.1291		17.3	20.0	-13.5	30.0
Chloroform	Ave	0.4917	0.4650		18.9	20.0	-5.4	30.0
1,1,1-Trichloroethane	Ave	0.6064	0.5786		19.1	20.0	-4.6	30.0
1,1-Dichloropropene	Ave	0.5960	0.5435		18.2	20.0	-8.8	30.0
Carbon tetrachloride	Ave	0.4684	0.4332		18.5	20.0	-7.5	30.0
Benzene	Ave	1.803	1.582		17.5	20.0	-12.3	30.0
1,2-Dichloroethane	Ave	0.6543	0.5957		18.2	20.0	-9.0	30.0
Trichloroethene	Ave	0.3223	0.3019		18.7	20.0	-6.3	30.0
1,2-Dichloropropane	Ave	0.4582	0.4474		19.5	20.0	-2.3	30.0
Dibromomethane	Ave	0.2440	0.2313		19.0	20.0	-5.2	30.0
Dichlorobromomethane	Ave	0.5421	0.5222		19.3	20.0	-3.7	30.0
cis-1,3-Dichloropropene	Ave	0.6645	0.6693		20.1	20.0	0.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5342	0.5307		99.4	100	-0.6	30.0
Toluene	Ave	1.032	0.9394		18.2	20.0	-9.0	30.0
trans-1,3-Dichloropropene	Ave	0.6565	0.6034		18.4	20.0	-8.1	30.0
1,1,2-Trichloroethane	Ave	0.3314	0.2880		17.4	20.0	-13.1	30.0
Tetrachloroethene	Ave	0.5105	0.4905		19.2	20.0	-3.9	30.0
1,3-Dichloropropane	Ave	0.7347	0.6432		17.5	20.0	-12.5	30.0
2-Hexanone	Ave	0.8008	0.8115		101	100	1.3	30.0
Chlorodibromomethane	Ave	0.7204	0.6741		18.7	20.0	-6.4	30.0
Ethylene Dibromide	Ave	0.3494	0.3241		18.5	20.0	-7.3	30.0
Chlorobenzene	Ave	1.018	0.9544		18.7	20.0	-6.3	30.0
1,1,1,2-Tetrachloroethane	Ave	0.7102	0.6958		19.6	20.0	-2.0	30.0
Ethylbenzene	Ave	4.103	4.017		19.6	20.0	-2.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: ICV 680-621037/16 Calibration Date: 06/03/2020 17:52
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF0316.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
m-Xylene & p-Xylene	Ave	3.195	3.276		20.5	20.0	2.5	30.0
o-Xylene	Ave	3.277	3.285		20.0	20.0	0.2	30.0
Styrene	Ave	2.276	2.402		21.1	20.0	5.5	30.0
Bromoform	Ave	0.4029	0.4176		20.7	20.0	3.6	30.0
Isopropylbenzene	Ave	3.811	3.727		19.6	20.0	-2.2	30.0
Bromobenzene	Ave	0.7819	0.7500		19.2	20.0	-4.1	30.0
1,1,2,2-Tetrachloroethane	Ave	1.179	1.233		20.9	20.0	4.6	30.0
1,2,3-Trichloropropane	Ave	0.3263	0.3696		22.7	20.0	13.3	30.0
N-Propylbenzene	Ave	5.089	5.392		21.2	20.0	5.9	30.0
2-Chlorotoluene	Ave	2.965	3.137		21.2	20.0	5.8	30.0
1,3,5-Trimethylbenzene	Ave	3.274	3.186		19.5	20.0	-2.7	30.0
4-Chlorotoluene	Ave	3.206	3.316		20.7	20.0	3.4	30.0
tert-Butylbenzene	Ave	2.700	2.708		20.1	20.0	0.3	30.0
1,2,4-Trimethylbenzene	Ave	3.258	3.615		22.2	20.0	11.0	30.0
sec-Butylbenzene	Ave	4.336	4.390		20.3	20.0	1.3	30.0
4-Isopropyltoluene	Ave	3.446	3.401		19.7	20.0	-1.3	30.0
1,3-Dichlorobenzene	Ave	1.564	1.607		20.5	20.0	2.7	30.0
1,4-Dichlorobenzene	Ave	1.665	1.672		20.1	20.0	0.4	30.0
n-Butylbenzene	Ave	3.687	3.650		19.8	20.0	-1.0	30.0
1,2-Dichlorobenzene	Ave	1.616	1.623		20.1	20.0	0.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2035	0.2126		20.9	20.0	4.5	30.0
1,2,4-Trichlorobenzene	Ave	0.8194	0.8430		20.6	20.0	2.9	30.0
Hexachlorobutadiene	Ave	0.3707	0.3816		20.6	20.0	3.0	30.0
Naphthalene	Ave	2.771	3.029		21.9	20.0	9.3	30.0
1,2,3-Trichlorobenzene	Ave	0.7670	0.8216		21.4	20.0	7.1	30.0
4-Bromofluorobenzene	Ave	0.4011	0.3860		9.62	10.0	-3.8	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9907	0.9673		9.76	10.0	-2.4	30.0

Report Date: 04-Jun-2020 12:47:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0316.D
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 03-Jun-2020 17:52:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-016
 Operator ID: rd Instrument ID: CMSAG
 Sublist:
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:49 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: intarachau

Date: 04-Jun-2020 11:28:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.187	4.184	0.003	97	472885	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.589	6.586	0.003	90	339428	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.736	8.739	-0.003	93	154432	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.647	7.645	0.002	87	182546	10.0	9.62	
\$ 5 1,2-Dichlorobenzene-d4	152	9.113	9.110	0.003	87	149387	10.0	9.76	
7 Dichlorodifluoromethane	85	1.304	1.302	0.002	99	322225	20.0	18.9	
8 Chloromethane	50	1.481	1.478	0.003	99	369406	20.0	17.2	
9 Vinyl chloride	62	1.511	1.515	-0.004	97	343233	20.0	18.5	
10 Bromomethane	94	1.742	1.746	-0.004	96	74618	20.0	20.2	
11 Chloroethane	64	1.803	1.800	0.003	98	201891	20.0	21.9	
12 Trichlorofluoromethane	101	1.961	1.959	0.002	99	329313	20.0	19.4	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.265	2.269	-0.004	91	141803	20.0	19.4	
13 1,1-Dichloroethene	96	2.295	2.293	0.002	94	191458	20.0	18.3	
15 Acetone	58	2.344	2.342	0.002	86	150481	100.0	98.3	
16 Methylene Chloride	84	2.606	2.609	-0.003	99	303644	20.0	20.7	
17 2-Methyl-2-propanol	59	2.666	2.664	0.002	97	296638	200.0	195.9	
18 Methyl tert-butyl ether	73	2.739	2.743	-0.004	97	818963	20.0	18.7	
19 trans-1,2-Dichloroethene	96	2.764	2.767	-0.003	99	222273	20.0	20.3	
20 1,1-Dichloroethane	63	3.043	3.041	0.002	99	463836	20.0	18.3	
25 2,2-Dichloropropane	77	3.402	3.406	-0.004	95	327198	20.0	17.3	
24 cis-1,2-Dichloroethene	61	3.421	3.418	0.002	87	411958	20.0	18.0	
23 2-Butanone (MEK)	72	3.427	3.424	0.003	99	180448	100.0	101.5	
26 Chlorobromomethane	130	3.591	3.594	-0.003	97	122062	20.0	17.3	
27 Chloroform	83	3.621	3.619	0.002	97	439768	20.0	18.9	
28 1,1,1-Trichloroethane	97	3.737	3.734	0.003	98	392750	20.0	19.1	
30 1,1-Dichloropropene	75	3.846	3.844	0.002	92	368970	20.0	18.2	
29 Carbon tetrachloride	117	3.846	3.850	-0.004	82	294098	20.0	18.5	
31 Benzene	78	3.998	4.002	-0.004	98	1073888	20.0	17.5	
32 1,2-Dichloroethane	62	4.035	4.032	0.003	95	404373	20.0	18.2	
34 Trichloroethene	132	4.448	4.446	0.002	94	204931	20.0	18.7	
35 1,2-Dichloropropane	63	4.631	4.628	0.003	94	303735	20.0	19.5	

Report Date: 04-Jun-2020 12:47:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0316.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Dibromomethane	93	4.740	4.738	0.002	91	157017	20.0	19.0	
37 Dichlorobromomethane	83	4.837	4.835	0.002	97	354524	20.0	19.3	
38 cis-1,3-Dichloropropene	75	5.166	5.170	-0.004	96	454333	20.0	20.1	
39 4-Methyl-2-pentanone (MIBK)	43	5.269	5.267	0.002	98	1801433	100.0	99.4	
40 Toluene	92	5.415	5.419	-0.004	93	637695	20.0	18.2	
41 trans-1,3-Dichloropropene	75	5.610	5.613	-0.003	98	409643	20.0	18.4	
42 1,1,2-Trichloroethane	83	5.774	5.778	-0.004	93	195500	20.0	17.4	
43 Tetrachloroethene	164	5.853	5.863	-0.010	89	151498	20.0	19.2	
44 1,3-Dichloropropane	76	5.914	5.911	0.003	95	436636	20.0	17.5	
45 2-Hexanone	43	5.950	5.948	0.002	97	1253199	100.0	101.3	
46 Chlorodibromomethane	129	6.108	6.112	-0.004	97	208200	20.0	18.7	
47 Ethylene Dibromide	107	6.212	6.216	-0.004	99	220011	20.0	18.5	
48 Chlorobenzene	112	6.613	6.611	0.002	93	647915	20.0	18.7	
50 Ethylbenzene	91	6.680	6.678	0.002	99	1240693	20.0	19.6	
49 1,1,1,2-Tetrachloroethane	131	6.680	6.684	-0.004	47	214908	20.0	19.6	
51 m-Xylene & p-Xylene	91	6.777	6.781	-0.004	99	1011942	20.0	20.5	
52 o-Xylene	91	7.142	7.140	0.002	91	1014571	20.0	20.0	
53 Styrene	104	7.167	7.164	0.003	91	741796	20.0	21.1	
54 Bromoform	173	7.386	7.377	0.009	89	128966	20.0	20.7	
55 Isopropylbenzene	105	7.471	7.468	0.003	96	1151094	20.0	19.6	
56 Bromobenzene	156	7.799	7.797	0.002	92	231661	20.0	19.2	
57 1,1,2,2-Tetrachloroethane	83	7.805	7.803	0.002	98	380960	20.0	20.9	
58 1,2,3-Trichloropropane	110	7.842	7.845	-0.003	60	114170	20.0	22.7	
59 N-Propylbenzene	91	7.848	7.851	-0.003	96	1665303	20.0	21.2	
60 2-Chlorotoluene	91	7.957	7.955	0.002	95	968930	20.0	21.2	
61 1,3,5-Trimethylbenzene	105	8.006	8.010	-0.003	93	983965	20.0	19.5	
62 4-Chlorotoluene	91	8.061	8.058	0.003	98	1024073	20.0	20.7	
63 tert-Butylbenzene	119	8.322	8.320	0.002	91	836506	20.0	20.1	
64 1,2,4-Trimethylbenzene	105	8.377	8.374	0.003	96	1116619	20.0	22.2	
65 sec-Butylbenzene	105	8.535	8.526	0.009	99	1355952	20.0	20.3	
67 4-Isopropyltoluene	119	8.669	8.666	0.003	96	1050314	20.0	19.7	
66 1,3-Dichlorobenzene	146	8.675	8.678	-0.003	95	496352	20.0	20.5	
68 1,4-Dichlorobenzene	146	8.760	8.764	-0.004	90	516272	20.0	20.1	
70 n-Butylbenzene	91	9.064	9.068	-0.004	97	1127392	20.0	19.8	
69 1,2-Dichlorobenzene	146	9.131	9.135	-0.004	90	501418	20.0	20.1	
71 1,2-Dibromo-3-Chloropropane	157	9.964	9.962	0.002	89	65657	20.0	20.9	
72 1,2,4-Trichlorobenzene	180	10.901	10.898	0.003	91	260382	20.0	20.6	
73 Hexachlorobutadiene	225	11.053	11.050	0.003	90	117871	20.0	20.6	
74 Naphthalene	128	11.180	11.178	0.002	98	935443	20.0	21.9	
75 1,2,3-Trichlorobenzene	180	11.430	11.427	0.003	93	253747	20.0	21.4	
S 76 Xylenes, Total	1				0		40.0	40.6	
S 78 1,3-Dichloropropene, Total	1				0		40.0	38.5	

Reagents:

VM_MMIX SEC_00126

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 04-Jun-2020 12:47:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0316.D

Injection Date: 03-Jun-2020 17:52:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: icv

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

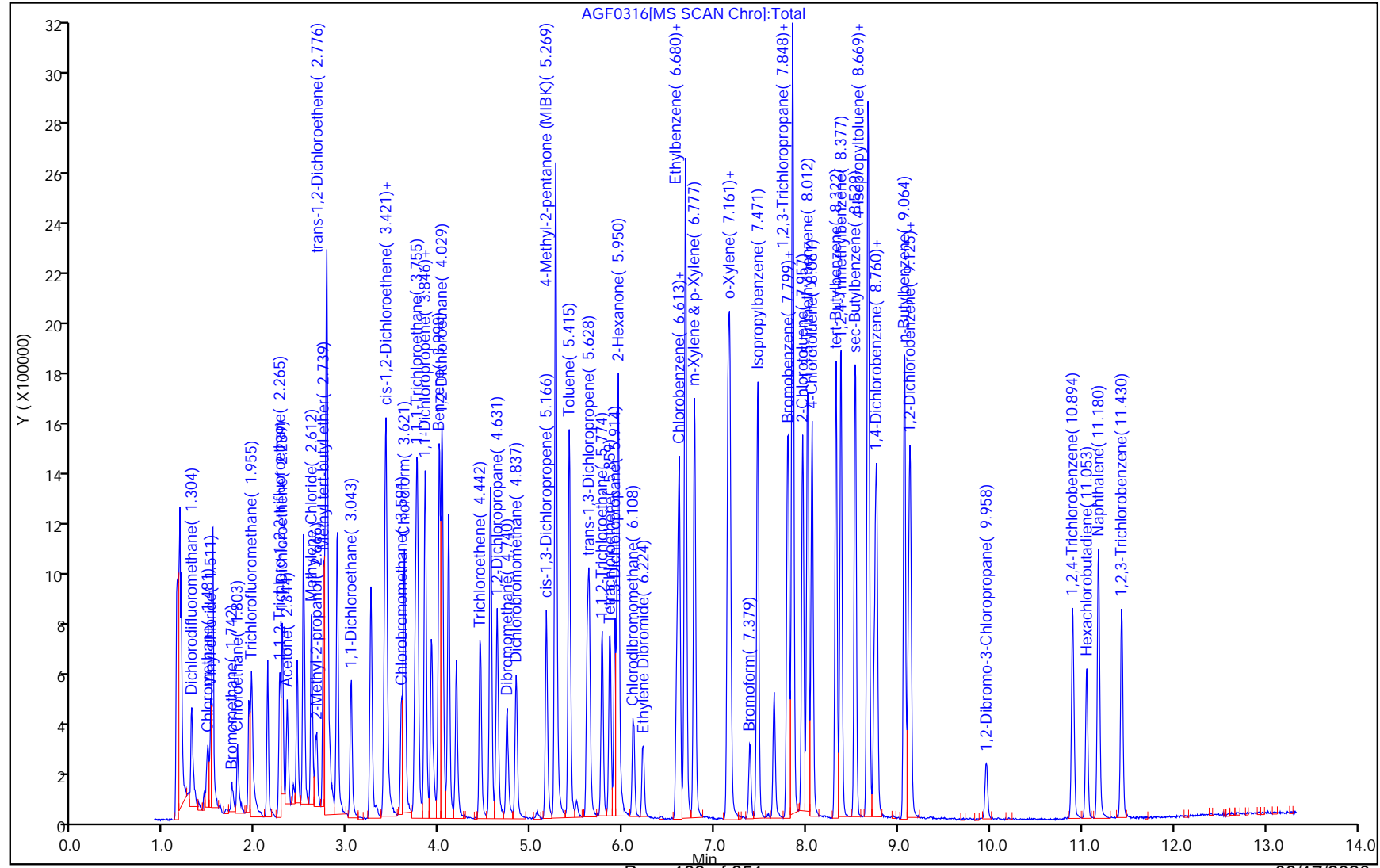
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-622635/4 Calibration Date: 06/16/2020 11:45
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF1604.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3599	0.4016		55.8	50.0	11.6	30.0
Chloromethane	Ave	0.4540	0.5211		57.4	50.0	14.8	30.0
Vinyl chloride	Ave	0.3929	0.4199		53.4	50.0	6.9	30.0
Bromomethane	Ave	0.0781	0.0684		43.8	50.0	-12.4	30.0
Chloroethane	Ave	0.1945	0.2375		61.0	50.0	22.1	30.0
Trichlorofluoromethane	Ave	0.3587	0.3926		54.7	50.0	9.4	30.0
Freon 113	Ave	0.1546	0.1574		50.9	50.0	1.8	30.0
1,1-Dichloroethene	Ave	0.2212	0.2377		53.7	50.0	7.5	30.0
Acetone	Ave	0.0324	0.0242		187	250	-25.2	30.0
Methylene Chloride	Lin1		0.3137		55.2	50.0	10.3	30.0
tert-Butyl alcohol	Ave	0.0320	0.0226		353	500	-29.4	30.0
Methyl tert-butyl ether	Ave	0.9265	0.8486		45.8	50.0	-8.4	30.0
trans-1,2-Dichloroethene	Ave	0.2313	0.2449		53.0	50.0	5.9	30.0
1,1-Dichloroethane	Ave	0.5350	0.5697		53.2	50.0	6.5	30.0
Tert-butyl ethyl ether	Ave	0.9392	0.9719		41.4	40.0	3.5	30.0
2,2-Dichloropropane	Ave	0.4000	0.4962		62.0	50.0	24.0	30.0
2-Butanone (MEK)	Ave	0.0376	0.0332		221	250	-11.7	30.0
cis-1,2-Dichloroethene	Ave	0.4851	0.5397		55.6	50.0	11.2	30.0
Chlorobromomethane	Ave	0.1492	0.1418		47.5	50.0	-5.0	30.0
Chloroform	Ave	0.4917	0.5199		52.9	50.0	5.7	30.0
1,1,1-Trichloroethane	Ave	0.6064	0.7163		59.1	50.0	18.1	30.0
1,1-Dichloropropene	Ave	0.5960	0.6671		56.0	50.0	11.9	30.0
Carbon tetrachloride	Ave	0.4684	0.5630		60.1	50.0	20.2	30.0
Benzene	Ave	1.803	2.130		59.1	50.0	18.1	30.0
1,2-Dichloroethane	Ave	0.6543	0.7553		57.7	50.0	15.4	30.0
Tert-amyl methyl ether	Ave	0.8542	0.8520		39.9	40.0	-0.3	30.0
Trichloroethene	Ave	0.3223	0.3604		55.9	50.0	11.8	30.0
1,2-Dichloropropane	Ave	0.4582	0.5673		61.9	50.0	23.8	30.0
Dibromomethane	Ave	0.2440	0.2865		58.7	50.0	17.4	30.0
Dichlorobromomethane	Ave	0.5421	0.6713		61.9	50.0	23.8	30.0
cis-1,3-Dichloropropene	Ave	0.6645	0.8364		62.9	50.0	25.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5342	0.5386		252	250	0.8	30.0
Toluene	Ave	1.032	1.152		55.8	50.0	11.5	30.0
trans-1,3-Dichloropropene	Ave	0.6565	0.6987		53.2	50.0	6.4	30.0
1,1,2-Trichloroethane	Ave	0.3314	0.3649		55.1	50.0	10.1	30.0
Tetrachloroethene	Ave	0.5105	0.4978		48.8	50.0	-2.5	30.0
1,3-Dichloropropane	Ave	0.7347	0.7801		53.1	50.0	6.2	30.0
2-Hexanone	Ave	0.8008	0.7137		223	250	-10.9	30.0
Chlorodibromomethane	Ave	0.7204	0.7126		49.5	50.0	-1.1	30.0
Ethylene Dibromide	Ave	0.3494	0.3712		53.1	50.0	6.2	30.0
Chlorobenzene	Ave	1.018	1.144		56.1	50.0	12.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-622635/4 Calibration Date: 06/16/2020 11:45
 Instrument ID: CMSAG Calib Start Date: 06/03/2020 14:08
 GC Column: Rtx-624 ID: 0.18 (mm) Calib End Date: 06/03/2020 17:02
 Lab File ID: AGF1604.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylbenzene	Ave	4.103	4.149		50.6	50.0	1.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.7102	0.6464		45.5	50.0	-9.0	30.0
m-Xylene & p-Xylene	Ave	3.195	3.375		52.8	50.0	5.6	30.0
o-Xylene	Ave	3.277	3.452		52.7	50.0	5.4	30.0
Styrene	Ave	2.276	2.365		52.0	50.0	3.9	30.0
Bromoform	Ave	0.4029	0.4241		52.6	50.0	5.3	30.0
Isopropylbenzene	Ave	3.811	4.060		53.3	50.0	6.5	30.0
Bromobenzene	Ave	0.7819	0.7202		46.1	50.0	-7.9	30.0
1,1,2,2-Tetrachloroethane	Ave	1.179	0.9739		41.3	50.0	-17.4	30.0
1,2,3-Trichloropropane	Ave	0.3263	0.2982		45.7	50.0	-8.6	30.0
N-Propylbenzene	Ave	5.089	5.155		50.6	50.0	1.3	30.0
2-Chlorotoluene	Ave	2.965	3.030		51.1	50.0	2.2	30.0
1,3,5-Trimethylbenzene	Ave	3.274	3.592		54.9	50.0	9.7	30.0
4-Chlorotoluene	Ave	3.206	3.363		52.5	50.0	4.9	30.0
tert-Butylbenzene	Ave	2.700	2.731		50.6	50.0	1.1	30.0
1,2,4-Trimethylbenzene	Ave	3.258	3.482		53.4	50.0	6.9	30.0
sec-Butylbenzene	Ave	4.336	4.427		51.1	50.0	2.1	30.0
4-Isopropyltoluene	Ave	3.446	3.583		52.0	50.0	4.0	30.0
1,3-Dichlorobenzene	Ave	1.564	1.504		48.1	50.0	-3.9	30.0
1,4-Dichlorobenzene	Ave	1.665	1.549		46.5	50.0	-7.0	30.0
n-Butylbenzene	Ave	3.687	3.665		49.7	50.0	-0.6	30.0
1,2-Dichlorobenzene	Ave	1.616	1.383		42.8	50.0	-14.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2035	0.1583		38.9	50.0	-22.2	30.0
1,2,4-Trichlorobenzene	Ave	0.8194	0.6968		42.5	50.0	-15.0	30.0
Hexachlorobutadiene	Ave	0.3707	0.3019		40.7	50.0	-18.5	30.0
Naphthalene	Ave	2.771	2.183		39.4	50.0	-21.2	30.0
1,2,3-Trichlorobenzene	Ave	0.7670	0.5937		38.7	50.0	-22.6	30.0
4-Bromofluorobenzene	Ave	0.4011	0.4177		10.4	10.0	4.1	30.0
1,2-Dichlorobenzene-d4 (Surr)	Ave	0.9907	0.9140		9.23	10.0	-7.7	30.0

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1604.D
 Lims ID: ccvis
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 16-Jun-2020 11:45:30 ALS Bottle#: 5 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-004
 Operator ID: rd Instrument ID: CMSAG
 Sublist: chrom-CMSAG_524New*sub11
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:47:53 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:47:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.181	4.181	0.000	96	456920	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.590	6.590	0.000	80	285719	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.737	8.737	0.000	96	157773	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.642	7.642	0.000	82	190843	10.0	10.4	
\$ 5 1,2-Dichlorobenzene-d4	152	9.108	9.108	0.000	89	144197	10.0	9.23	
7 Dichlorodifluoromethane	85	1.303	1.303	0.000	99	917404	50.0	55.8	
8 Chloromethane	50	1.455	1.455	0.000	100	1190529	50.0	57.4	
9 Vinyl chloride	62	1.510	1.510	0.000	98	959222	50.0	53.4	
10 Bromomethane	94	1.741	1.741	0.000	97	156278	50.0	43.8	
11 Chloroethane	64	1.802	1.802	0.000	100	542547	50.0	61.0	
12 Trichlorofluoromethane	101	1.954	1.954	0.000	98	896860	50.0	54.7	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.271	2.271	0.000	92	359576	50.0	50.9	
13 1,1-Dichloroethene	96	2.295	2.295	0.000	94	543132	50.0	53.7	
15 Acetone	58	2.344	2.344	0.000	86	276861	250.0	187.1	
16 Methylene Chloride	84	2.605	2.605	0.000	99	716559	50.0	55.2	
17 2-Methyl-2-propanol	59	2.654	2.654	0.000	97	516334	500.0	352.8	
18 Methyl tert-butyl ether	73	2.739	2.739	0.000	98	1938640	50.0	45.8	
19 trans-1,2-Dichloroethene	96	2.763	2.763	0.000	94	559595	50.0	53.0	
20 1,1-Dichloroethane	63	3.037	3.037	0.000	99	1301562	50.0	53.2	
22 Tert-butyl ethyl ether	59	3.250	3.250	0.000	89	1776241	40.0	41.4	
25 2,2-Dichloropropane	77	3.402	3.402	0.000	95	1133618	50.0	62.0	
24 cis-1,2-Dichloroethene	61	3.414	3.414	0.000	83	1232987	50.0	55.6	
23 2-Butanone (MEK)	72	3.414	3.414	0.000	99	379161	250.0	220.8	
26 Chlorobromomethane	130	3.585	3.585	0.000	95	323925	50.0	47.5	
27 Chloroform	83	3.621	3.621	0.000	97	1187647	50.0	52.9	
28 1,1,1-Trichloroethane	97	3.731	3.731	0.000	95	1023240	50.0	59.1	
30 1,1-Dichloropropene	75	3.846	3.846	0.000	89	953070	50.0	56.0	
29 Carbon tetrachloride	117	3.846	3.846	0.000	85	804240	50.0	60.1	
31 Benzene	78	3.998	3.998	0.000	97	3042425	50.0	59.1	
33 Tert-amyl methyl ether	73	4.029	4.029	0.000	97	1557136	40.0	39.9	
32 1,2-Dichloroethane	62	4.029	4.029	0.000	98	1078951	50.0	57.7	

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1604.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Trichloroethene	132	4.442	4.442	0.000	94	514846	50.0	55.9	
35 1,2-Dichloropropane	63	4.625	4.625	0.000	88	810366	50.0	61.9	
36 Dibromomethane	93	4.734	4.734	0.000	83	409226	50.0	58.7	
37 Dichlorobromomethane	83	4.832	4.832	0.000	98	958995	50.0	61.9	
38 cis-1,3-Dichloropropene	75	5.166	5.166	0.000	98	1194878	50.0	62.9	
39 4-Methyl-2-pentanone (MIBK)	43	5.258	5.258	0.000	99	3846973	250.0	252.1	E
40 Toluene	92	5.416	5.416	0.000	92	1645061	50.0	55.8	
41 trans-1,3-Dichloropropene	75	5.610	5.610	0.000	95	998213	50.0	53.2	
42 1,1,2-Trichloroethane	83	5.769	5.769	0.000	93	521260	50.0	55.1	
43 Tetrachloroethene	164	5.854	5.854	0.000	83	392693	50.0	48.8	
44 1,3-Dichloropropane	76	5.915	5.915	0.000	96	1114500	50.0	53.1	
45 2-Hexanone	43	5.945	5.945	0.000	99	2815177	250.0	222.8	
46 Chlorodibromomethane	129	6.109	6.109	0.000	96	562130	50.0	49.5	
47 Ethylene Dibromide	107	6.213	6.213	0.000	99	530283	50.0	53.1	
48 Chlorobenzene	112	6.608	6.608	0.000	88	1633768	50.0	56.1	
50 Ethylbenzene	91	6.675	6.675	0.000	99	3272845	50.0	50.6	
49 1,1,1,2-Tetrachloroethane	131	6.681	6.681	0.000	89	509885	50.0	45.5	
51 m-Xylene & p-Xylene	91	6.772	6.772	0.000	97	2662594	50.0	52.8	
52 o-Xylene	91	7.143	7.143	0.000	95	2723439	50.0	52.7	
53 Styrene	104	7.162	7.162	0.000	93	1865929	50.0	52.0	
54 Bromoform	173	7.381	7.381	0.000	91	334590	50.0	52.6	
55 Isopropylbenzene	105	7.466	7.466	0.000	97	3202420	50.0	53.3	
56 Bromobenzene	156	7.788	7.788	0.000	89	568174	50.0	46.1	
57 1,1,2,2-Tetrachloroethane	83	7.800	7.800	0.000	97	768252	50.0	41.3	
58 1,2,3-Trichloropropane	110	7.843	7.843	0.000	89	235248	50.0	45.7	
59 N-Propylbenzene	91	7.849	7.849	0.000	98	4066755	50.0	50.6	
60 2-Chlorotoluene	91	7.952	7.952	0.000	96	2390047	50.0	51.1	
61 1,3,5-Trimethylbenzene	105	8.007	8.007	0.000	93	2833498	50.0	54.9	
62 4-Chlorotoluene	91	8.056	8.056	0.000	98	2653189	50.0	52.5	
63 tert-Butylbenzene	119	8.317	8.317	0.000	89	2154739	50.0	50.6	
64 1,2,4-Trimethylbenzene	105	8.372	8.372	0.000	97	2746796	50.0	53.4	
65 sec-Butylbenzene	105	8.524	8.524	0.000	98	3492466	50.0	51.1	
67 4-Isopropyltoluene	119	8.664	8.664	0.000	96	2826441	50.0	52.0	
66 1,3-Dichlorobenzene	146	8.670	8.670	0.000	91	1186150	50.0	48.1	
68 1,4-Dichlorobenzene	146	8.762	8.762	0.000	89	1221751	50.0	46.5	
70 n-Butylbenzene	91	9.060	9.060	0.000	97	2891104	50.0	49.7	
69 1,2-Dichlorobenzene	146	9.127	9.127	0.000	88	1091308	50.0	42.8	
71 1,2-Dibromo-3-Chloropropane	157	9.954	9.954	0.000	89	124903	50.0	38.9	
72 1,2,4-Trichlorobenzene	180	10.897	10.897	0.000	90	549675	50.0	42.5	
73 Hexachlorobutadiene	225	11.049	11.049	0.000	87	238179	50.0	40.7	
74 Naphthalene	128	11.171	11.171	0.000	98	1722147	50.0	39.4	
75 1,2,3-Trichlorobenzene	180	11.426	11.426	0.000	90	468327	50.0	38.7	
S 76 Xylenes, Total	1				0		100.0	105.5	
S 78 1,3-Dichloropropene, Total	1				0		100.0	116.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Reagents:

524MMix_00173

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:47:53

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1604.D

Injection Date: 16-Jun-2020 11:45:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: ccvis

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

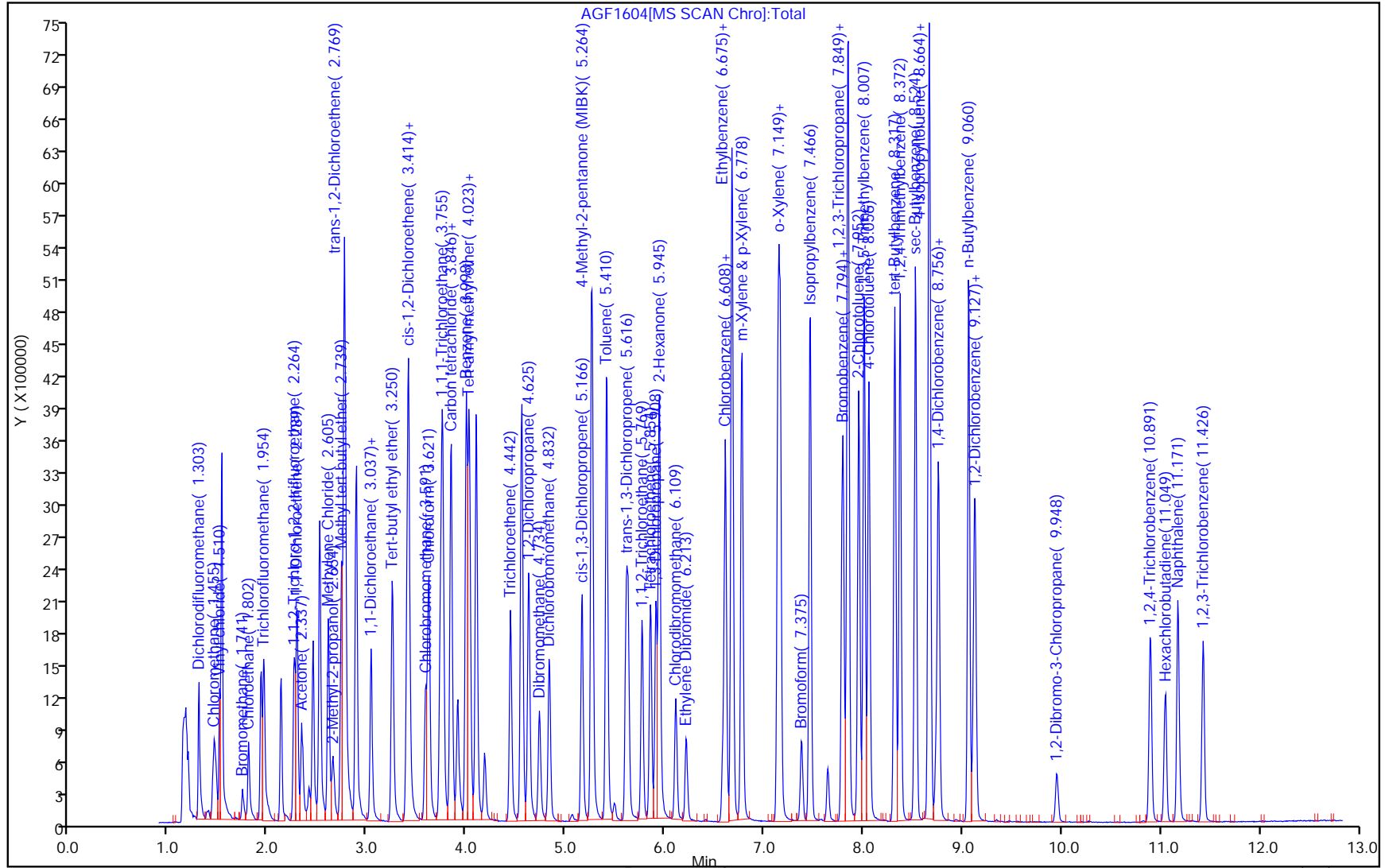
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 03-Jun-2020 12:40:30 ALS Bottle#: 4 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0064070-004
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 04-Jun-2020 12:47:49 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1052

First Level Reviewer: proctors

Date: 03-Jun-2020 13:02:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 6 BFB

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VM_bfb_00218

Amount Added: 1.00

Units: uL

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D

Injection Date: 03-Jun-2020 12:40:30

Instrument ID: CMSAG

Lims ID: bfb

Client ID:

Operator ID: rd

ALS Bottle#:

4

Worklist Smp#: 4

Injection Vol: 5.0 mL

Dil. Factor:

1.0000

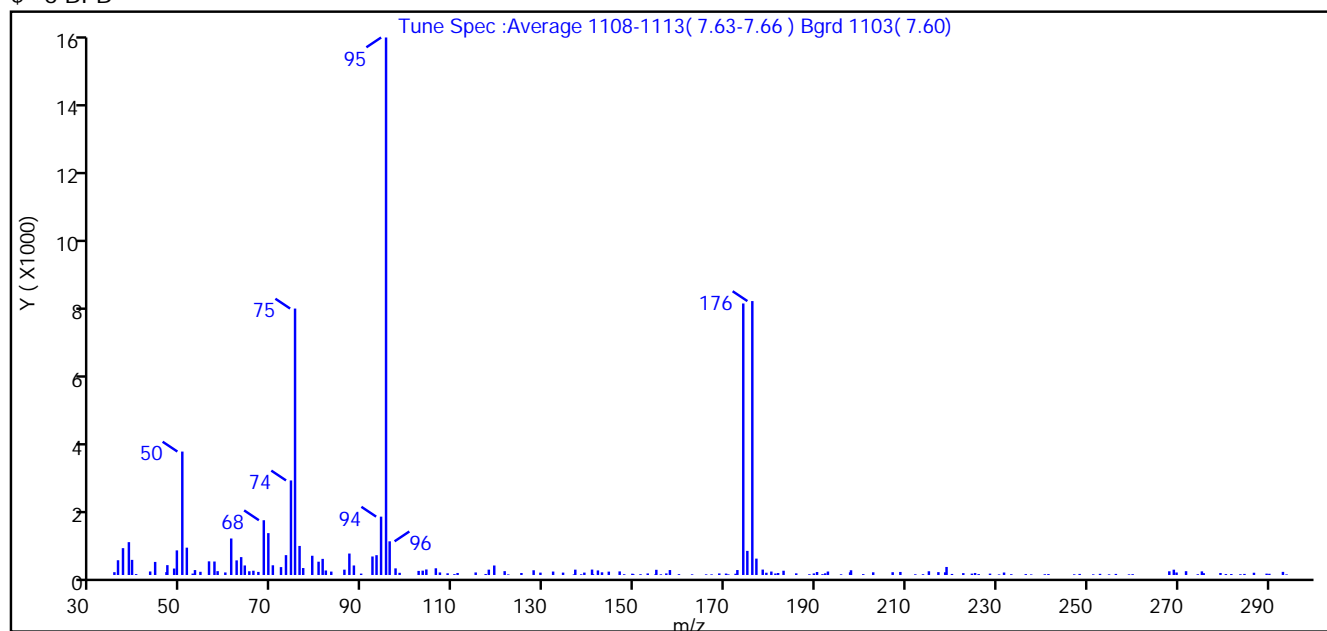
Method: CMSAG_524New

Limit Group:

524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	23.0
75	30-80% of mass 95	49.6
96	5-9% of mass 95	6.3
173	<2% of mass 174	0.9 (1.8)
174	>50% of mass 95	50.5
175	5-9% of mass 174	4.5 (8.9)
176	>95% but <101% of mass 174	51.0 (100.9)
177	5-9% of mass 176	3.0 (6.0)

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D\CMSAG_524New.rsl\spectra.d
Injection Date: 03-Jun-2020 12:40:30
Spectrum: Tune Spec :Average 1108-1113(7.63-7.66) Bgrd 1103(7.60)
Base Peak: 95.15
Minimum % Base Peak: 0
Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	78	87.00	599	153.00	43	219.00	75
36.00	412	88.00	266	155.00	17	219.00	224
37.00	749	90.00	39	155.00	145	220.00	29
38.00	917	92.00	517	156.00	19	223.00	52
39.00	422	93.00	553	157.00	44	225.00	38
40.00	25	94.00	1629	158.00	138	225.00	56
43.00	98	95.00	15008	160.00	23	226.00	25
44.00	365	96.00	940	163.00	18	229.00	38
47.00	80	97.00	185	166.00	18	231.00	16
47.00	275	98.00	61	167.00	18	232.00	69
48.00	180	102.00	114	169.00	43	233.00	22
49.00	687	103.00	121	170.00	40	236.00	25
50.00	3446	104.00	154	171.00	17	238.00	16
51.00	763	106.00	187	172.00	35	241.00	21
52.00	39	107.00	71	173.00	138	241.00	26
53.00	137	109.00	47	174.00	7581	247.00	19
54.00	89	110.00	24	175.00	673	248.00	30
56.00	381	111.00	56	176.00	7648	251.00	18
57.00	376	115.00	71	177.00	457	253.00	32
58.00	107	117.00	28	178.00	151	255.00	18
60.00	71	118.00	149	179.00	63	256.00	30
61.00	1019	119.00	265	180.00	96	259.00	18
62.00	408	121.00	107	181.00	41	260.00	23
63.00	499	122.00	17	182.00	55	268.00	103
64.00	266	125.00	56	183.00	119	269.00	148
65.00	104	128.00	132	186.00	46	270.00	70
66.00	119	129.00	66	189.00	21	272.00	106
67.00	86	132.00	96	190.00	43	274.00	21
68.00	1529	134.00	67	190.00	83	275.00	101
69.00	1169	137.00	17	192.00	23	276.00	50
70.00	271	137.00	149	192.00	46	279.00	56
72.00	220	138.00	19	193.00	97	281.00	26
73.00	554	139.00	67	196.00	19	282.00	27

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D\CMSAG_524New.rsl\spectra.d

Injection Date: 03-Jun-2020 12:40:30

Spectrum: Tune Spec :Average 1108-1113(7.63-7.66) Bgrd 1103(7.60)

Base Peak: 95.15

Minimum % Base Peak: 0

Number of Points: 169

m/z	Y	m/z	Y	m/z	Y	m/z	Y
74.00	2640	141.00	151	198.00	75	284.00	21
75.00	7439	141.00	23	198.00	132	285.00	30
76.00	811	142.00	127	201.00	24	287.00	63
77.00	194	143.00	75	203.00	75	290.00	38
79.00	537	144.00	94	207.00	78	290.00	34
80.00	371	147.00	100	209.00	85	293.00	87
81.00	450	148.00	21	212.00	20	294.00	17
82.00	126	150.00	36	214.00	21		
83.00	95	150.00	23	215.00	104		
86.00	149	151.00	22	217.00	80		

Report Date: 04-Jun-2020 12:47:50

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0304.D

Injection Date: 03-Jun-2020 12:40:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

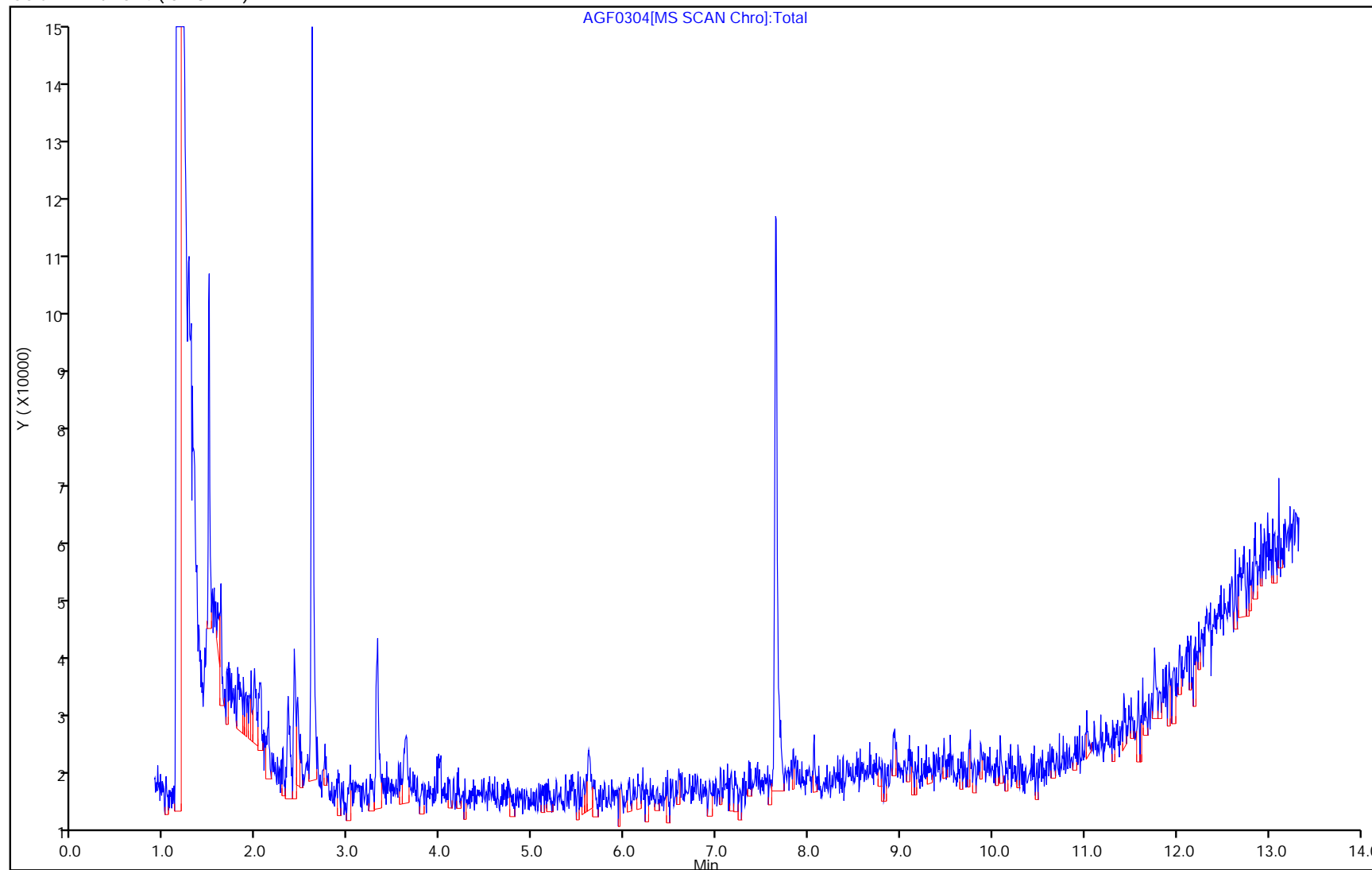
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 16-Jun-2020 10:10:30 ALS Bottle#: 2 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-001
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:35:19 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: proctors Date: 16-Jun-2020 10:26:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 4 4-Bromofluorobenzene	95	7.634	7.634	0.000	84	69010	NR	NR	
\$ 6 BFB									

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

a - User Assigned ID

Reagents:

VM_bfb_00219 Amount Added: 1.00 Units: uL

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48
MS Tune Report

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D

Injection Date: 16-Jun-2020 10:10:30

Instrument ID: CMSAG

Lims ID: bfb

Client ID:

Operator ID: rd

ALS Bottle#: 2

Worklist Smp#: 1

Injection Vol: 5.0 mL

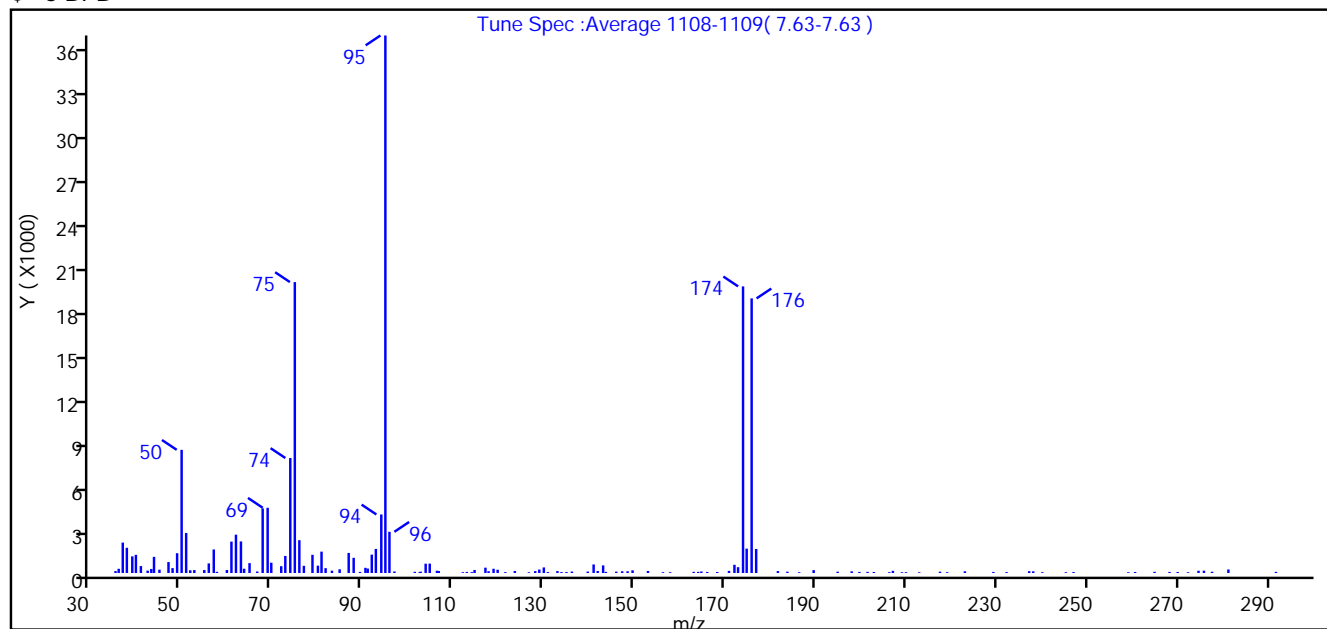
Dil. Factor: 1.0000

Method: CMSAG_524New

Limit Group: 524.2

Tune Method: BFB Method 524

\$ 6 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	22.9
75	30-80% of mass 95	54.1
96	5-9% of mass 95	7.7
173	<2% of mass 174	1.1 (2.0)
174	>50% of mass 95	53.3
175	5-9% of mass 174	4.5 (8.5)
176	>95% but <101% of mass 174	51.1 (95.8)
177	5-9% of mass 176	4.5 (8.7)

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D\CMSAG_524New.rsl\spectra.d
 Injection Date: 16-Jun-2020 10:10:30
 Spectrum: Tune Spec :Average 1108-1109(7.63-7.63)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	131	75.00	19952	122.00	59	182.00	131
36.00	288	76.00	2251	124.00	139	184.00	91
37.00	2086	77.00	492	127.00	50	186.00	52
38.00	1728	79.00	1247	128.00	130	190.00	196
39.00	1139	80.00	501	129.00	237	195.00	91
40.00	1245	81.00	1464	130.00	381	198.00	113
41.00	476	82.00	330	131.00	63	200.00	73
42.00	163	83.00	159	133.00	131	202.00	77
43.00	277	85.00	253	134.00	62	203.00	69
44.00	1106	87.00	1375	135.00	65	206.00	53
45.00	227	88.00	1041	136.00	98	207.00	149
47.00	750	89.00	74	140.00	98	209.00	52
48.00	335	91.00	355	141.00	586	210.00	55
49.00	1357	91.00	303	142.00	138	213.00	50
50.00	8446	92.00	1257	143.00	519	218.00	91
51.00	2745	93.00	1650	144.00	77	219.00	55
52.00	185	94.00	4014	146.00	94	223.00	116
53.00	201	95.00	36864	147.00	117	229.00	71
55.00	202	96.00	2824	148.00	118	232.00	62
56.00	658	97.00	104	150.00	183	237.00	123
57.00	1613	102.00	82	153.00	140	238.00	114
58.00	81	103.00	67	156.00	53	240.00	55
60.00	203	103.00	92	158.00	54	245.00	54
61.00	2152	104.00	637	163.00	80	247.00	65
62.00	2627	105.00	643	164.00	77	259.00	52
63.00	2164	106.00	156	165.00	103	261.00	68
64.00	293	107.00	131	166.00	71	265.00	82
65.00	677	112.00	54	168.00	69	268.00	74
67.00	101	113.00	74	171.00	144	270.00	68
68.00	4429	114.00	59	172.00	562	272.00	51
69.00	4472	115.00	207	173.00	398	275.00	155
70.00	704	117.00	365	174.00	19656	276.00	160
72.00	465	118.00	123	175.00	1670	278.00	85

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D\CMSAG_524New.rsl\spectra.d

Injection Date: 16-Jun-2020 10:10:30

Spectrum: Tune Spec :Average 1108-1109(7.63-7.63)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1168	119.00	291	176.00	18832	281.00	242
74.00	7884	120.00	223	177.00	1647	292.00	77

Report Date: 17-Jun-2020 09:35:19

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1601.D

Injection Date: 16-Jun-2020 10:10:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

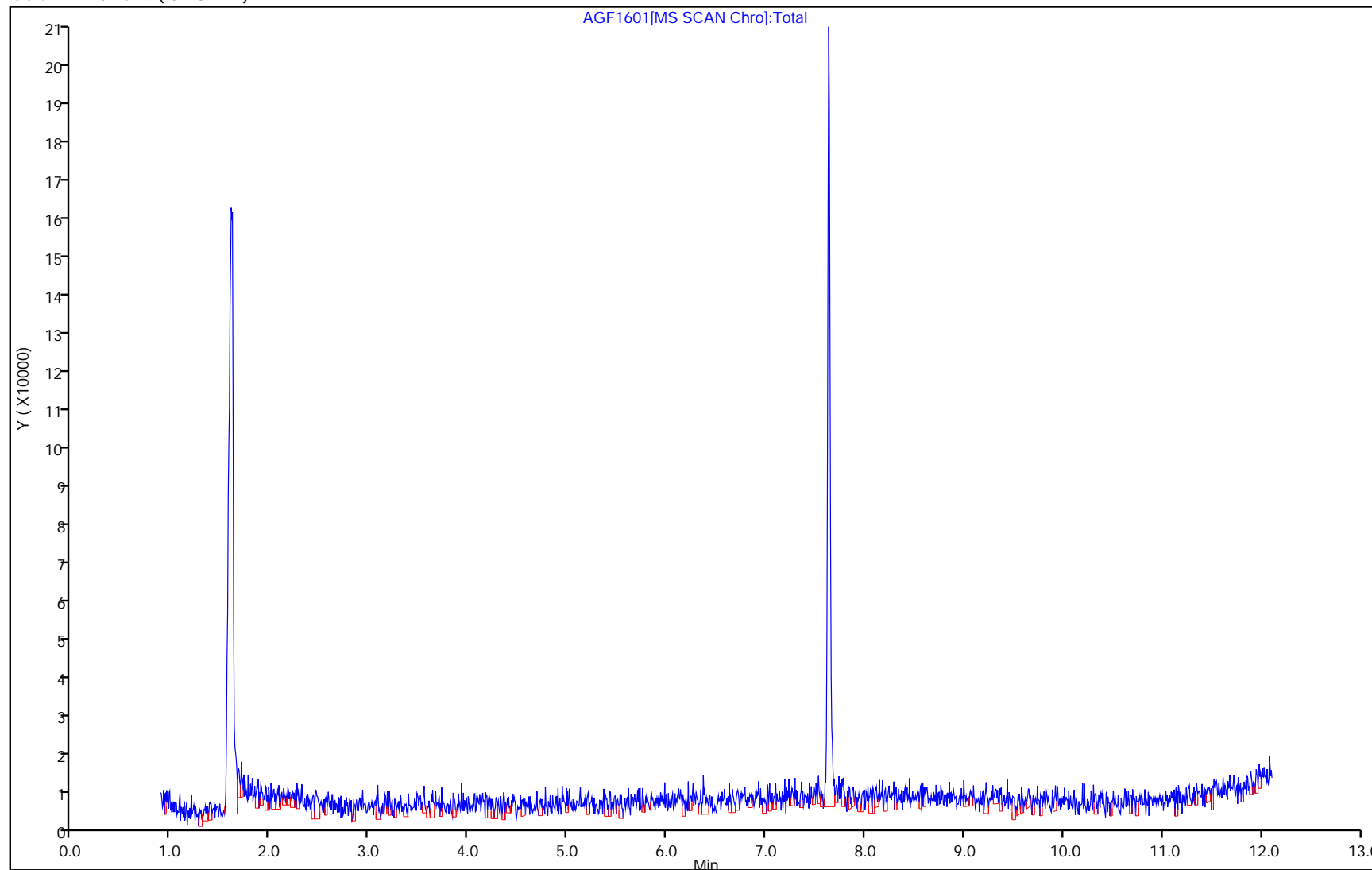
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-622635/11
 Matrix: Water Lab File ID: AGF1611.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 14:36
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.50	0.082
100-41-4	Ethylbenzene	ND		0.50	0.099
108-88-3	Toluene	ND		0.50	0.086
1330-20-7	Xylenes, Total	ND		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	104		70-130
460-00-4	4-Bromofluorobenzene	95		70-130

Report Date: 17-Jun-2020 09:39:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1611.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 16-Jun-2020 14:36:30 ALS Bottle#: 12 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-011
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:39:03 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp Date: 17-Jun-2020 09:39:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.184	4.181	0.003	97	426437	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.587	6.590	-0.003	92	284662	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.740	8.737	0.003	96	120400	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.645	7.634	0.011	83	163350	10.0	9.55	
\$ 5 1,2-Dichlorobenzene-d4	152	9.105	9.108	-0.003	93	124042	10.0	10.4	
\$ 6 BFB									

Reagents:

524 ISSU/2016_00092 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 17-Jun-2020 09:39:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1611.D

Injection Date: 16-Jun-2020 14:36:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: mb

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

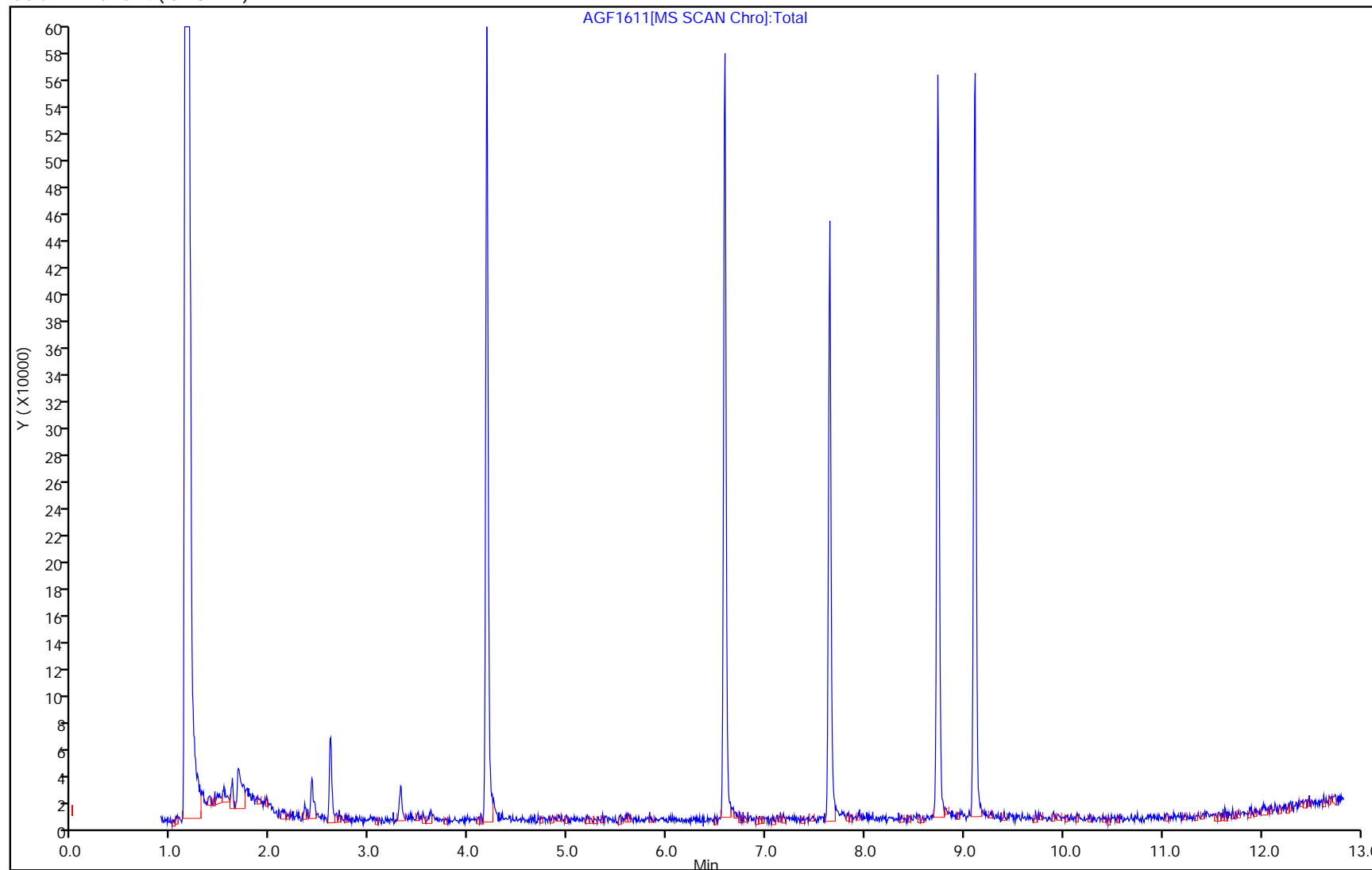
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:39:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1611.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 16-Jun-2020 14:36:30 ALS Bottle#: 12 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-011
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:39:03 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:39:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	9.55	95.50
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.4	103.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-622635/5
 Matrix: Water Lab File ID: AGF1605.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 12:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	52.4		0.50	0.082
100-41-4	Ethylbenzene	48.7		0.50	0.099
108-88-3	Toluene	53.2		0.50	0.086
1330-20-7	Xylenes, Total	102		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	91		70-130
460-00-4	4-Bromofluorobenzene	105		70-130

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 16-Jun-2020 12:09:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-005
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:49:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	97	445960	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.582	6.590	-0.008	91	286911	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.736	8.737	-0.001	97	153975	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.641	7.642	-0.001	85	188197	10.0	10.5	
\$ 5 1,2-Dichlorobenzene-d4	152	9.107	9.108	-0.001	87	139383	10.0	9.14	
7 Dichlorodifluoromethane	85	1.302	1.303	-0.001	99	866026	50.0	54.0	
8 Chloromethane	50	1.454	1.455	-0.001	100	1037479	50.0	51.2	
9 Vinyl chloride	62	1.509	1.510	-0.001	98	908516	50.0	51.9	
10 Bromomethane	94	1.746	1.741	0.005	97	196702	50.0	56.5	
11 Chloroethane	64	1.801	1.802	-0.001	98	527599	50.0	60.8	
12 Trichlorofluoromethane	101	1.953	1.954	-0.001	98	1064878	50.0	66.6	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.263	2.271	-0.008	92	378195	50.0	54.9	
13 1,1-Dichloroethene	96	2.293	2.295	-0.002	91	487318	50.0	49.4	
15 Acetone	58	2.342	2.344	-0.002	86	305546	250.0	211.5	
16 Methylene Chloride	84	2.604	2.605	-0.001	99	636550	50.0	49.9	
17 2-Methyl-2-propanol	59	2.658	2.654	0.004	98	622973	500.0	436.1	
18 Methyl tert-butyl ether	73	2.737	2.739	-0.002	98	1876061	50.0	45.4	
19 trans-1,2-Dichloroethene	96	2.762	2.763	-0.001	97	554674	50.0	53.8	
20 1,1-Dichloroethane	63	3.036	3.037	-0.001	99	1205973	50.0	50.5	
22 Tert-butyl ethyl ether	59	3.248	3.250	-0.002	90	1610231	40.0	38.4	
25 2,2-Dichloropropane	77	3.401	3.402	-0.001	96	1055671	50.0	59.2	
24 cis-1,2-Dichloroethene	61	3.419	3.414	0.005	91	1125509	50.0	52.0	
23 2-Butanone (MEK)	72	3.419	3.414	0.005	100	407405	250.0	243.1	
26 Chlorobromomethane	130	3.583	3.585	-0.002	96	302504	50.0	45.5	
27 Chloroform	83	3.626	3.621	0.005	97	1101774	50.0	50.2	
28 1,1,1-Trichloroethane	97	3.735	3.731	0.004	96	996780	50.0	57.3	
30 1,1-Dichloropropene	75	3.845	3.846	-0.001	94	896723	50.0	52.4	
29 Carbon tetrachloride	117	3.845	3.846	-0.001	85	830232	50.0	61.8	
31 Benzene	78	3.997	3.998	-0.001	97	2712359	50.0	52.4	
33 Tert-amyl methyl ether	73	4.027	4.029	-0.002	97	1548402	40.0	40.6	
32 1,2-Dichloroethane	62	4.027	4.029	-0.002	97	1043172	50.0	55.6	
34 Trichloroethene	132	4.447	4.442	0.005	91	527908	50.0	57.1	

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.629	4.625	0.004	90	754940	50.0	57.4	
36 Dibromomethane	93	4.733	4.734	-0.001	88	382338	50.0	54.6	
37 Dichlorobromomethane	83	4.836	4.832	0.004	99	941302	50.0	60.5	
38 cis-1,3-Dichloropropene	75	5.159	5.166	-0.007	97	1048459	50.0	55.0	
39 4-Methyl-2-pentanone (MIBK)	43	5.262	5.258	0.004	98	3966218	250.0	258.8	E
40 Toluene	92	5.414	5.416	-0.002	93	1575993	50.0	53.2	
41 trans-1,3-Dichloropropene	75	5.609	5.610	-0.001	97	1047928	50.0	55.6	
42 1,1,2-Trichloroethane	83	5.767	5.769	-0.002	92	484192	50.0	50.9	
43 Tetrachloroethene	164	5.858	5.854	0.004	87	389693	50.0	49.6	
44 1,3-Dichloropropane	76	5.913	5.915	-0.002	92	1093662	50.0	51.9	
45 2-Hexanone	43	5.950	5.945	0.005	99	2885889	250.0	234.0	
46 Chlorodibromomethane	129	6.114	6.109	0.005	97	573749	50.0	51.7	
47 Ethylene Dibromide	107	6.211	6.213	-0.002	96	542027	50.0	54.1	
48 Chlorobenzene	112	6.607	6.608	-0.001	90	1561390	50.0	53.4	
50 Ethylbenzene	91	6.673	6.675	-0.002	100	3078881	50.0	48.7	
49 1,1,1,2-Tetrachloroethane	131	6.680	6.681	-0.001	46	522365	50.0	47.8	
51 m-Xylene & p-Xylene	91	6.777	6.772	0.005	97	2581439	50.0	52.5	
52 o-Xylene	91	7.142	7.143	-0.001	92	2493582	50.0	49.4	
53 Styrene	104	7.160	7.162	-0.002	92	1884382	50.0	53.8	
54 Bromoform	173	7.379	7.381	-0.002	90	362873	50.0	58.5	
55 Isopropylbenzene	105	7.464	7.466	-0.002	97	3107005	50.0	52.9	
56 Bromobenzene	156	7.787	7.788	-0.001	88	576096	50.0	47.9	
57 1,1,2,2-Tetrachloroethane	83	7.805	7.800	0.005	96	765014	50.0	42.1	
58 1,2,3-Trichloropropane	110	7.842	7.843	-0.001	92	236824	50.0	47.1	
59 N-Propylbenzene	91	7.848	7.849	-0.001	98	3876920	50.0	49.5	
60 2-Chlorotoluene	91	7.951	7.952	-0.001	96	2271797	50.0	49.8	
61 1,3,5-Trimethylbenzene	105	8.012	8.007	0.005	90	2759598	50.0	54.7	
62 4-Chlorotoluene	91	8.061	8.056	0.004	99	2522663	50.0	51.1	
63 tert-Butylbenzene	119	8.316	8.317	-0.001	95	2132769	50.0	51.3	
64 1,2,4-Trimethylbenzene	105	8.365	8.372	-0.007	99	2693747	50.0	53.7	
65 sec-Butylbenzene	105	8.523	8.524	-0.001	98	3402332	50.0	51.0	
67 4-Isopropyltoluene	119	8.663	8.664	-0.001	96	2776782	50.0	52.3	
66 1,3-Dichlorobenzene	146	8.669	8.670	-0.001	89	1126934	50.0	46.8	
68 1,4-Dichlorobenzene	146	8.760	8.762	-0.002	92	1192475	50.0	46.5	
70 n-Butylbenzene	91	9.064	9.060	0.004	97	2692805	50.0	47.4	
69 1,2-Dichlorobenzene	146	9.125	9.127	-0.002	86	1089092	50.0	43.8	
71 1,2-Dibromo-3-Chloropropane	157	9.946	9.954	-0.008	86	128435	50.0	41.0	Ma
72 1,2,4-Trichlorobenzene	180	10.895	10.897	-0.002	92	574569	50.0	45.5	
73 Hexachlorobutadiene	225	11.047	11.049	-0.002	89	240875	50.0	42.2	
74 Naphthalene	128	11.175	11.171	0.004	99	1872481	50.0	43.9	
75 1,2,3-Trichlorobenzene	180	11.425	11.426	-0.001	93	533052	50.0	45.1	
S 76 Xylenes, Total	1				0		100.0	101.9	
S 78 1,3-Dichloropropene, Total	1				0		100.0	110.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

524MMix_00173

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D

Injection Date: 16-Jun-2020 12:09:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: lcs

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

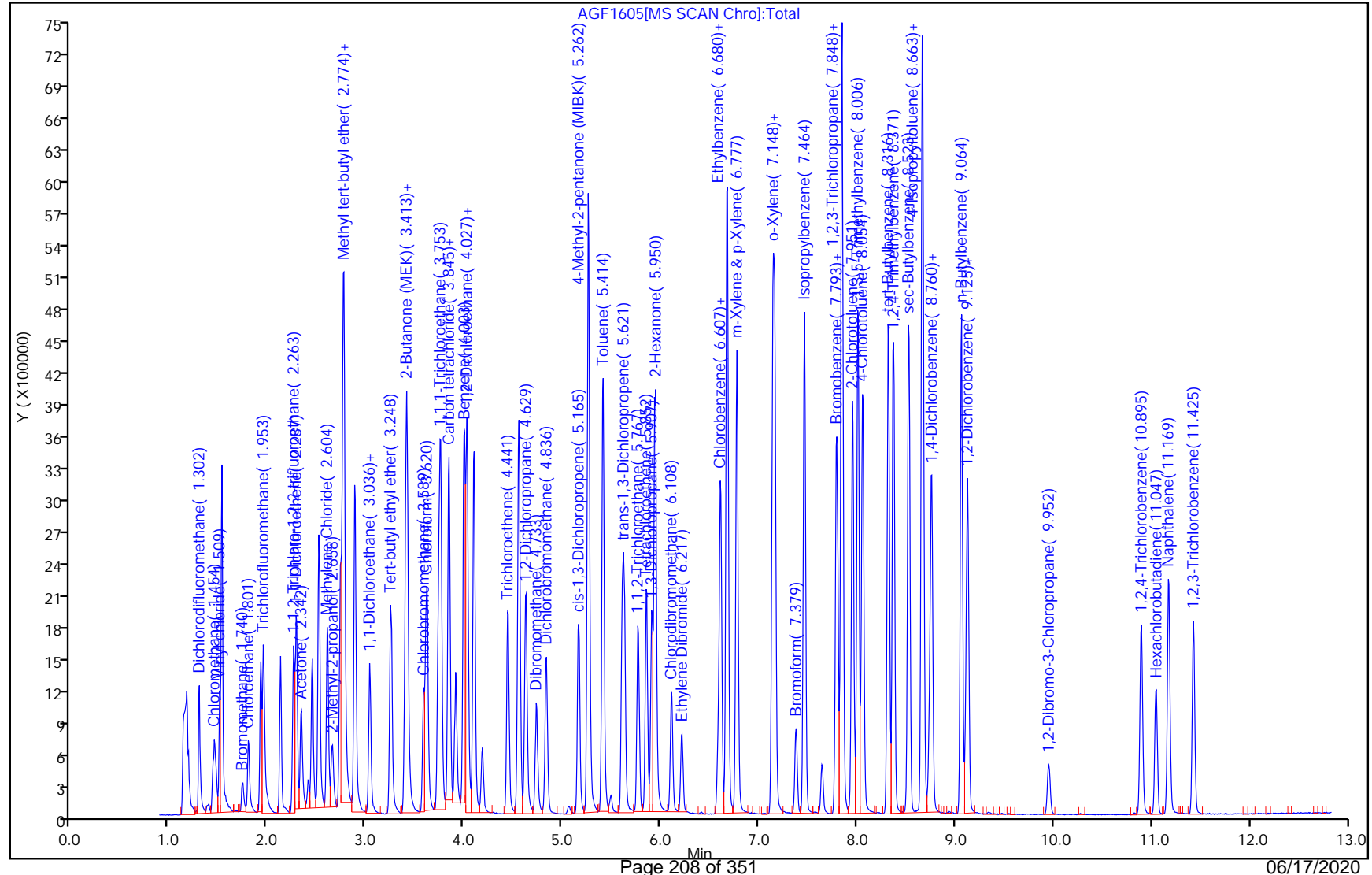
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:49:06

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1605.D
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 16-Jun-2020 12:09:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-005
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:49:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.5	105.21
\$ 5 1,2-Dichlorobenzene-d4	10.0	9.14	91.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-622635/6
 Matrix: Water Lab File ID: AGF1606.D
 Analysis Method: 524.2 Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 06/16/2020 12:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: Rtx-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 622635 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	52.0		0.50	0.082
100-41-4	Ethylbenzene	52.8		0.50	0.099
108-88-3	Toluene	54.4		0.50	0.086
1330-20-7	Xylenes, Total	108		0.50	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
2199-69-1	1,2-Dichlorobenzene-d4 (Surr)	103		70-130
460-00-4	4-Bromofluorobenzene	102		70-130

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 16-Jun-2020 12:33:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-006
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:50:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.185	4.181	0.004	97	505226	10.0	10.0	
* 2 Chlorobenzene-d5	117	6.588	6.590	-0.002	91	311748	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	8.735	8.737	-0.002	97	155998	10.0	10.0	
\$ 4 4-Bromofluorobenzene	95	7.640	7.642	-0.002	83	206741	10.0	10.2	
\$ 5 1,2-Dichlorobenzene-d4	152	9.107	9.108	-0.001	88	159828	10.0	10.3	
7 Dichlorodifluoromethane	85	1.301	1.303	-0.002	99	943317	50.0	51.9	
8 Chloromethane	50	1.460	1.455	0.005	100	1158497	50.0	50.5	
9 Vinyl chloride	62	1.508	1.510	-0.002	98	924870	50.0	46.6	
10 Bromomethane	94	1.739	1.741	-0.002	98	172832	50.0	43.8	
11 Chloroethane	64	1.800	1.802	-0.002	98	537164	50.0	54.7	
12 Trichlorofluoromethane	101	1.958	1.954	0.004	97	1054432	50.0	58.2	
14 1,1,2-Trichloro-1,2,2-trifluoro	151	2.263	2.271	-0.008	93	396051	50.0	50.7	
13 1,1-Dichloroethene	96	2.293	2.295	-0.002	97	529422	50.0	47.4	
15 Acetone	58	2.336	2.344	-0.008	85	368135	250.0	225.0	
16 Methylene Chloride	84	2.603	2.605	-0.002	96	705987	50.0	48.8	
17 2-Methyl-2-propanol	59	2.652	2.654	-0.002	98	799911	500.0	494.3	
18 Methyl tert-butyl ether	73	2.737	2.739	-0.002	98	2133626	50.0	45.6	
19 trans-1,2-Dichloroethene	96	2.768	2.763	0.005	94	573981	50.0	49.1	
20 1,1-Dichloroethane	63	3.035	3.037	-0.002	99	1367295	50.0	50.6	
22 Tert-butyl ethyl ether	59	3.254	3.250	0.004	89	1913645	40.0	40.3	
25 2,2-Dichloropropane	77	3.400	3.402	-0.002	94	1154148	50.0	57.1	
24 cis-1,2-Dichloroethene	61	3.412	3.414	-0.002	88	1241252	50.0	50.6	
23 2-Butanone (MEK)	72	3.419	3.414	0.004	99	433788	250.0	228.5	
26 Chlorobromomethane	130	3.589	3.585	0.004	94	324177	50.0	43.0	
27 Chloroform	83	3.619	3.621	-0.002	97	1213683	50.0	48.9	
28 1,1,1-Trichloroethane	97	3.741	3.731	0.010	96	1005647	50.0	53.2	
30 1,1-Dichloropropene	75	3.844	3.846	-0.002	91	984737	50.0	53.0	
29 Carbon tetrachloride	117	3.850	3.846	0.004	90	799858	50.0	54.8	
31 Benzene	78	3.996	3.998	-0.002	98	2921392	50.0	52.0	
33 Tert-amyl methyl ether	73	4.027	4.029	-0.002	98	1574232	40.0	36.5	
32 1,2-Dichloroethane	62	4.033	4.029	0.004	98	1094380	50.0	53.7	
34 Trichloroethene	132	4.447	4.442	0.005	90	507465	50.0	50.5	

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 1,2-Dichloropropane	63	4.623	4.625	-0.002	90	837755	50.0	58.7	
36 Dibromomethane	93	4.733	4.734	-0.001	83	402704	50.0	52.9	
37 Dichlorobromomethane	83	4.836	4.832	0.004	98	950196	50.0	56.2	
38 cis-1,3-Dichloropropene	75	5.164	5.166	-0.002	96	1200109	50.0	57.9	
39 4-Methyl-2-pentanone (MIBK)	43	5.268	5.258	0.010	99	4451219	250.0	267.3	E
40 Toluene	92	5.414	5.416	-0.002	93	1752617	50.0	54.4	
41 trans-1,3-Dichloropropene	75	5.609	5.610	-0.001	97	1035044	50.0	50.6	
42 1,1,2-Trichloroethane	83	5.767	5.769	-0.002	92	523388	50.0	50.7	
43 Tetrachloroethene	164	5.858	5.854	0.004	86	408615	50.0	51.3	
44 1,3-Dichloropropane	76	5.913	5.915	-0.002	93	1222851	50.0	53.4	
45 2-Hexanone	43	5.943	5.945	-0.002	99	3286594	250.0	263.1	E
46 Chlorodibromomethane	129	6.113	6.109	0.004	96	590442	50.0	52.5	
47 Ethylene Dibromide	107	6.217	6.213	0.004	97	556306	50.0	51.1	
48 Chlorobenzene	112	6.606	6.608	-0.002	88	1708942	50.0	53.8	
50 Ethylbenzene	91	6.679	6.675	0.004	99	3380637	50.0	52.8	
49 1,1,1,2-Tetrachloroethane	131	6.673	6.681	-0.008	93	529868	50.0	47.8	
51 m-Xylene & p-Xylene	91	6.777	6.772	0.005	98	2658729	50.0	53.3	
52 o-Xylene	91	7.142	7.143	-0.001	90	2773578	50.0	54.3	
53 Styrene	104	7.160	7.162	-0.002	92	2003096	50.0	56.4	
54 Bromoform	173	7.379	7.381	-0.002	91	356420	50.0	56.7	
55 Isopropylbenzene	105	7.464	7.466	-0.002	97	3285511	50.0	55.3	
56 Bromobenzene	156	7.793	7.788	0.004	89	587931	50.0	48.2	
57 1,1,2,2-Tetrachloroethane	83	7.799	7.800	-0.001	98	905370	50.0	49.2	
58 1,2,3-Trichloropropane	110	7.841	7.843	-0.002	91	246592	50.0	48.4	
59 N-Propylbenzene	91	7.847	7.849	-0.002	97	4297038	50.0	54.1	
60 2-Chlorotoluene	91	7.957	7.952	0.005	95	2460648	50.0	53.2	
61 1,3,5-Trimethylbenzene	105	8.005	8.007	-0.002	91	2727639	50.0	53.4	
62 4-Chlorotoluene	91	8.054	8.056	-0.002	99	2734187	50.0	54.7	
63 tert-Butylbenzene	119	8.316	8.317	-0.001	89	2212004	50.0	52.5	
64 1,2,4-Trimethylbenzene	105	8.370	8.372	-0.002	96	2780077	50.0	54.7	
65 sec-Butylbenzene	105	8.529	8.524	0.005	98	3564068	50.0	52.7	
67 4-Isopropyltoluene	119	8.662	8.664	-0.002	96	2865956	50.0	53.3	
66 1,3-Dichlorobenzene	146	8.675	8.670	0.005	90	1168825	50.0	47.9	
68 1,4-Dichlorobenzene	146	8.760	8.762	-0.002	86	1234838	50.0	47.5	
70 n-Butylbenzene	91	9.064	9.060	0.004	97	2935441	50.0	51.0	
69 1,2-Dichlorobenzene	146	9.125	9.127	-0.002	88	1148348	50.0	45.6	
71 1,2-Dibromo-3-Chloropropane	157	9.946	9.954	-0.008	87	77860	50.0	24.5	
72 1,2,4-Trichlorobenzene	180	10.889	10.897	-0.008	91	577239	50.0	45.2	
73 Hexachlorobutadiene	225	11.047	11.049	-0.002	87	240465	50.0	41.6	
74 Naphthalene	128	11.175	11.171	0.004	98	1942220	50.0	44.9	
75 1,2,3-Trichlorobenzene	180	11.430	11.426	0.004	94	531573	50.0	44.4	
S 76 Xylenes, Total	1				0		100.0	107.6	
S 78 1,3-Dichloropropene, Total	1				0		100.0	108.5	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Reagents:

524MMix_00173

Amount Added: 2.00

Units: uL

524 ISSU/2016_00092

Amount Added: 5.00

Units: uL

Run Reagent

Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D

Injection Date: 16-Jun-2020 12:33:30

Instrument ID: CMSAG

Operator ID: rd

Lims ID: lcsd

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

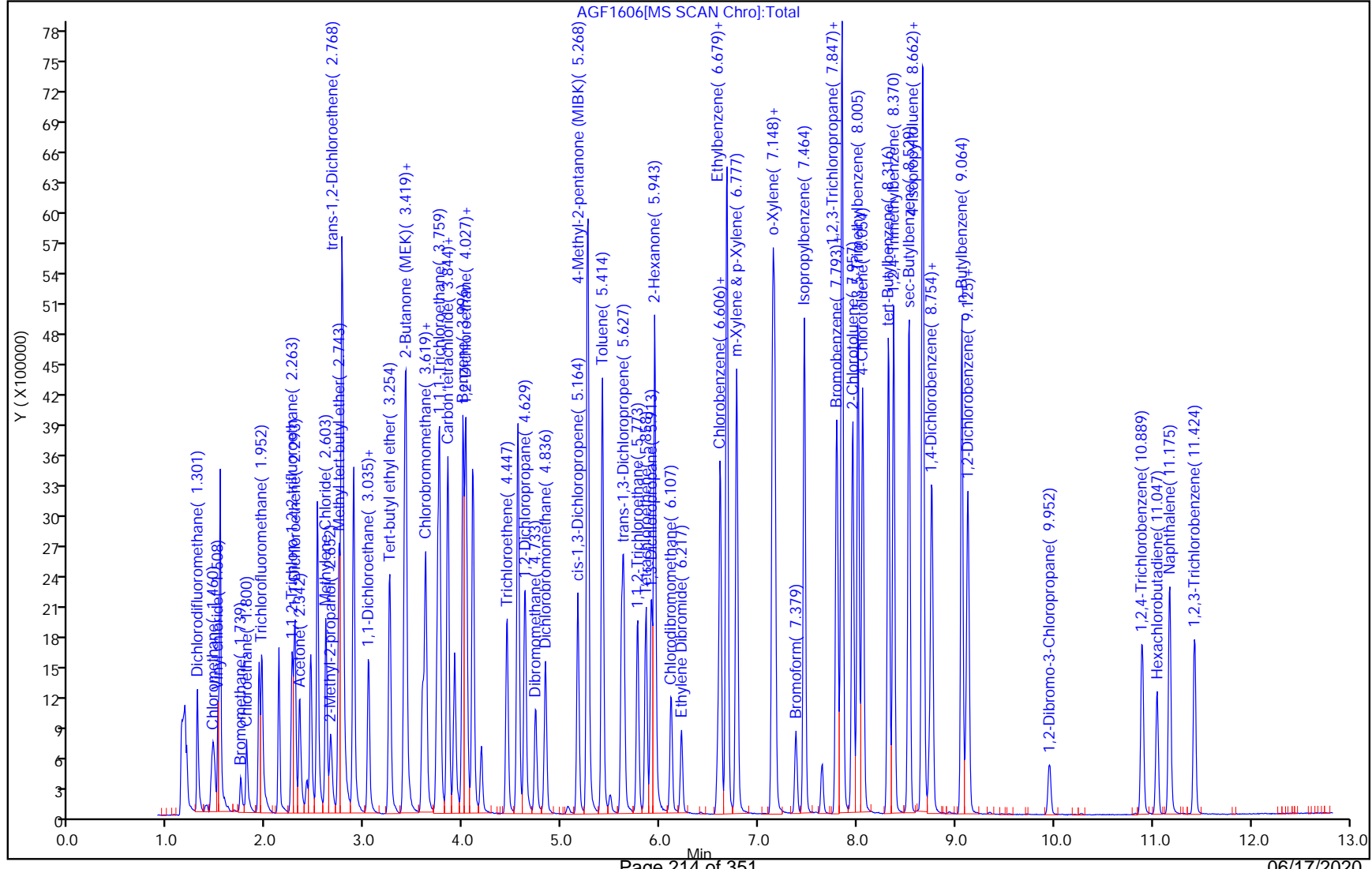
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: CMSAG_524New

Limit Group: 524.2

Column: Rtx-624 (0.18 mm)



Report Date: 17-Jun-2020 09:50:48

Chrom Revision: 2.3 10-Jun-2020 22:46:48

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\AGF1606.D
 Lims ID: lcsd
 Client ID:
 Sample Type: LCSD
 Inject. Date: 16-Jun-2020 12:33:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 680-0064308-006
 Operator ID: rd Instrument ID: CMSAG
 Method: \\chromfs\Savannah\ChromData\CMSAG\20200616-64308.b\CMSAG_524New.m
 Limit Group: 524.2
 Last Update: 17-Jun-2020 09:49:06 Calib Date: 03-Jun-2020 17:02:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CMSAG\20200603-64070.b\AGF0314.D
 Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX1017

First Level Reviewer: chimsudp

Date: 17-Jun-2020 09:50:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene	10.0	10.2	102.02
\$ 5 1,2-Dichlorobenzene-d4	10.0	10.3	103.42

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Instrument ID: CMSAG Start Date: 06/03/2020 12:40
 Analysis Batch Number: 621037 End Date: 06/04/2020 00:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-621037/4		06/03/2020 12:40	1	AGF0304.D	Rtx-624 0.18 (mm)
IC 680-621037/7		06/03/2020 14:08	1	AGF0307.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 14:08	1		Rtx-624 0.18 (mm)
IC 680-621037/8		06/03/2020 14:33	1	AGF0308.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 14:33	1		Rtx-624 0.18 (mm)
IC 680-621037/9		06/03/2020 14:58	1	AGF0309.D	Rtx-624 0.18 (mm)
IC 680-621037/10		06/03/2020 15:23	1	AGF0310.D	Rtx-624 0.18 (mm)
IC 680-621037/11		06/03/2020 15:48	1	AGF0311.D	Rtx-624 0.18 (mm)
ICIS 680-621037/12		06/03/2020 16:12	1	AGF0312.D	Rtx-624 0.18 (mm)
IC 680-621037/13		06/03/2020 16:37	1	AGF0313.D	Rtx-624 0.18 (mm)
IC 680-621037/14		06/03/2020 17:02	1	AGF0314.D	Rtx-624 0.18 (mm)
ICV 680-621037/16		06/03/2020 17:52	1	AGF0316.D	Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 17:52	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 18:17	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 18:41	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 19:56	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:21	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 20:46	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:11	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 21:36	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:00	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:25	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 22:50	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 23:15	1		Rtx-624 0.18 (mm)
ZZZZZ		06/03/2020 23:40	1		Rtx-624 0.18 (mm)
ZZZZZ		06/04/2020 00:04	1		Rtx-624 0.18 (mm)
ZZZZZ		06/04/2020 00:29	1		Rtx-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Instrument ID: CMSAG Start Date: 06/16/2020 10:10
 Analysis Batch Number: 622635 End Date: 06/16/2020 21:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-622635/1		06/16/2020 10:10	1	AGF1601.D	Rtx-624 0.18 (mm)
CCVIS 680-622635/4		06/16/2020 11:45	1	AGF1604.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 11:45	1		Rtx-624 0.18 (mm)
LCS 680-622635/5		06/16/2020 12:09	1	AGF1605.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 12:09	1		Rtx-624 0.18 (mm)
LCSD 680-622635/6		06/16/2020 12:33	1	AGF1606.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 13:22	1		Rtx-624 0.18 (mm)
MB 680-622635/11		06/16/2020 14:36	1	AGF1611.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 15:00	5		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 15:25	1		Rtx-624 0.18 (mm)
680-184600-3		06/16/2020 15:49	1	AGF1614.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 16:14	1		Rtx-624 0.18 (mm)
680-184600-1		06/16/2020 16:39	1	AGF1616.D	Rtx-624 0.18 (mm)
680-184600-2		06/16/2020 17:03	1	AGF1617.D	Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 17:28	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 17:53	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 18:18	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 18:42	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 19:07	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 19:31	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 19:56	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 20:21	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 20:45	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 21:10	1		Rtx-624 0.18 (mm)
ZZZZZ		06/16/2020 21:35	1		Rtx-624 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Batch Number: 622635 Batch Start Date: 06/16/20 10:10 Batch Analyst: Chimsud, Prapatsorn 1

Batch Method: 524.2 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	ChlorineCheck	FinalAmount	524 ISSU/2016 00092	524MMix 00173
BFB 680-622635/1		524.2			5 mL		5 mL		
CCVIS 680-622635/4		524.2			5 mL		5 mL	5 uL	2 uL
LCS 680-622635/5		524.2			5 mL		5 mL	5 uL	2 uL
LCSD 680-622635/6		524.2			5 mL		5 mL	5 uL	2 uL
MB 680-622635/11		524.2			5 mL		5 mL	5 uL	
680-184600-C-3	TB2023-2	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-184600-F-1	GWK003-2023	524.2	T	<2	5 mL	N	5 mL	5 uL	
680-184600-F-2	GWK016-2023	524.2	T	<2	5 mL	N	5 mL	5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_bfb 00219					
BFB 680-622635/1		524.2		1 uL					
CCVIS 680-622635/4		524.2							
LCS 680-622635/5		524.2							
LCSD 680-622635/6		524.2							
MB 680-622635/11		524.2							
680-184600-C-3	TB2023-2	524.2	T						
680-184600-F-1	GWK003-2023	524.2	T						
680-184600-F-2	GWK016-2023	524.2	T						

Batch Notes	
pH Indicator ID	pHPaper1-2.5_00062
Pipette/Syringe/Dispenser ID	KlstarchPaper_00005

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

524.2

Method 504.1

**EDB, DBCP, and 1,2,3-TCP (GC) by
Method 504.1**

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): CLP I 0.25 ID: 0.25 (mm) GC Column (2): CLP II 0.25 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	PCA1 #	PCA2 #
GWK003-2023	680-184600-1		100
GWK016-2023	680-184600-2		96
TB2023-2	680-184600-3		97
	MB 680-621423/3-A	101	
	LCS 680-621423/4-A		102
	LCSD 680-621423/5-A		98

PCA = Pentachloroethane

QC LIMITS
70-130

Column to be used to flag recovery values

FORM II 504.1

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XF05009.D
 Lab ID: LCS 680-621423/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylene Dibromide	0.100	0.102	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM III
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: XF05010.D
 Lab ID: LCSD 680-621423/5-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Ethylene Dibromide	0.100	0.0972	97	4	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 504.1

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: MB 680-621423/3-A
 Matrix: Water Date Extracted: 06/05/2020 13:32
 Lab File ID: (1) XF05008.D Lab File ID: (2) XF05008.D
 Date Analyzed: (1) 06/05/2020 15:54 Date Analyzed: (2) 06/05/2020 15:54
 Instrument ID: (1) CSGX Instrument ID: (2) CSGX
 GC Column: (1) CLP I 0.25 ID: 0.25(mm) GC Column: (2) CLP II 0.25 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1		DATE ANALYZED 2	
	LCS 680-621423/4-A	06/05/2020	16:04	06/05/2020	16:04
	LCSD 680-621423/5-A	06/05/2020	16:13	06/05/2020	16:13
GWK003-2023	680-184600-1	06/05/2020	19:00	06/05/2020	19:00
GWK016-2023	680-184600-2	06/05/2020	19:10	06/05/2020	19:10
TB2023-2	680-184600-3	06/05/2020	19:20	06/05/2020	19:20

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-621423/4-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 06/05/2020 16:04 Date Analyzed (2): 06/05/2020 16:04
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0986		3.1
	2		1.59	1.56	1.62	0.102		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-621423/5-A
 Instrument ID (1): CSGX Instrument ID (2): CSGX
 Date Analyzed (1): 06/05/2020 16:13 Date Analyzed (2): 06/05/2020 16:13
 GC Column (1): CLP I 0.25 ID: 0.25(mm) GC Column (2): CLP II 0.25 ID: 0.25(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Ethylene Dibromide	1		1.24	1.21	1.27	0.0923		5.2
	2		1.59	1.56	1.62	0.0972		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: GWK003-2023 Lab Sample ID: 680-184600-1
 Matrix: Water Lab File ID: XF05027.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 10:40
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.3 (mL) Date Analyzed: 06/05/2020 19:00
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05027.D
 Lims ID: 680-184600-A-1-A
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:00:49 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-027
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.283	2.283	0.000	423047	0.3928
2	2.553	2.553	0.000	373475	0.4380

RPD = 10.87

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05027.D

Injection Date: 05-Jun-2020 19:00:49

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184600-A-1-A

Lab Sample ID: 680-184600-1

Worklist Smp#: 27

Client ID: GWK003-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

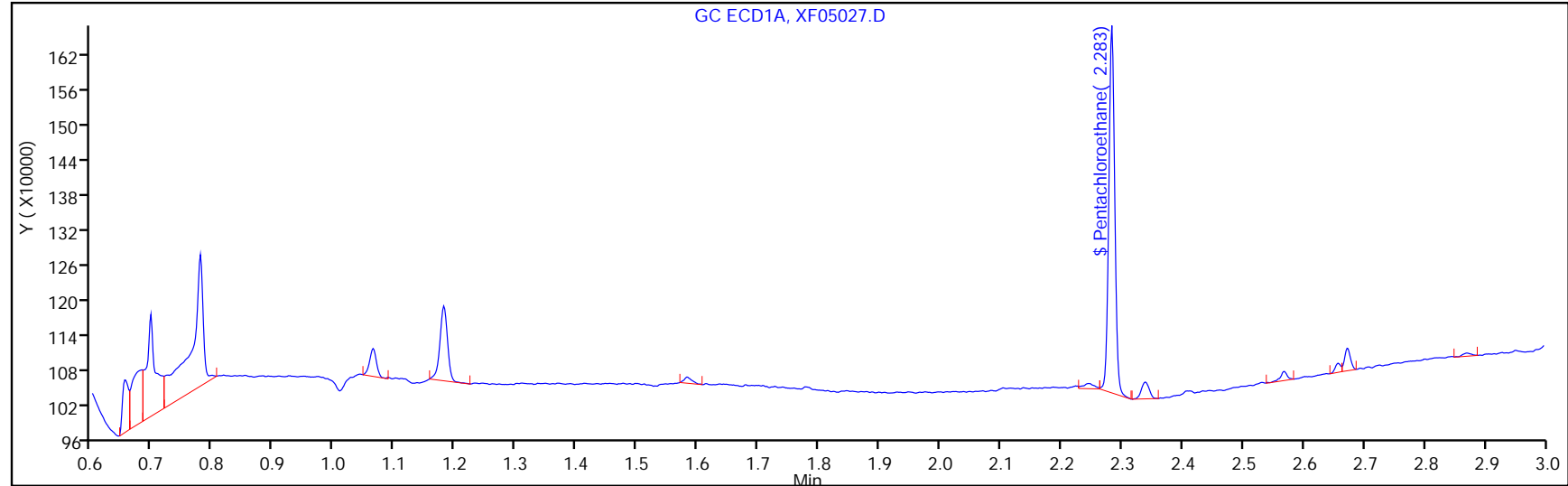
ALS Bottle#: 27

Method: EDBDBCP_CSGX

Limit Group: 504.1

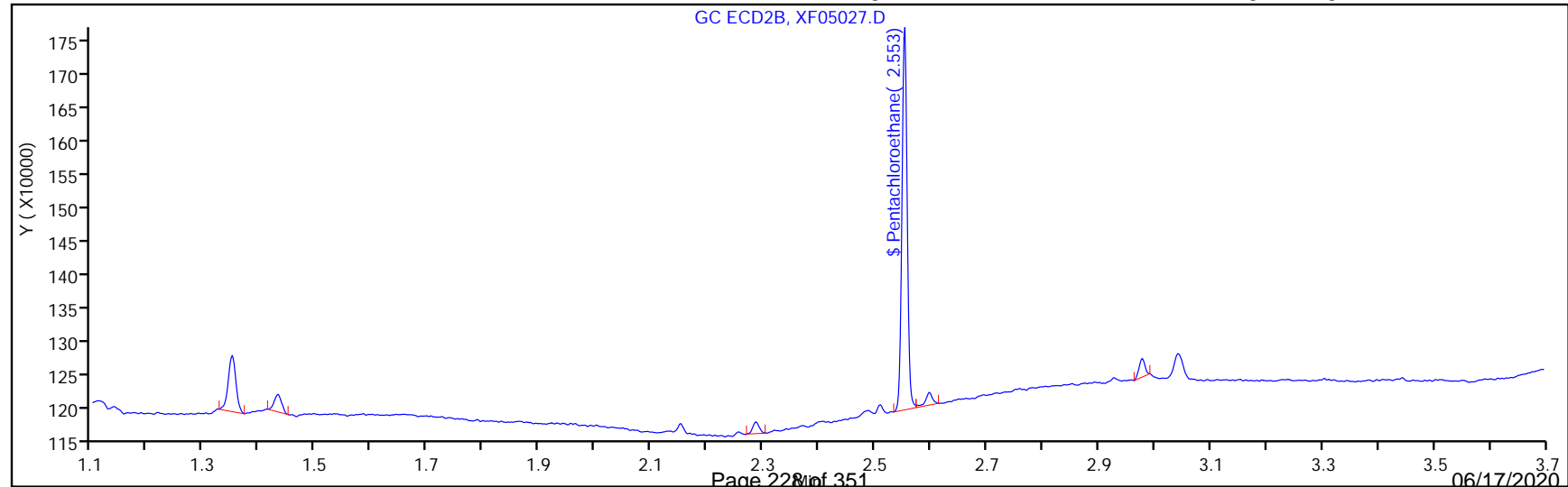
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05027.D
 Lims ID: 680-184600-A-1-A
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:00:49 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-027
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3928	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4380	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: GWK003-2023 Lab Sample ID: 680-184600-1
 Matrix: Water Lab File ID: XF05027.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 10:40
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.3 (mL) Date Analyzed: 06/05/2020 19:00
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	100		70-130

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05027.D
 Lims ID: 680-184600-A-1-A
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:00:49 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-027
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	423047	0.3928
2	2.553	2.553	0.000	373475	0.4380

RPD = 10.87

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05027.D

Injection Date: 05-Jun-2020 19:00:49

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184600-A-1-A

Lab Sample ID: 680-184600-1

Worklist Smp#: 27

Client ID: GWK003-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

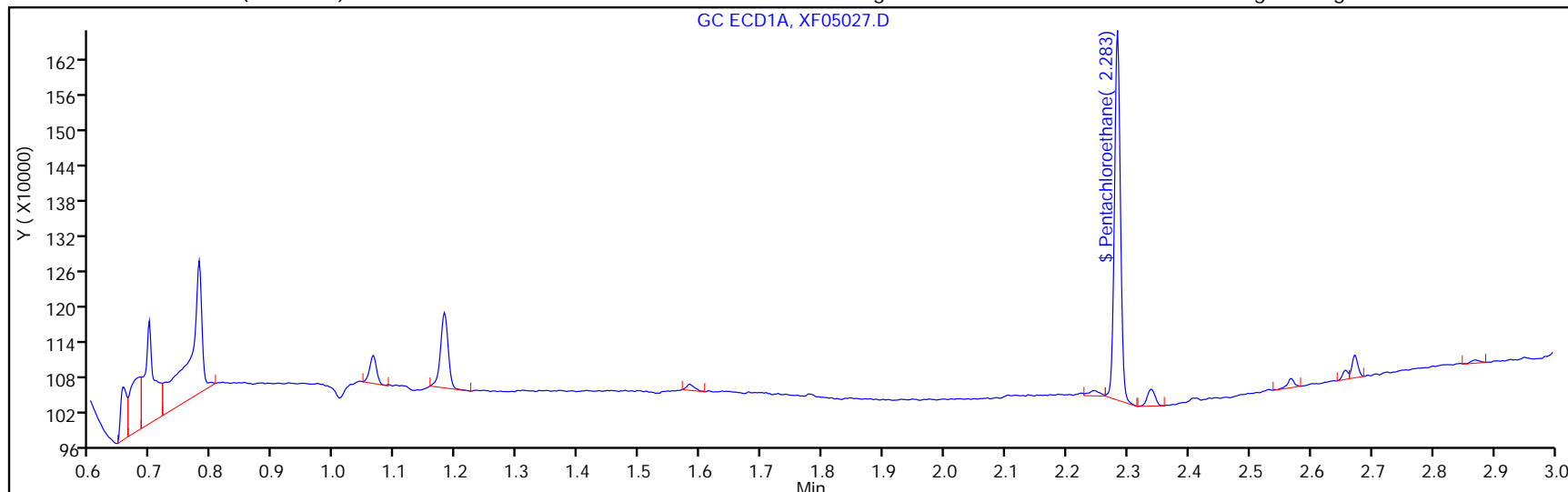
ALS Bottle#: 27

Method: EDBDBCP_CSGX

Limit Group: 504.1

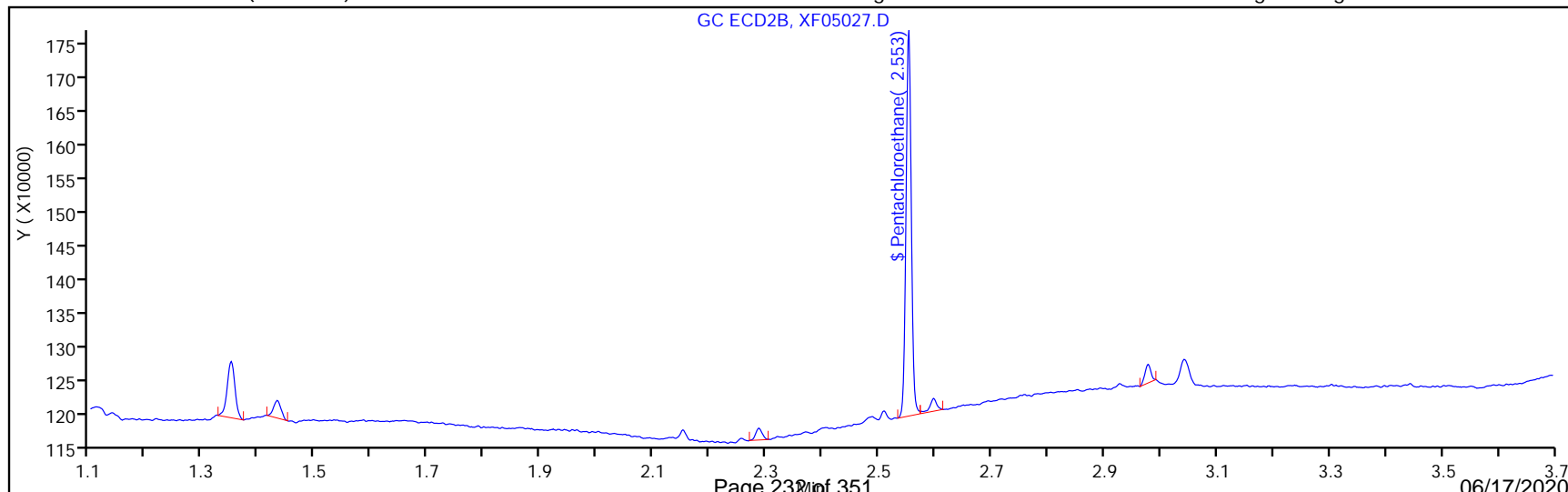
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05027.D
 Lims ID: 680-184600-A-1-A
 Client ID: GWK003-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:00:49 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-027
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3928	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4380	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: GWK016-2023 Lab Sample ID: 680-184600-2
 Matrix: Water Lab File ID: XF05028.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 09:30
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.7 (mL) Date Analyzed: 06/05/2020 19:10
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05028.D
 Lims ID: 680-184600-B-2-A
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:10:39 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-028
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	386694	0.3591
2	2.553	2.553	0.000	358212	0.4201

RPD = 15.66

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05028.D

Injection Date: 05-Jun-2020 19:10:39

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184600-B-2-A

Lab Sample ID: 680-184600-2

Worklist Smp#: 28

Client ID: GWK016-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

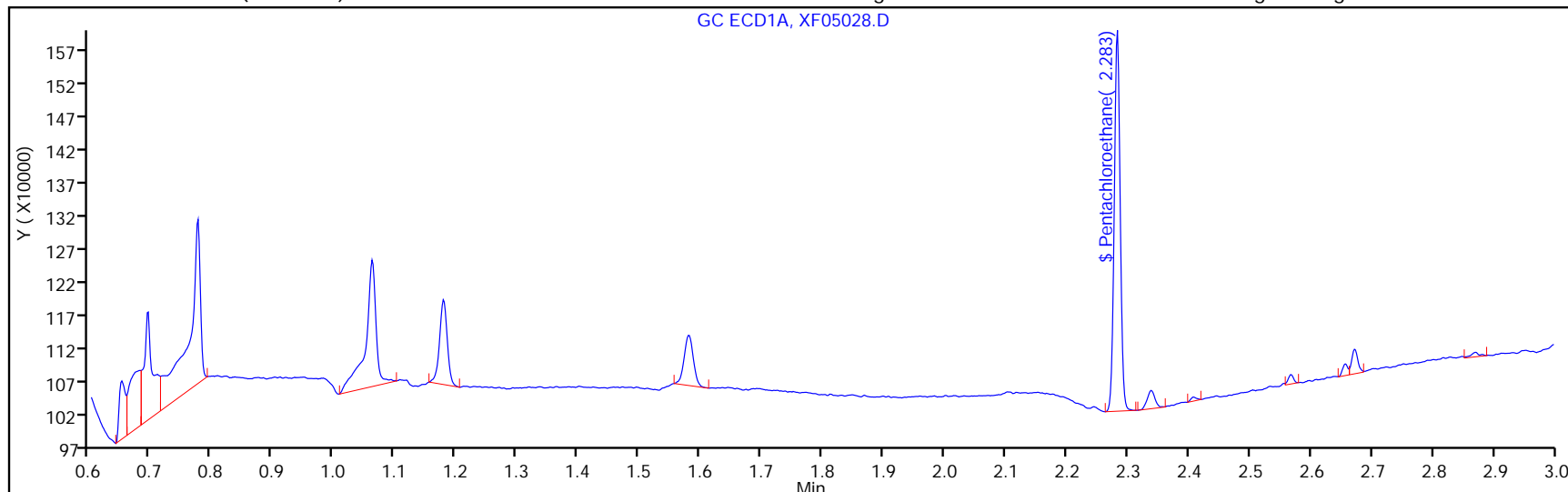
ALS Bottle#: 28

Method: EDBDBCP_CSGX

Limit Group: 504.1

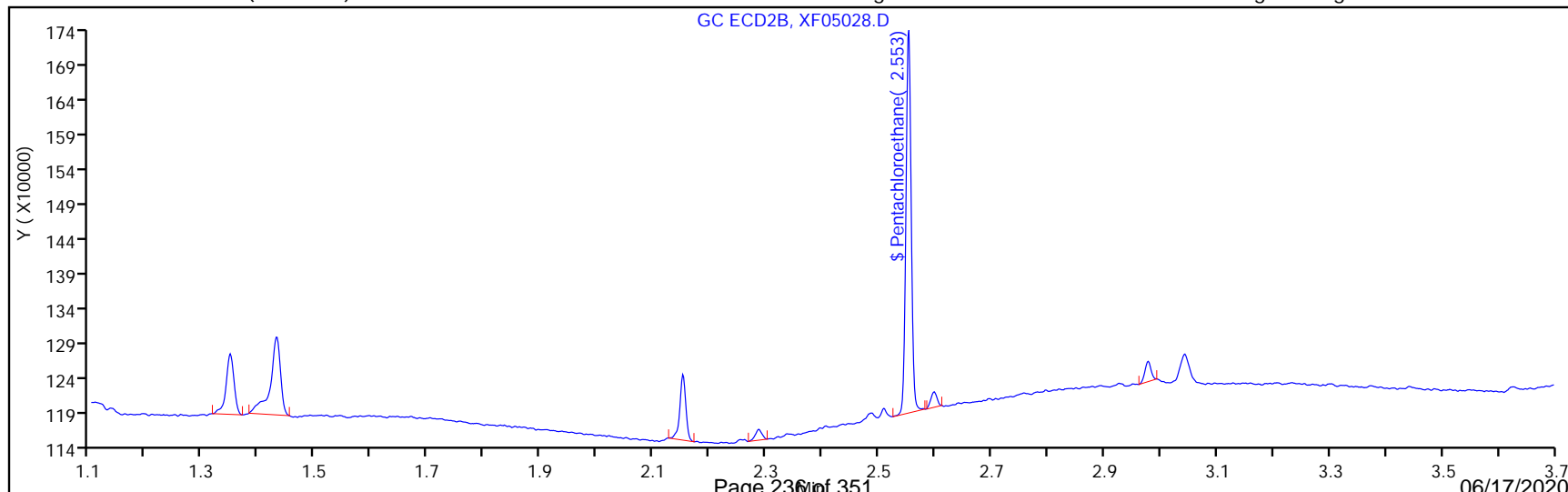
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05028.D
 Lims ID: 680-184600-B-2-A
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:10:39 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-028
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3591	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4201	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: GWK016-2023 Lab Sample ID: 680-184600-2
 Matrix: Water Lab File ID: XF05028.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 09:30
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.7 (mL) Date Analyzed: 06/05/2020 19:10
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	96		70-130

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05028.D
 Lims ID: 680-184600-B-2-A
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:10:39 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-028
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	386694	0.3591
2	2.553	2.553	0.000	358212	0.4201

RPD = 15.66

Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05028.D

Injection Date: 05-Jun-2020 19:10:39

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184600-B-2-A

Lab Sample ID: 680-184600-2

Worklist Smp#: 28

Client ID: GWK016-2023

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

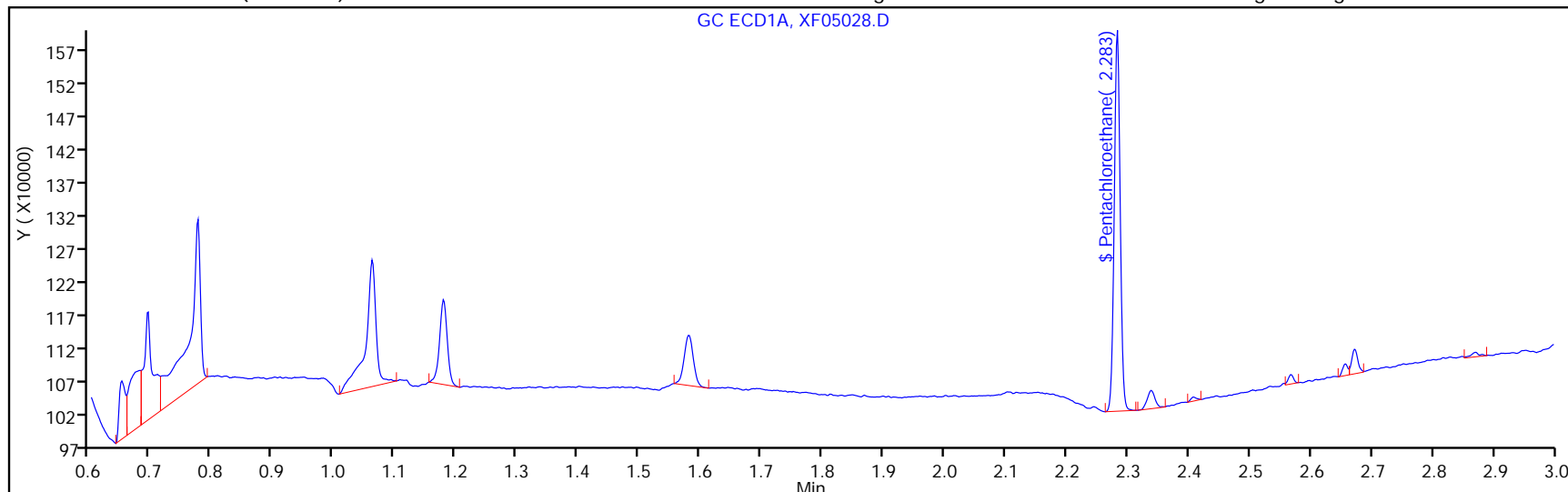
ALS Bottle#: 28

Method: EDBDBCP_CSGX

Limit Group: 504.1

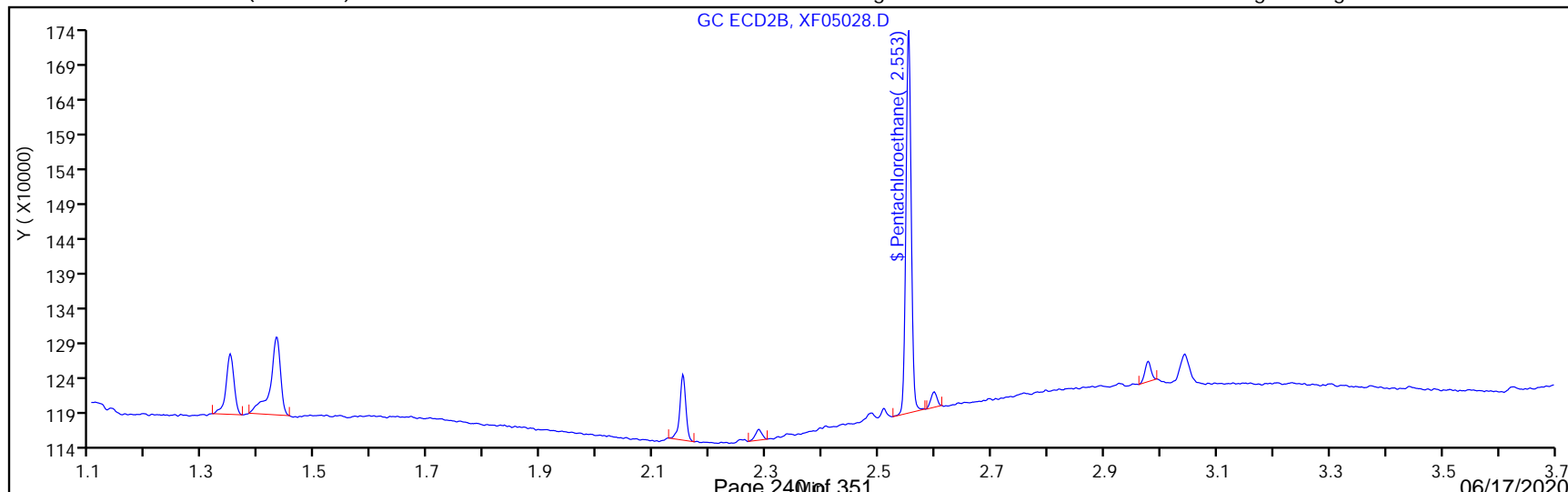
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:48

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05028.D
 Lims ID: 680-184600-B-2-A
 Client ID: GWK016-2023
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:10:39 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-028
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3591	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4201	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: TB2023-2 Lab Sample ID: 680-184600-3
 Matrix: Water Lab File ID: XF05029.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 08:00
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.4 (mL) Date Analyzed: 06/05/2020 19:20
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

Report Date: 08-Jun-2020 10:57:49

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05029.D
 Lims ID: 680-184600-A-3-A
 Client ID: TB2023-2
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:20:23 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-029
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.283	2.283	0.000	403519	0.3747
2	2.553	2.553	0.000	362643	0.4253

RPD = 12.64

Report Date: 08-Jun-2020 10:57:49

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05029.D

Injection Date: 05-Jun-2020 19:20:23

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184600-A-3-A

Lab Sample ID: 680-184600-3

Worklist Smp#: 29

Client ID: TB2023-2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

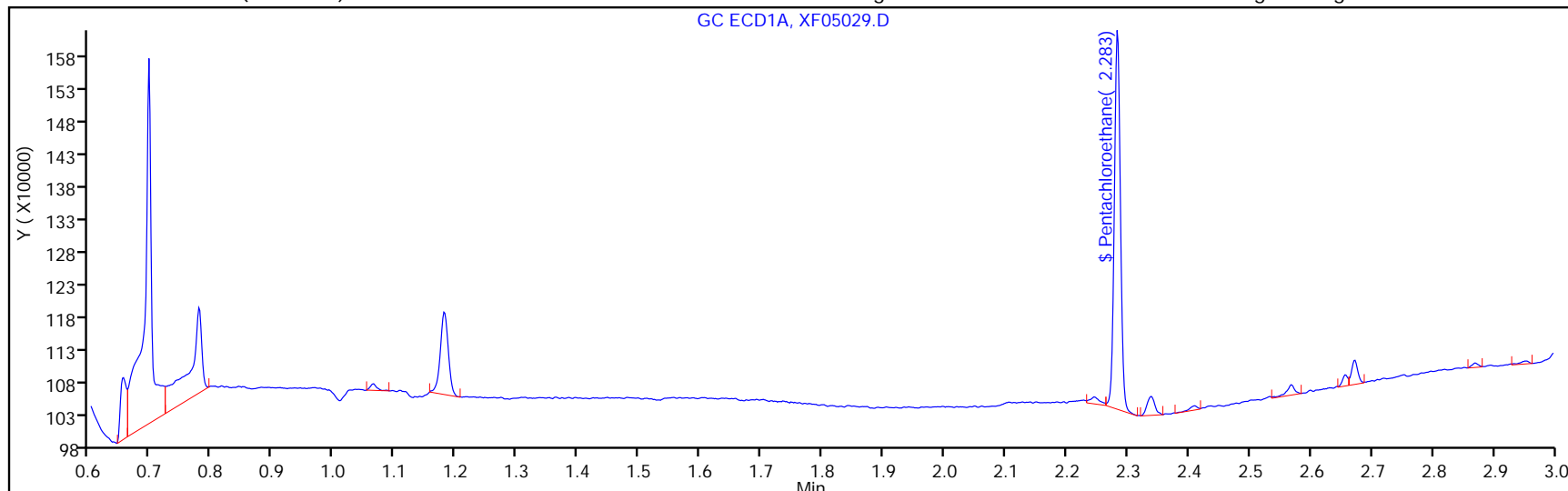
ALS Bottle#: 29

Method: EDBDBCP_CSGX

Limit Group: 504.1

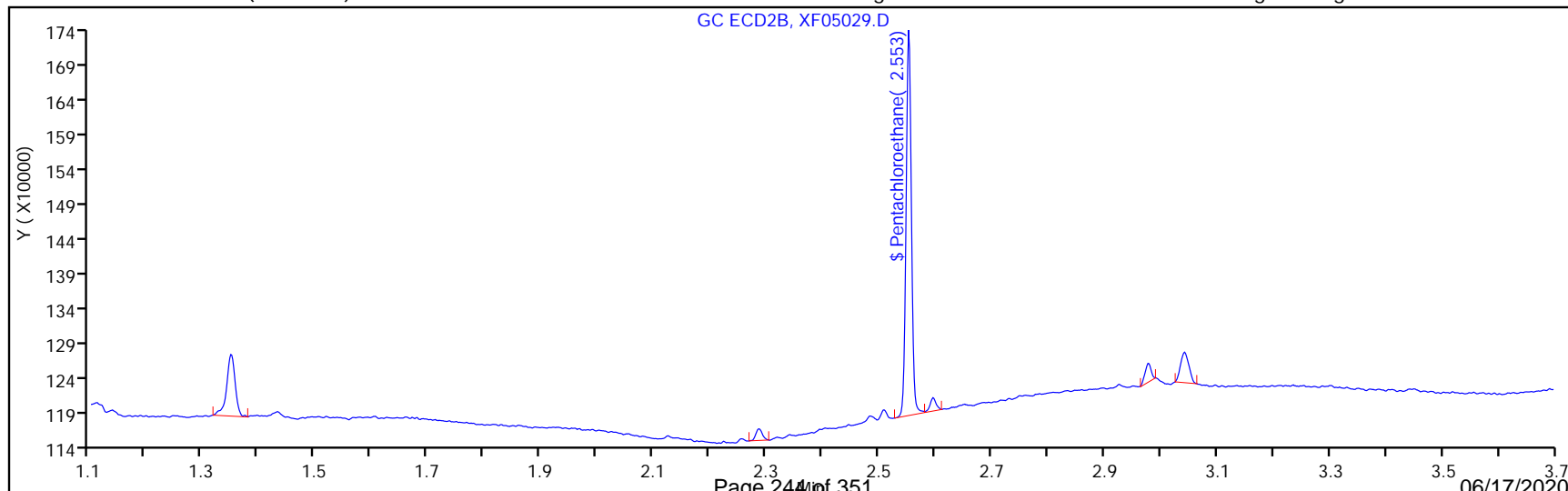
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:49

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05029.D
 Lims ID: 680-184600-A-3-A
 Client ID: TB2023-2
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:20:23 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-029
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3747	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4253	0.00

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: TB2023-2 Lab Sample ID: 680-184600-3
 Matrix: Water Lab File ID: XF05029.D
 Analysis Method: 504.1 Date Collected: 06/02/2020 08:00
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35.4 (mL) Date Analyzed: 06/05/2020 19:20
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	97		70-130

Report Date: 08-Jun-2020 10:57:49

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05029.D
 Lims ID: 680-184600-A-3-A
 Client ID: TB2023-2
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:20:23 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-029
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
-----	--------------	------------------	------------------	----------	--------------------	-------

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	403519	0.3747
2	2.553	2.553	0.000	362643	0.4253

RPD = 12.64

Report Date: 08-Jun-2020 10:57:49

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05029.D

Injection Date: 05-Jun-2020 19:20:23

Instrument ID: CSGX

Operator ID:

Lims ID: 680-184600-A-3-A

Lab Sample ID: 680-184600-3

Worklist Smp#: 29

Client ID: TB2023-2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

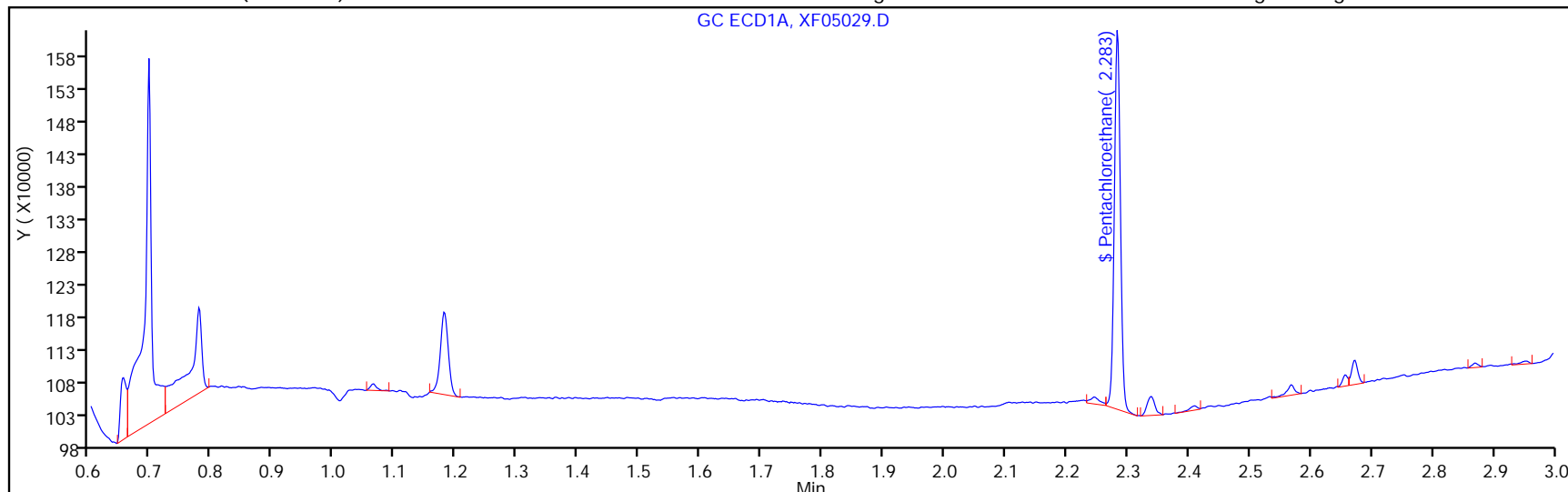
ALS Bottle#: 29

Method: EDBDBCP_CSGX

Limit Group: 504.1

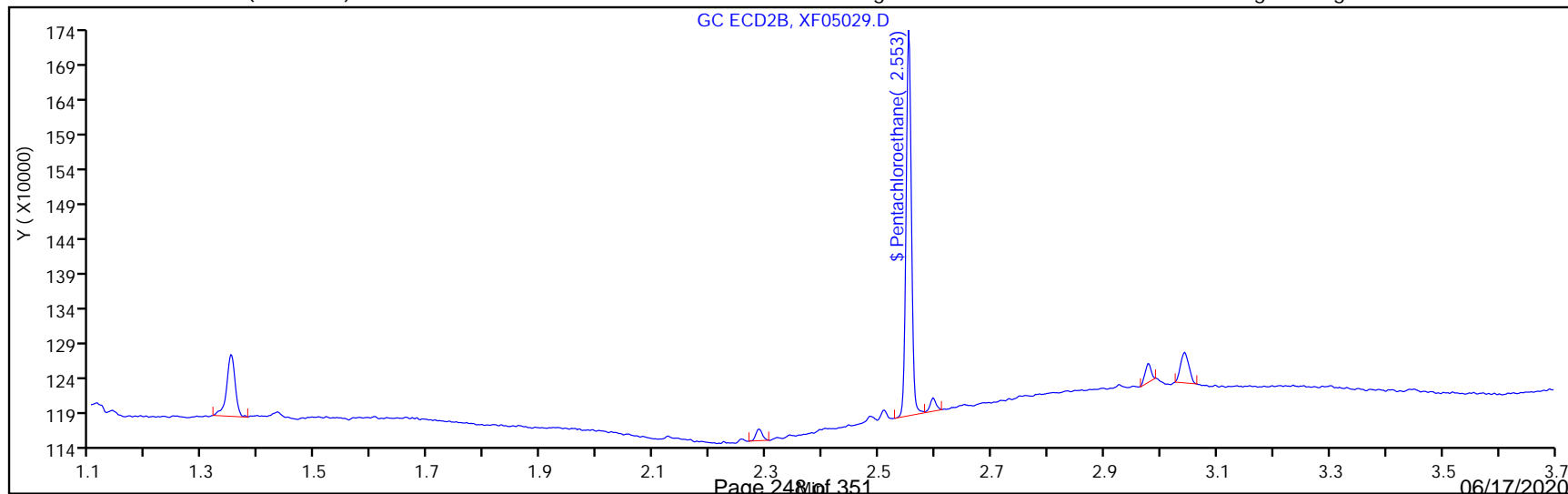
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:49

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05029.D
 Lims ID: 680-184600-A-3-A
 Client ID: TB2023-2
 Sample Type: Client
 Inject. Date: 05-Jun-2020 19:20:23 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-029
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.3747	0.00

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0	0.4253	0.00

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.063						1.032 - 1.092	1.063
Ethylene Dibromide	1.241	1.243	1.242	1.241	1.241	1.240	1.243	1.242			1.211 - 1.271	1.242
1,2,3-Trichloropropane	2.169	2.169	2.171	2.169	2.169	2.170	2.169	2.169			2.139 - 2.199	2.169
1,2-Dibromo-3-Chloropropane	2.899	2.899	2.899	2.899	2.899	2.900	2.899	2.899			2.869 - 2.929	2.899
Pentachloroethane	2.284	2.283	2.284	2.282	2.283	2.283	2.283	2.284			2.252 - 2.312	2.283

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	564298				Ave		564298.143						20.0			
Ethylene Dibromide	350208 334450	330566 303747	337136 303350	315777 301593	Ave		322103.484			5.7			20.0			
1,2,3-Trichloropropane	47660 39427	43493 37669	41218 37590	39602 37929	Ave		40573.3882			8.6			20.0			
1,2-Dibromo-3-Chloropropane	570285 475129	535616 455515	507691 460266	484894 450896	Ave		492536.616			8.6			20.0			
Pentachloroethane	1252736 1045893	1128728 1059340	1016696 1018140	1051957 1041659	Ave		1076893.61			7.3			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP I 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75592

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3950087					7.00
Ethylene Dibromide	Ave	54720 616986	103302 758376	210710 942479	345381	522578	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
1,2,3-Trichloropropane	Ave	37234 382572	67958 469870	128805 592647	216575	308023	0.781 10.2	1.56 12.5	3.13 15.6	5.47	7.81
1,2-Dibromo-3-Chloropropane	Ave	89107 925265	167380 1150666	317307 1409051	530353	742389	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
Pentachloroethane	Ave	78296 860714	141091 1018140	254174 1302074	460231	653683	0.0625 0.813	0.125 1.00	0.250 1.25	0.438	0.625

Curve Type Legend:

Ave = Average

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 22-May-2020 15:18:09 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:00 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.242	1.241	0.001	942479	3.13	2.93	
2	1.589	1.587	0.002	801332	3.13	3.04	
						RPD = 3.78	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	592647	15.6	14.6	
2	2.406	2.406	0.000	472469	15.6	13.7	
						RPD = 6.15	
\$ 4 Pentachloroethane							
1	2.284	2.282	0.002	1302074	1.25	1.21	
2	2.554	2.552	0.002	1045546	1.25	1.23	
						RPD = 1.40	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1409051	3.13	2.86	
2	3.371	3.371	0.000	1241101	3.13	2.89	
						RPD = 1.02	

Reagents:

504 WS #1_00168 Amount Added: 100.00 Units: uL

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D

Injection Date: 22-May-2020 15:18:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

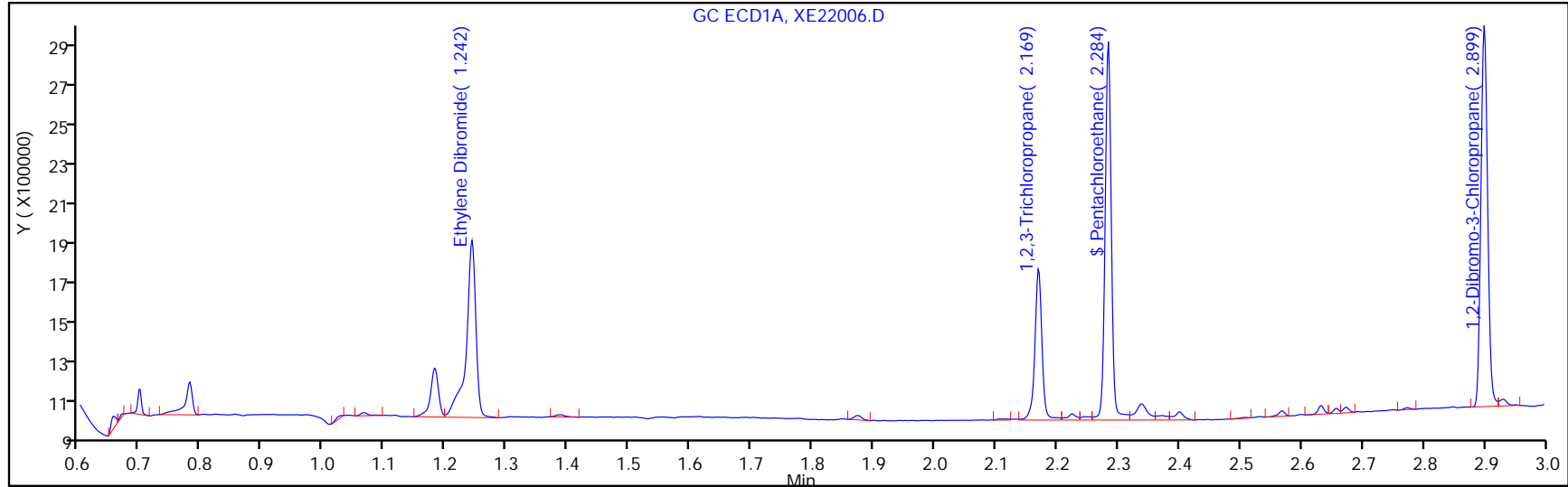
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

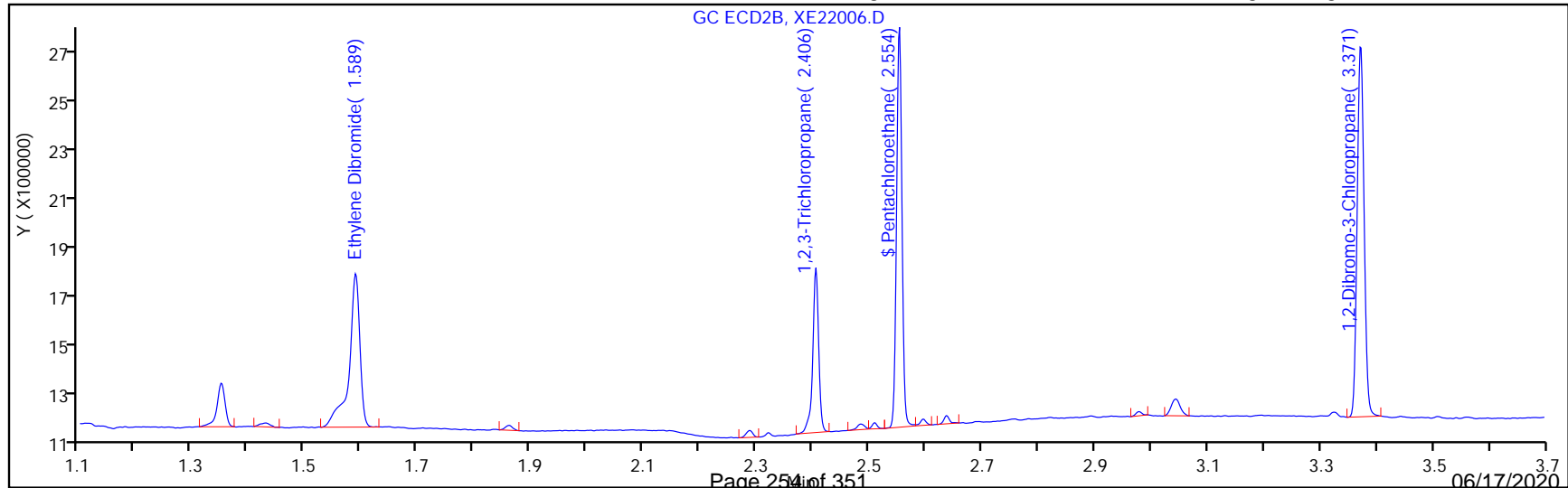
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-May-2020 15:27:51 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-007
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:04 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.243	1.241	0.002	758376	2.50	2.35	
2	1.589	1.587	0.002	648406	2.50	2.46	
						RPD = 4.33	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	469870	12.5	11.6	
2	2.406	2.406	0.000	392780	12.5	11.4	
						RPD = 1.41	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	1018140	1.00	0.9454	
2	2.553	2.552	0.001	825669	1.00	0.9683	
						RPD = 2.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1150666	2.50	2.34	
2	3.371	3.371	0.000	1011664	2.50	2.36	
						RPD = 0.84	

Reagents:

504 WS #1_00168 Amount Added: 80.00 Units: uL

Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D

Injection Date: 22-May-2020 15:27:51

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

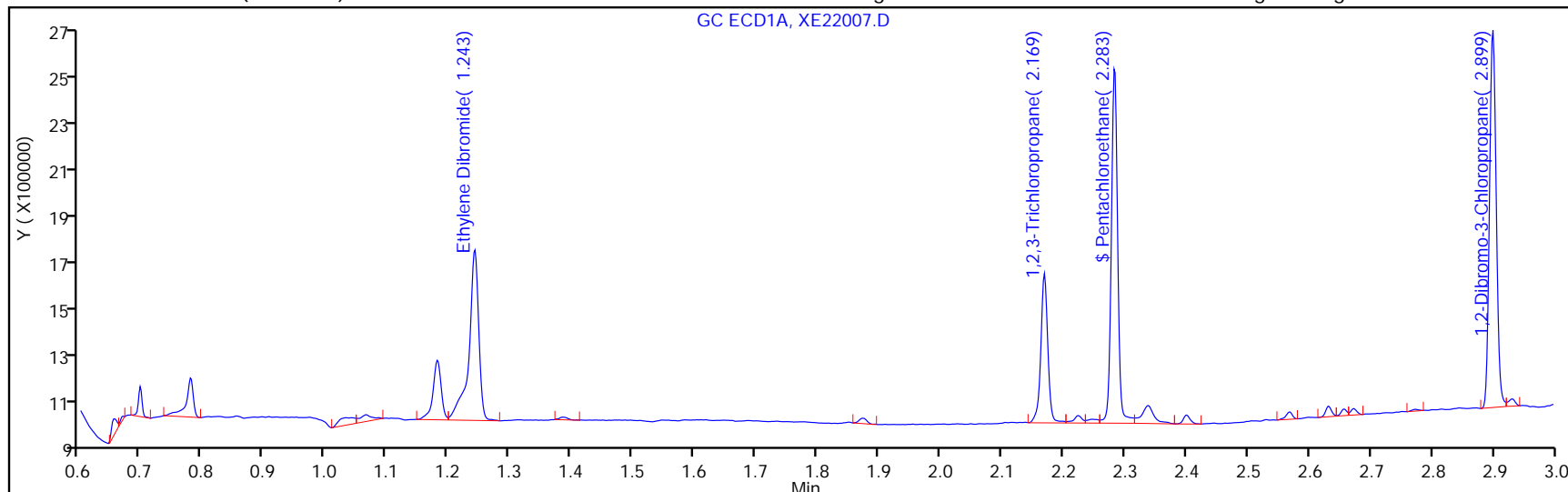
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

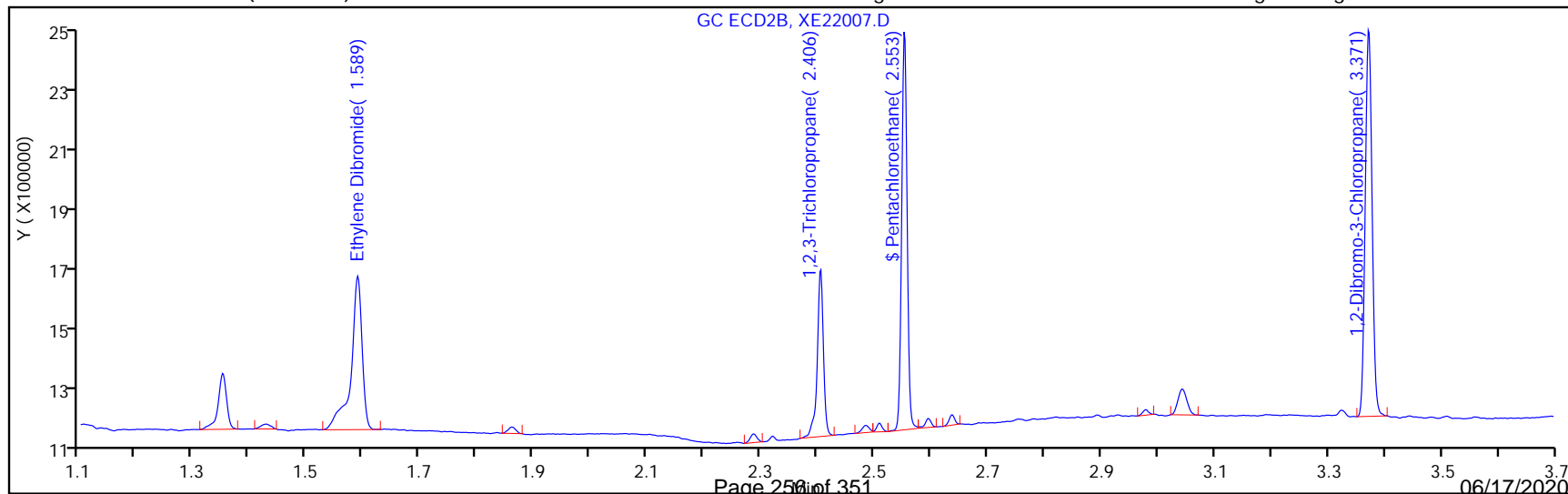
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-May-2020 15:37:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-008
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:06 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.241	-0.001	616986	2.03	1.92	
2	1.588	1.587	0.001	513788	2.03	1.95	
						RPD = 1.70	
3 1,2,3-Trichloropropane							
1	2.170	2.169	0.001	382572	10.2	9.43	
2	2.405	2.406	-0.001	326647	10.2	9.50	
						RPD = 0.71	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	860714	0.8125	0.7993	
2	2.553	2.552	0.001	693091	0.8125	0.8128	
						RPD = 1.68	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.899	0.001	925265	2.03	1.88	
2	3.371	3.371	0.000	825719	2.03	1.92	
						RPD = 2.33	

Reagents:

504 WS #1_00168 Amount Added: 65.00 Units: uL

Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D

Injection Date: 22-May-2020 15:37:38

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

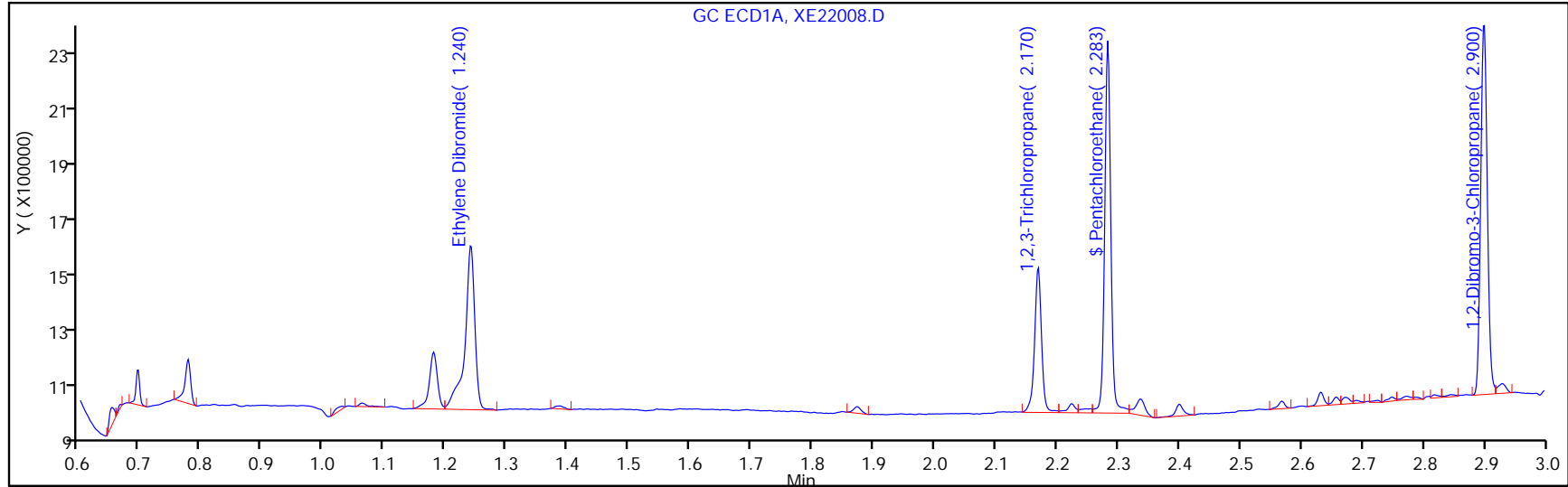
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

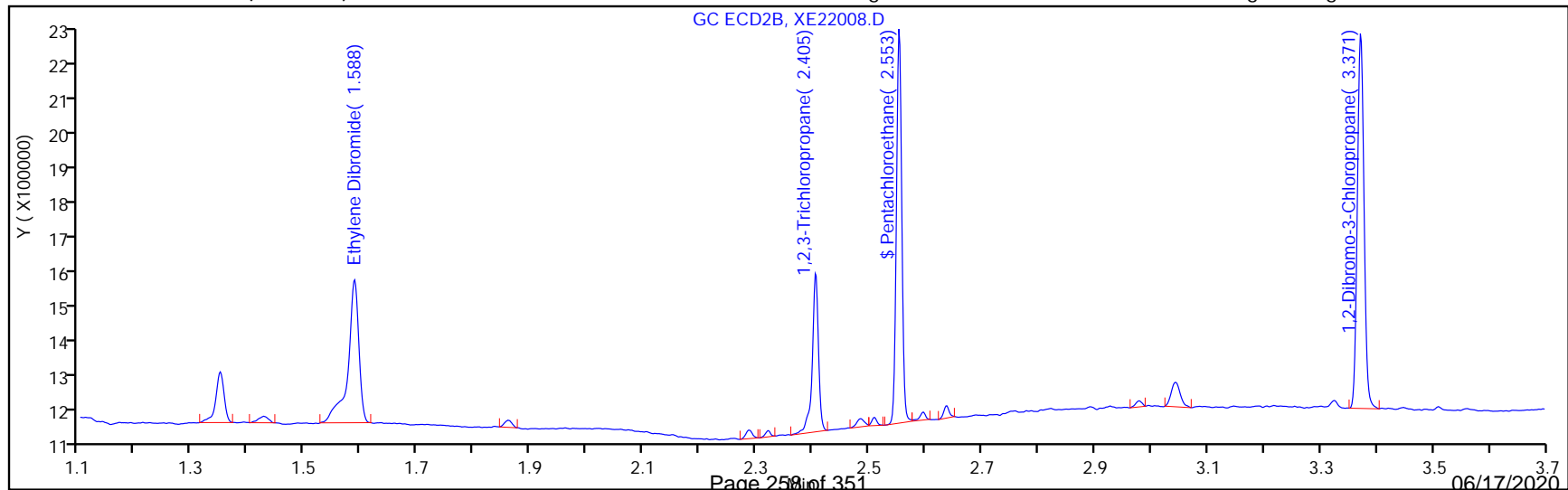
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-May-2020 15:47:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-009
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:07 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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1 Chlorodibromomethane							
1	1.063	1.062	0.001	3950087	7.00	7.00	
2	1.431	1.431	0.000	3294675	7.00	7.00	
						RPD = 0.00	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	522578	1.56	1.62	
2	1.588	1.587	0.001	410886	1.56	1.56	
						RPD = 4.04	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	308023	7.81	7.59	
2	2.404	2.406	-0.002	263838	7.81	7.67	
						RPD = 1.03	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	653683	0.6250	0.6070	
2	2.553	2.552	0.001	516883	0.6250	0.6062	
						RPD = 0.14	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	742389	1.56	1.51	
2	3.371	3.371	0.000	651966	1.56	1.52	
						RPD = 0.72	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D

Injection Date: 22-May-2020 15:47:22

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv15

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

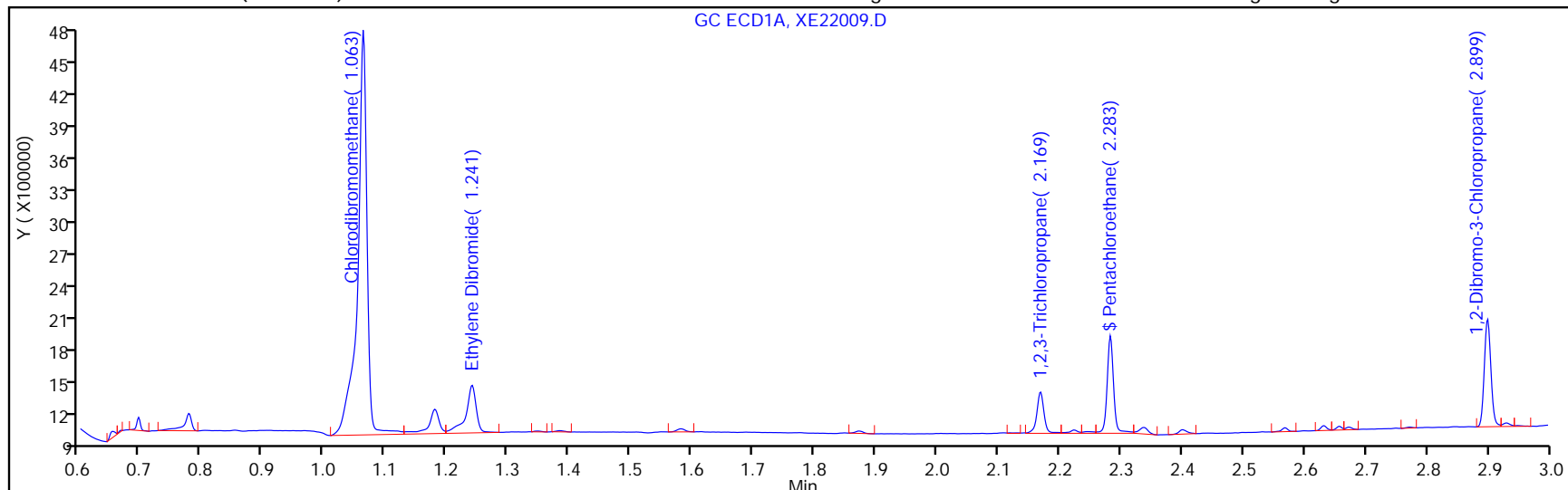
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

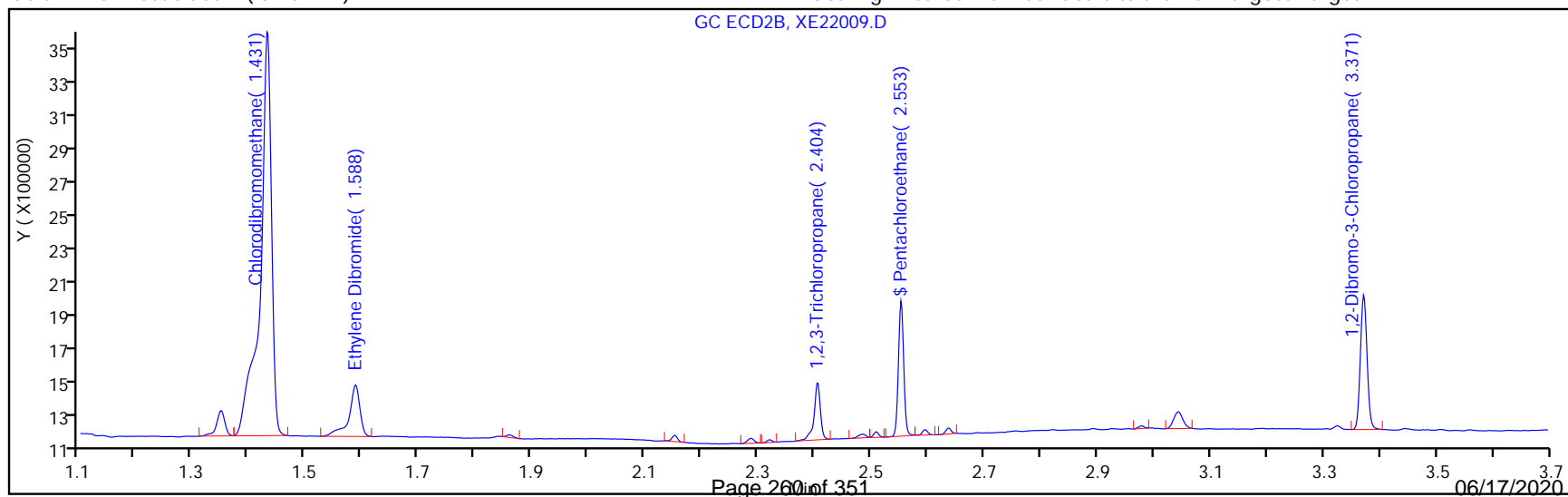
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Kirtland AFB BFF

Quarterly Report - April-June 2020

SWMUs ST-106/SS-111

H-2-2557

September 2020

Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D
 Lims ID: IC M4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-May-2020 15:57:09 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-010
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:08 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	345381	1.09	1.07	
2	1.587	1.587	0.000	277948	1.09	1.05	
						RPD = 1.72	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	216575	5.47	5.34	
2	2.406	2.406	0.000	190841	5.47	5.55	
						RPD = 3.86	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	460231	0.4375	0.4274	
2	2.552	2.552	0.000	362245	0.4375	0.4248	
						RPD = 0.60	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	530353	1.09	1.08	
2	3.371	3.371	0.000	467045	1.09	1.09	
						RPD = 1.00	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D

Injection Date: 22-May-2020 15:57:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

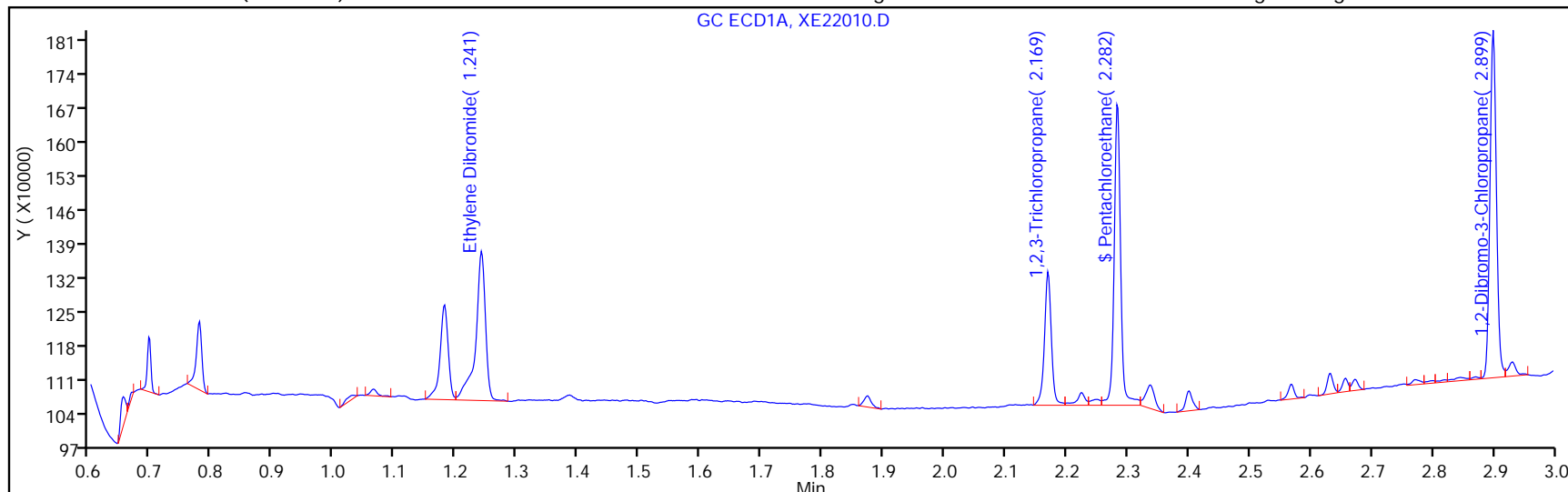
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

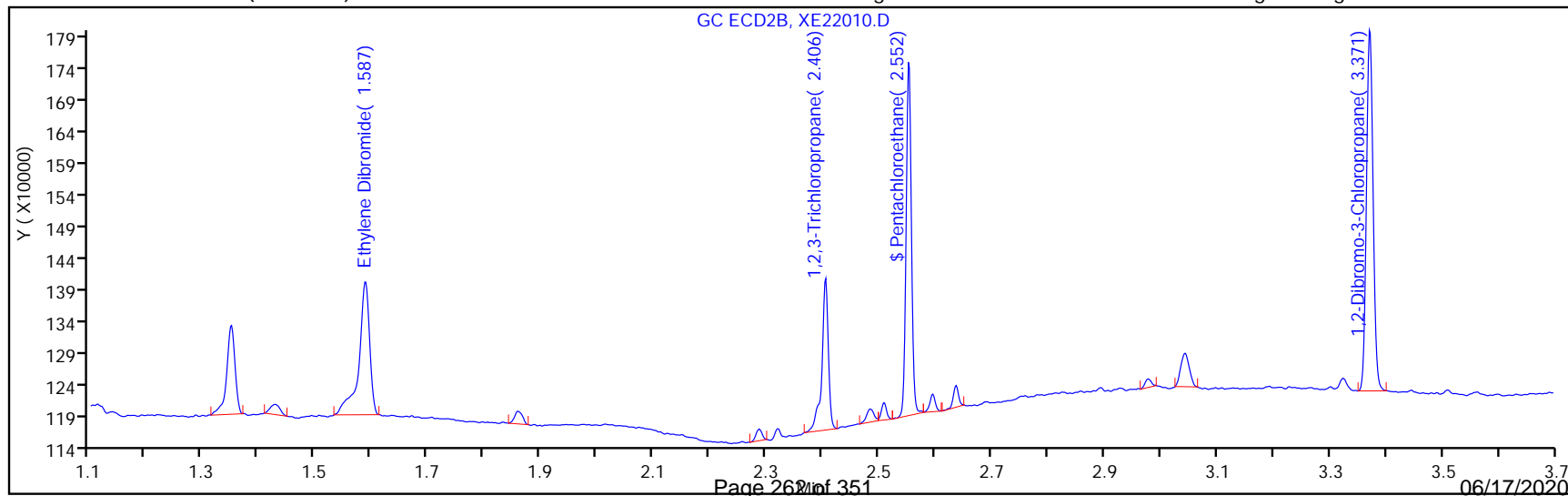
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:09

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-May-2020 16:06:56 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:09 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.242	1.241	0.001	210710	0.6250	0.6542	
2	1.589	1.587	0.002	161561	0.6250	0.6126	
						RPD = 6.56	
3 1,2,3-Trichloropropane							
1	2.171	2.169	0.002	128805	3.13	3.17	
2	2.406	2.406	0.000	107999	3.13	3.14	
						RPD = 1.10	
\$ 4 Pentachloroethane							
1	2.284	2.282	0.002	254174	0.2500	0.2360	
2	2.554	2.552	0.002	210622	0.2500	0.2470	
						RPD = 4.54	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	317307	0.6250	0.6442	
2	3.372	3.371	0.001	277313	0.6250	0.6458	
						RPD = 0.24	

Reagents:

504 WS #1_00168 Amount Added: 20.00 Units: uL

Report Date: 26-May-2020 09:42:09

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D

Injection Date: 22-May-2020 16:06:56

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

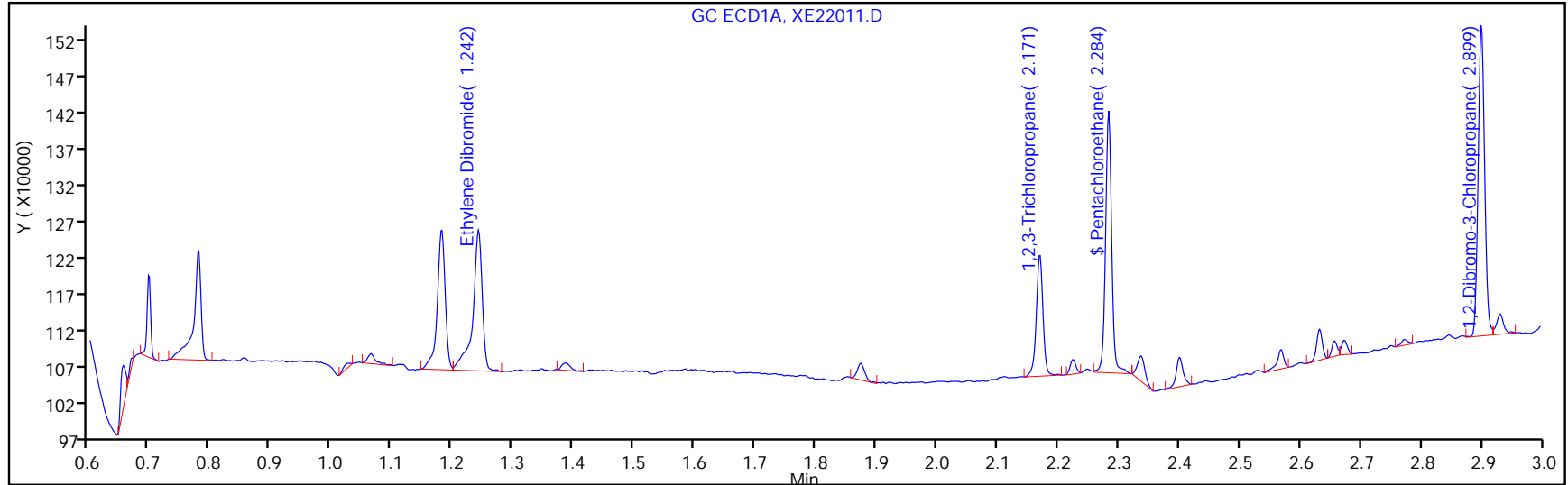
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

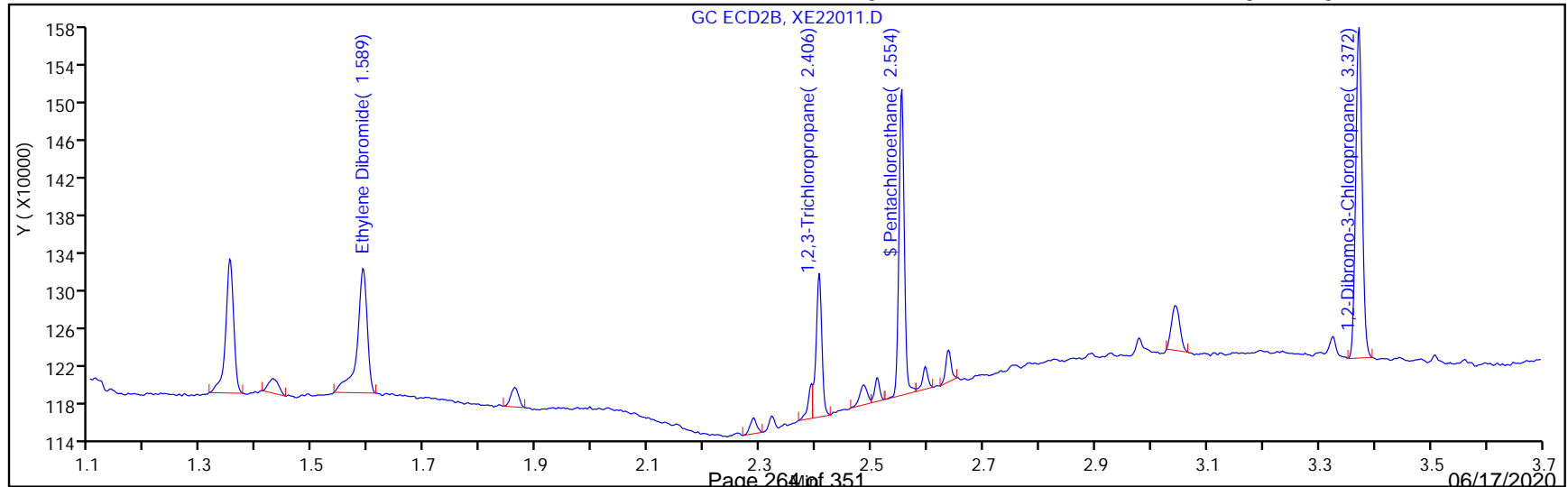
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-May-2020 16:16:45 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:11 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canady Date: 26-May-2020 09:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide							M
1	1.243	1.241	0.002	103302	0.3125	0.3207	M
2	1.589	1.587	0.002	86794	0.3125	0.3291	M
							RPD = 2.59
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	67958	1.56	1.67	
2	2.406	2.406	0.000	60057	1.56	1.75	
							RPD = 4.15
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	141091	0.1250	0.1310	
2	2.553	2.552	0.001	105378	0.1250	0.1236	
							RPD = 5.84
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	167380	0.3125	0.3398	
2	3.371	3.371	0.000	143975	0.3125	0.3353	
							RPD = 1.35

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 10.00

Units: uL

Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D

Injection Date: 22-May-2020 16:16:45

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

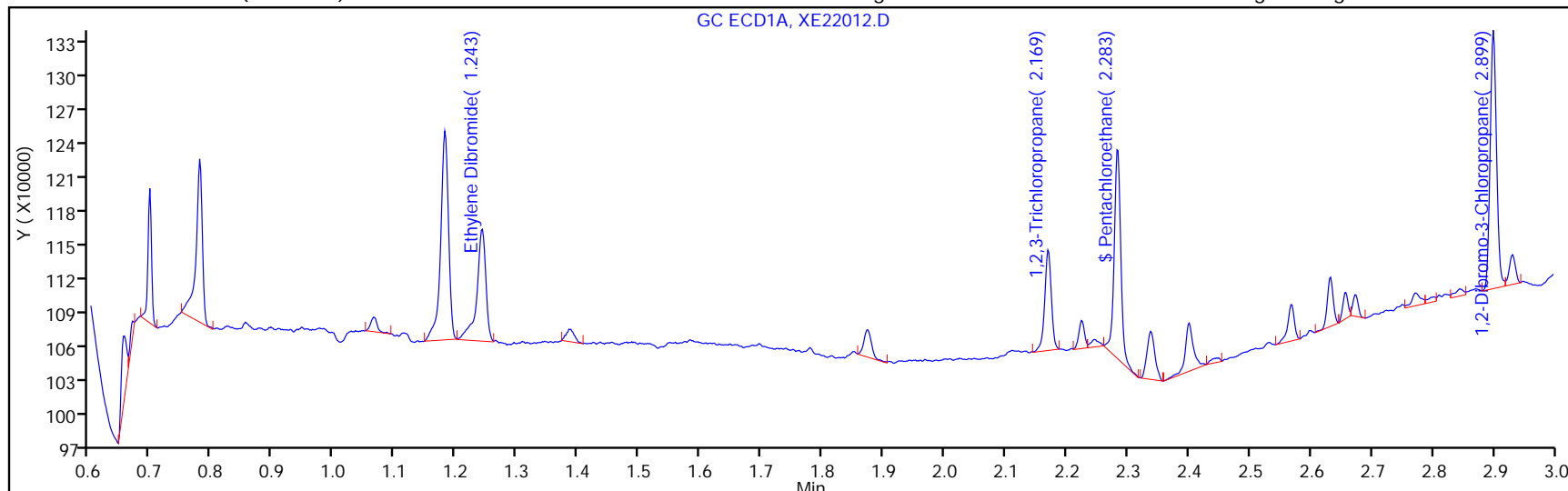
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

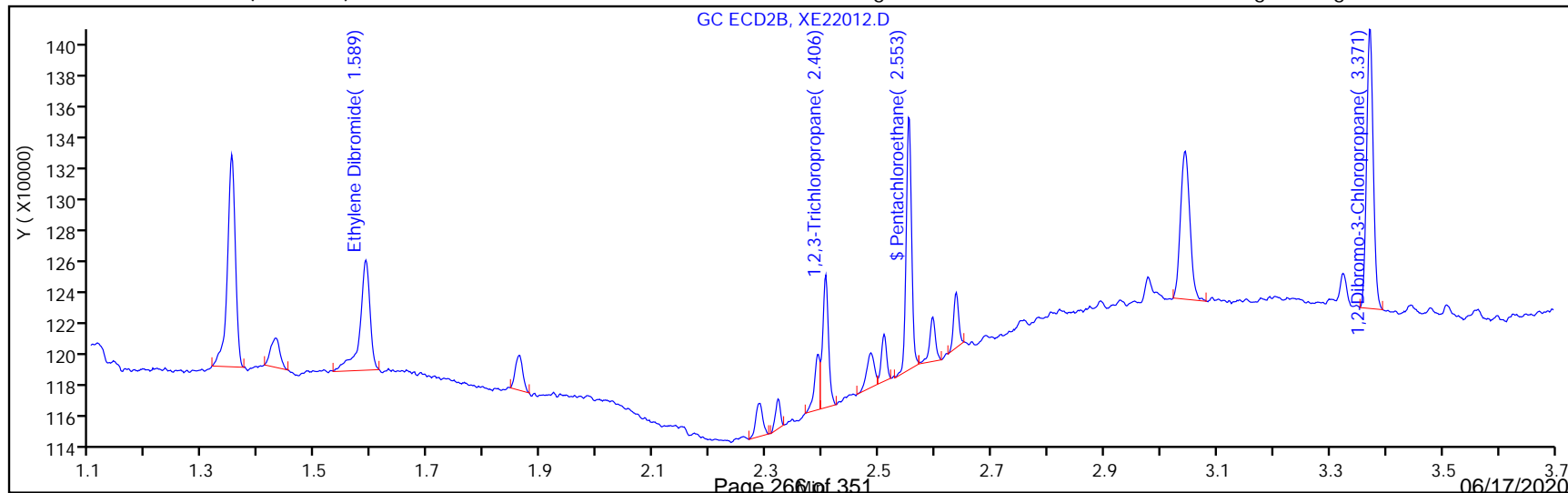
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

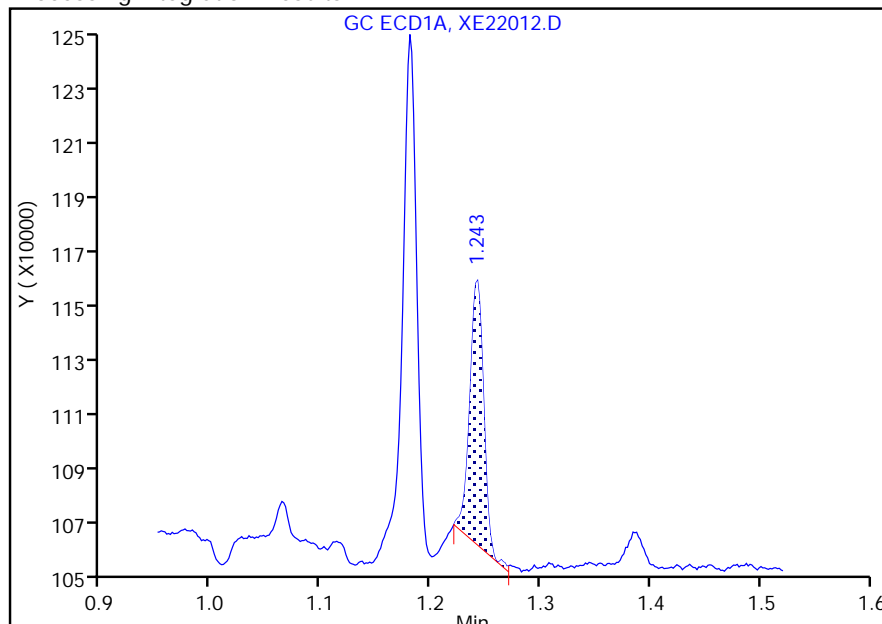
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D	Instrument ID:	CSGX
Injection Date:	22-May-2020 16:16:45	ALS Bottle#:	12
Lims ID:	IC IV2	Dil. Factor:	1.0000
Client ID:		Limit Group:	504.1
Operator ID:		Detector:	GC ECD1A
Injection Vol:	2.0 ul	Worklist Smp#:	12
Method:	EDBDBCP_CSGX		
Column:	CLPesticides I (0.25 mm)		

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

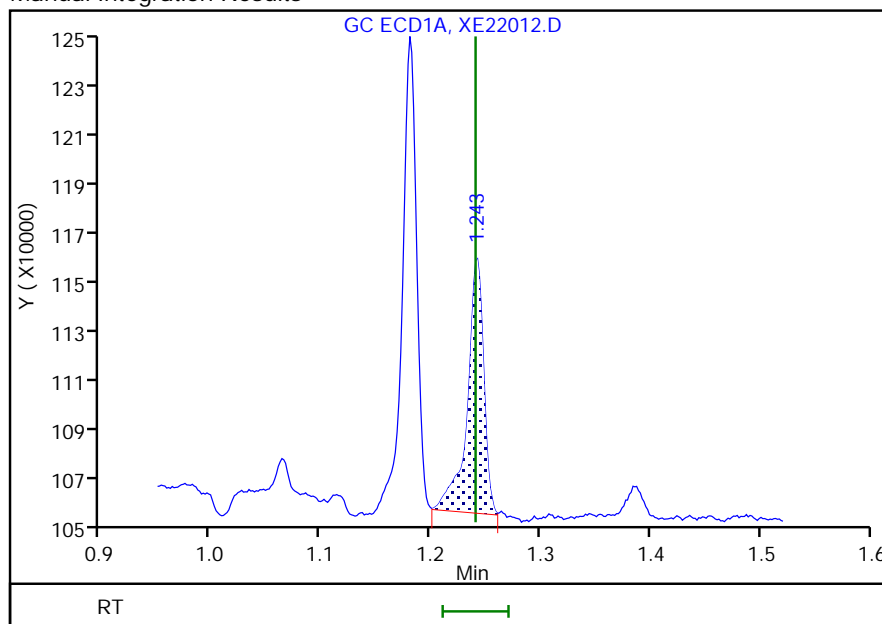
RT: 1.24
 Area: 82030
 Amount: 0.268891
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 103302
 Amount: 0.320711
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:33:52

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-May-2020 16:26:32 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:12 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:34:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.241	1.241	0.000	54720	0.1563	0.1699	M
2	1.587	1.587	0.000	44945	0.1563	0.1704	M
RPD = 0.32							
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	37234	0.7813	0.9177	
2	2.406	2.406	0.000	31009	0.7813	0.9015	
RPD = 1.78							
\$ 4 Pentachloroethane							M
1	2.284	2.282	0.002	78296	0.0625	0.0727	M
2	2.552	2.552	0.000	60380	0.0625	0.0708	
RPD = 2.64							
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	89107	0.1563	0.1809	
2	3.371	3.371	0.000	74754	0.1563	0.1741	
RPD = 3.85							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 5.00

Units: uL

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D

Injection Date: 22-May-2020 16:26:32

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 13

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

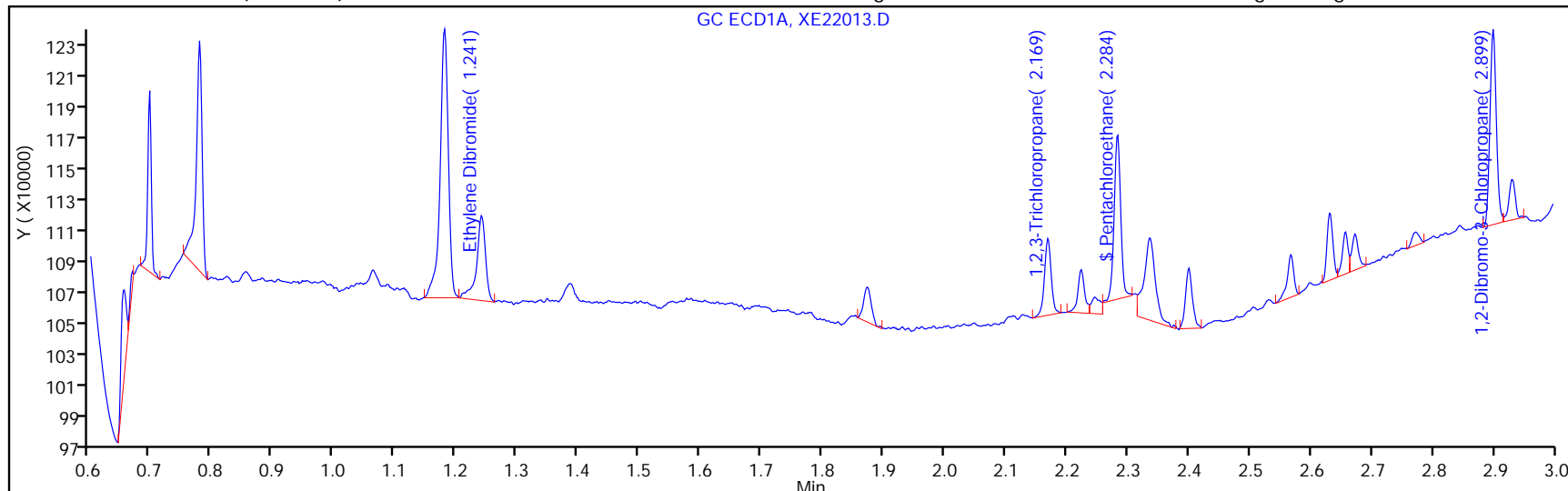
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

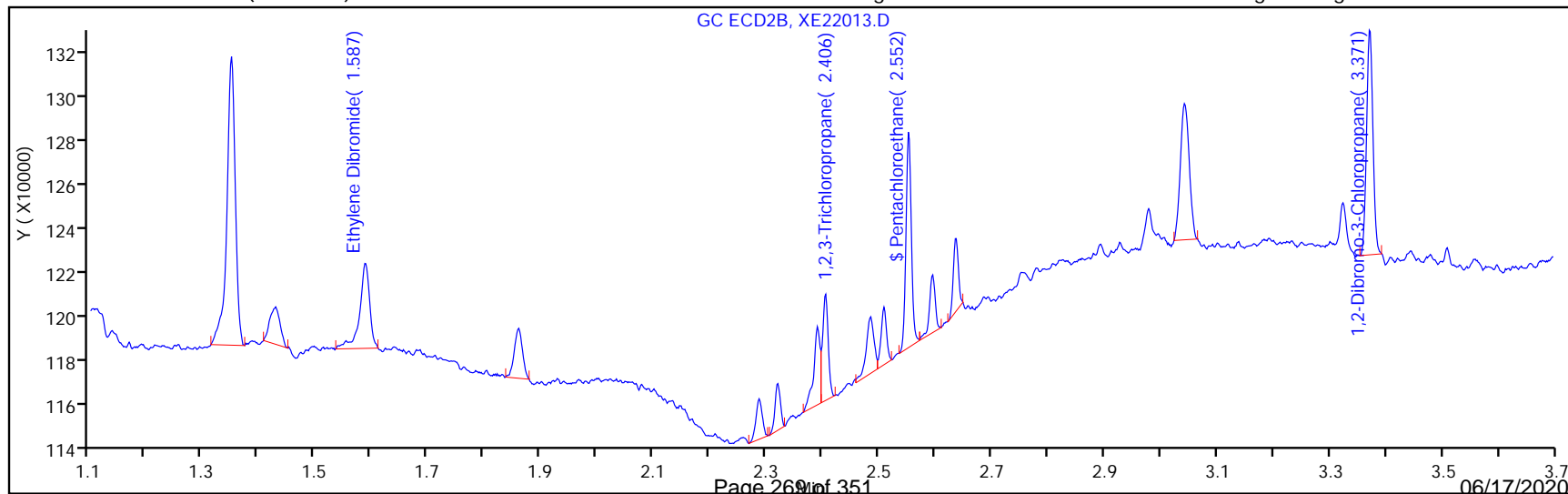
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

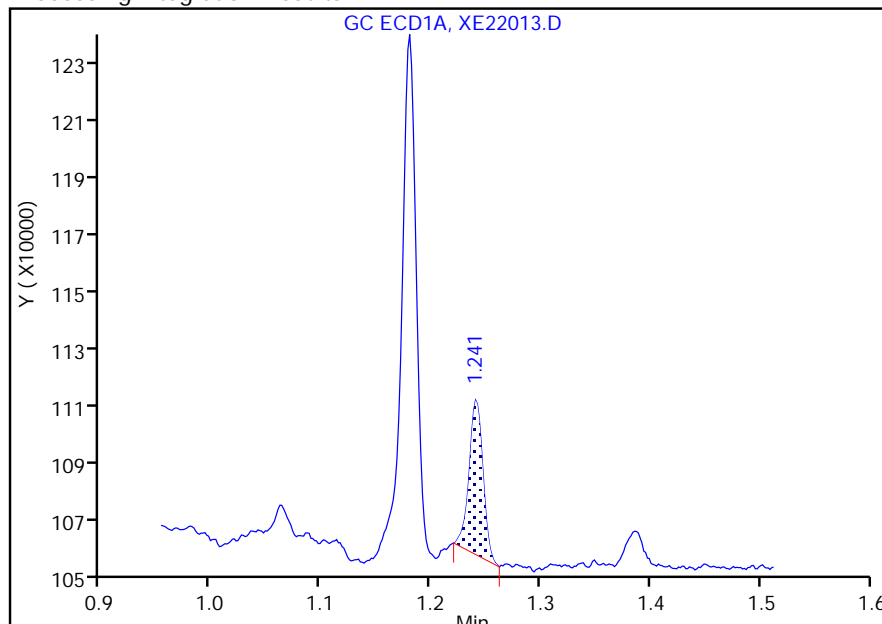
Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Injection Date: 22-May-2020 16:26:32 Instrument ID: CSGX
 Lims ID: IC IV1
 Client ID:
 Operator ID: ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Method: EDBDBCP_CSGX Limit Group: 504.1
 Column: CLPesticides I (0.25 mm) Detector: GC ECD1A

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

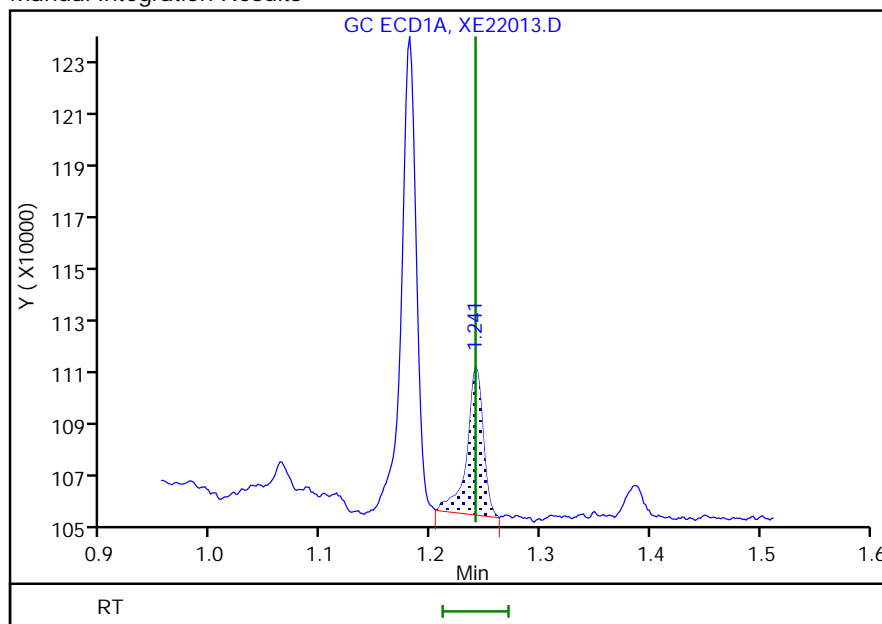
RT: 1.24
 Area: 44061
 Amount: 0.140511
 Amount Units: ng/ml

Processing Integration Results



RT: 1.24
 Area: 54720
 Amount: 0.169883
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:34:12
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

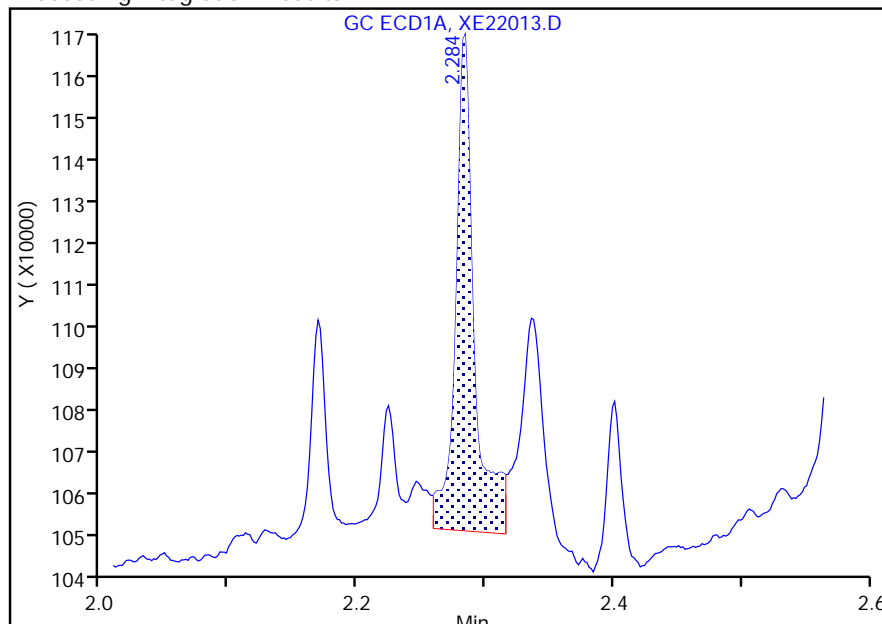
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D			
Injection Date:	22-May-2020 16:26:32	Instrument ID:	CSGX	
Lims ID:	IC IV1			
Client ID:				
Operator ID:	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	
Method:	EDBDBCP_CSGX	Limit Group:	504.1	
Column:	CLPesticides I (0.25 mm)	Detector:	GC ECD1A	

\$ 4 Pentachloroethane, CAS: 76-01-7

Signal: 1

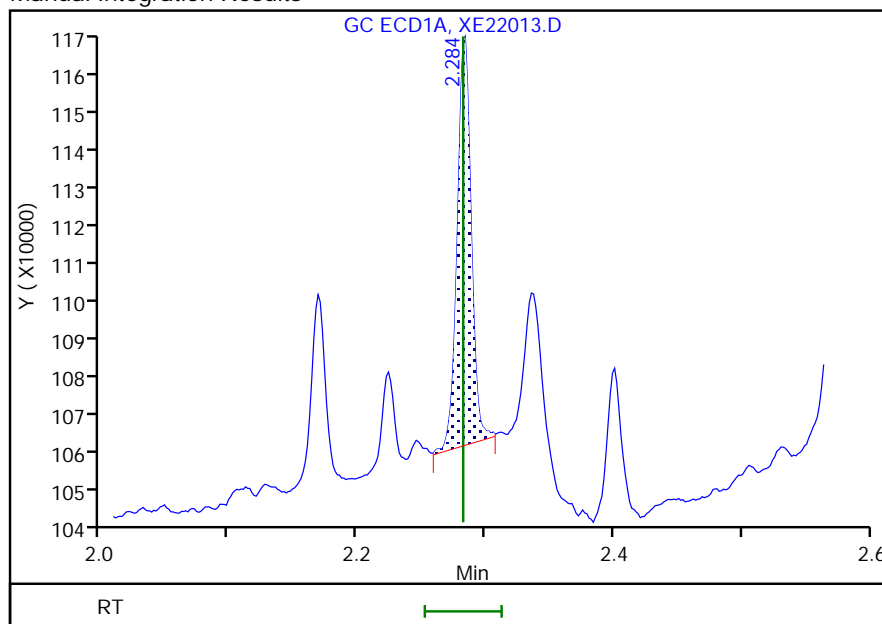
RT: 2.28
 Area: 114067
 Amount: 0.078379
 Amount Units: ng/ml

Processing Integration Results



RT: 2.28
 Area: 78296
 Amount: 0.072705
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:36:06

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VI
 GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
 RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75593

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Chlorodibromomethane					1.431						1.401 - 1.461	1.431
Ethylene Dibromide	1.587	1.589	1.589	1.587	1.588	1.588	1.589	1.589			1.557 - 1.617	1.588
1,2,3-Trichloropropane	2.406	2.406	2.406	2.406	2.404	2.405	2.406	2.406			2.376 - 2.436	2.406
1,2-Dibromo-3-Chloropropane	3.371	3.371	3.372	3.371	3.371	3.371	3.371	3.371			3.341 - 3.401	3.371
Pentachloroethane	2.552	2.553	2.554	2.552	2.553	2.553	2.553	2.554			2.522 - 2.582	2.553

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75593

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Chlorodibromomethane	470668				Ave		470667.857						20.0			
Ethylene Dibromide	287648 262967	277741 252942	258498 259362	254124 256426	Ave		263713.469			4.7			20.0			
1,2,3-Trichloropropane	39692 33771	38436 32162	34560 31422	34897 30238	Ave		34397.2708			9.6			20.0			
1,2-Dibromo-3-Chloropropane	478426 417258	460720 406508	443701 404666	427013 397152	Ave		429430.368			6.8			20.0			
Pentachloroethane	966080 827013	843024 853035	842488 825669	827989 836437	Ave		852716.781			5.5			20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1 Analy Batch No.: 619731

SDG No.: _____

Instrument ID: CSGX GC Column: CLP II 0.25 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/22/2020 15:18 Calibration End Date: 05/22/2020 16:26 Calibration ID: 75593

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-619731/13	XE22013.D
Level 2	IC 680-619731/12	XE22012.D
Level 3	IC 680-619731/11	XE22011.D
Level 4	IC 680-619731/10	XE22010.D
Level 5	IC 680-619731/9	XE22009.D
Level 6	IC 680-619731/8	XE22008.D
Level 7	IC 680-619731/7	XE22007.D
Level 8	IC 680-619731/6	XE22006.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorodibromomethane	Ave					3294675					7.00
Ethylene Dibromide	Ave	44945 513788	86794 648406	161561 801332	277948	410886	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
1,2,3-Trichloropropane	Ave	31009 326647	60057 392780	107999 472469	190841	263838	0.781 10.2	1.56 12.5	3.13 15.6	5.47	7.81
1,2-Dibromo-3-Chloropropane	Ave	74754 825719	143975 1011664	277313 1241101	467045	651966	0.156 2.03	0.313 2.50	0.625 3.13	1.09	1.56
Pentachloroethane	Ave	60380 693091	105378 825669	210622 1045546	362245	516883	0.0625 0.813	0.125 1.00	0.250 1.25	0.438	0.625

Curve Type Legend:

Ave = Average

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D
 Lims ID: IC IV8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 22-May-2020 15:18:09 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:00 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.242	1.241	0.001	942479	3.13	2.93	
2	1.589	1.587	0.002	801332	3.13	3.04	
						RPD = 3.78	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	592647	15.6	14.6	
2	2.406	2.406	0.000	472469	15.6	13.7	
						RPD = 6.15	
\$ 4 Pentachloroethane							
1	2.284	2.282	0.002	1302074	1.25	1.21	
2	2.554	2.552	0.002	1045546	1.25	1.23	
						RPD = 1.40	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1409051	3.13	2.86	
2	3.371	3.371	0.000	1241101	3.13	2.89	
						RPD = 1.02	

Reagents:

504 WS #1_00168 Amount Added: 100.00 Units: uL

Report Date: 26-May-2020 09:42:00

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22006.D

Injection Date: 22-May-2020 15:18:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv8

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

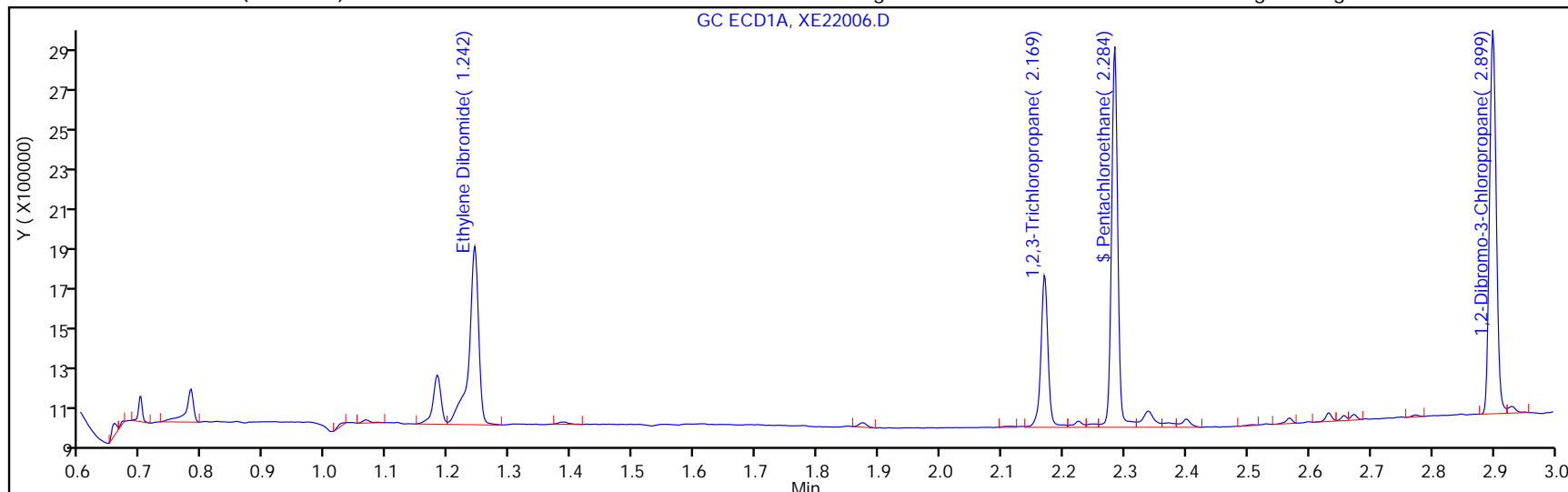
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

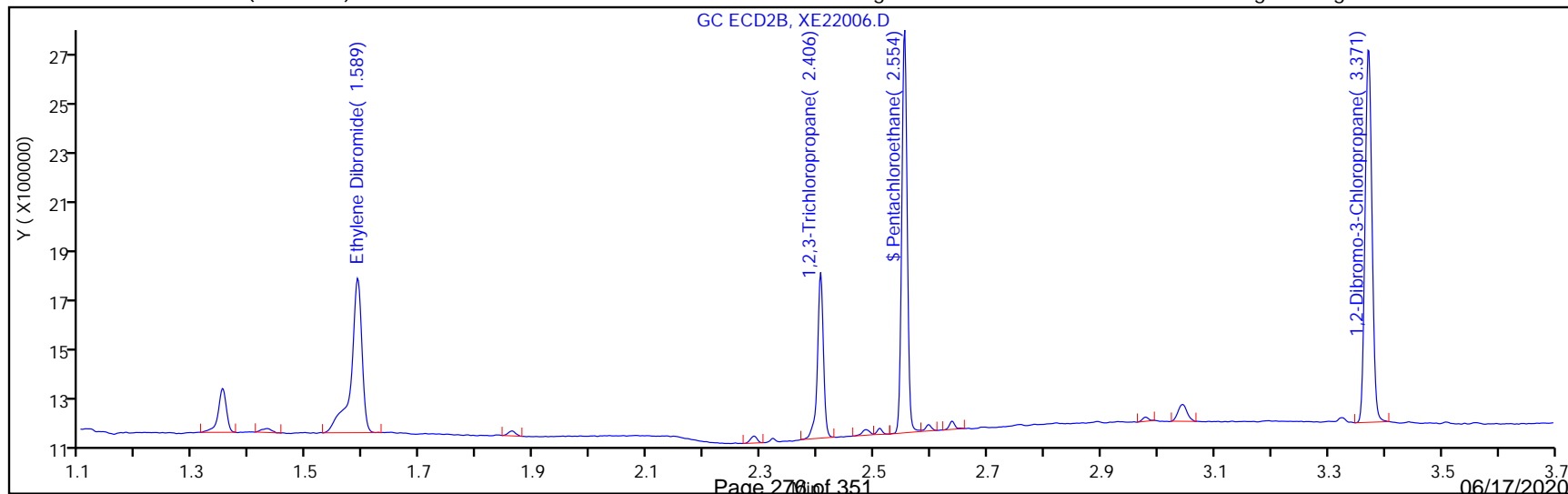
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D
 Lims ID: IC IV7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 22-May-2020 15:27:51 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-007
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:04 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.243	1.241	0.002	758376	2.50	2.35	
2	1.589	1.587	0.002	648406	2.50	2.46	
						RPD = 4.33	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	469870	12.5	11.6	
2	2.406	2.406	0.000	392780	12.5	11.4	
						RPD = 1.41	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	1018140	1.00	0.9454	
2	2.553	2.552	0.001	825669	1.00	0.9683	
						RPD = 2.39	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	1150666	2.50	2.34	
2	3.371	3.371	0.000	1011664	2.50	2.36	
						RPD = 0.84	

Reagents:

504 WS #1_00168 Amount Added: 80.00 Units: uL

Report Date: 26-May-2020 09:42:04

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22007.D

Injection Date: 22-May-2020 15:27:51

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv7

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

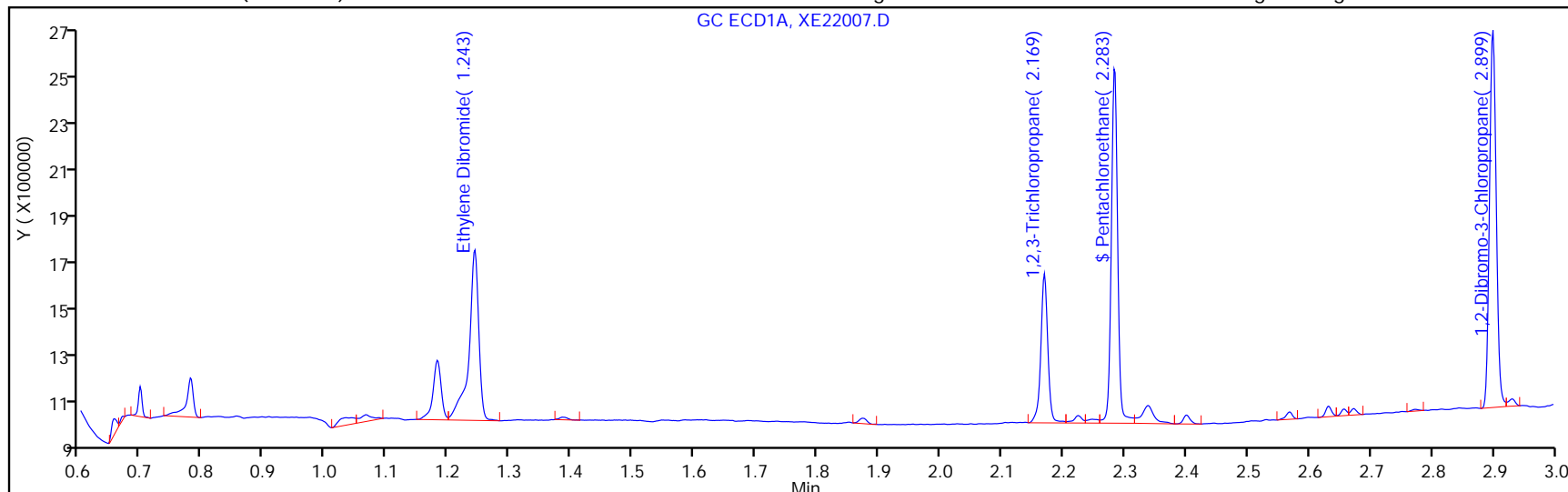
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

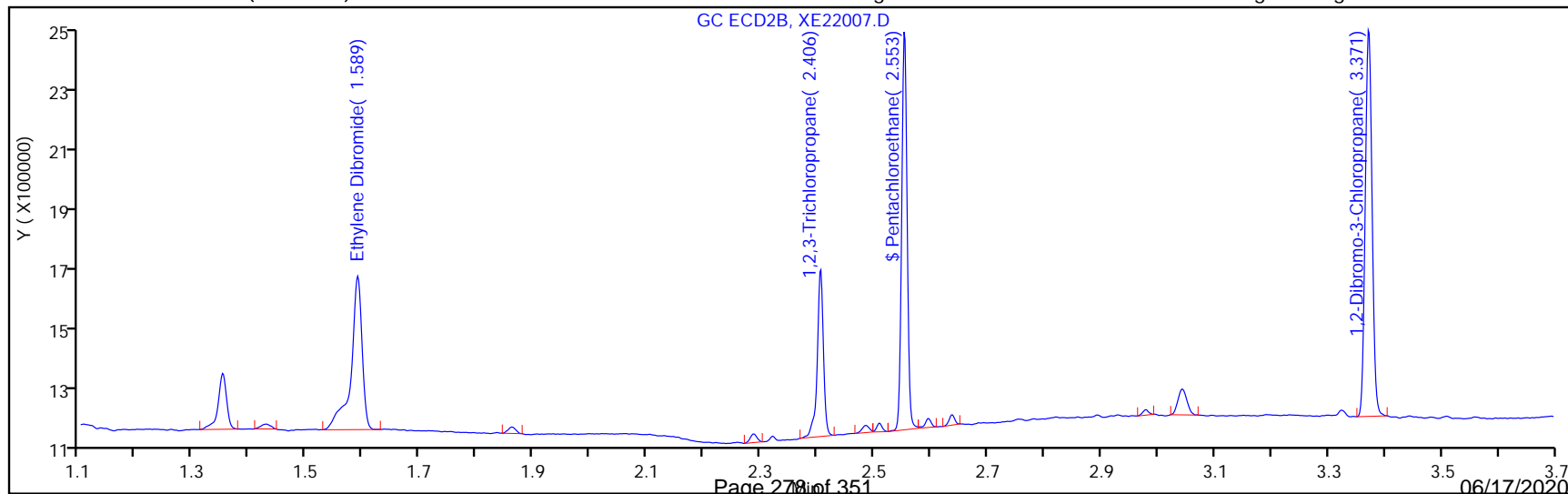
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D
 Lims ID: IC IV6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 22-May-2020 15:37:38 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-008
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:06 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.240	1.241	-0.001	616986	2.03	1.92	
2	1.588	1.587	0.001	513788	2.03	1.95	
						RPD = 1.70	
3 1,2,3-Trichloropropane							
1	2.170	2.169	0.001	382572	10.2	9.43	
2	2.405	2.406	-0.001	326647	10.2	9.50	
						RPD = 0.71	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	860714	0.8125	0.7993	
2	2.553	2.552	0.001	693091	0.8125	0.8128	
						RPD = 1.68	
5 1,2-Dibromo-3-Chloropropane							
1	2.900	2.899	0.001	925265	2.03	1.88	
2	3.371	3.371	0.000	825719	2.03	1.92	
						RPD = 2.33	

Reagents:

504 WS #1_00168 Amount Added: 65.00 Units: uL

Report Date: 26-May-2020 09:42:06

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22008.D

Injection Date: 22-May-2020 15:37:38

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv6

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

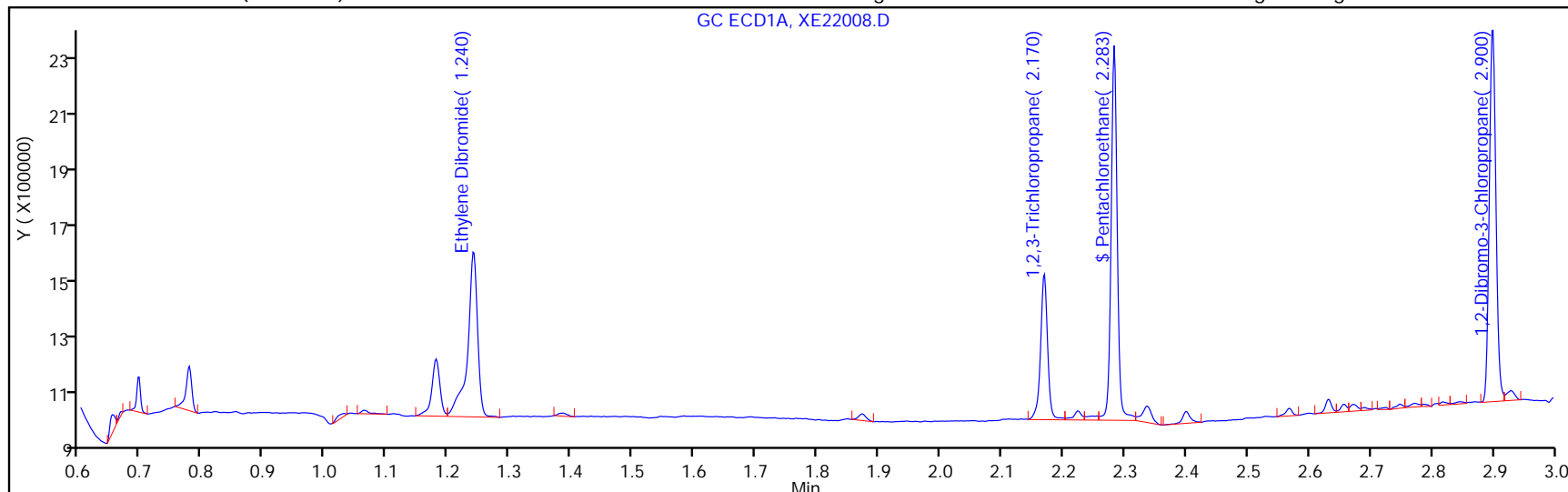
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

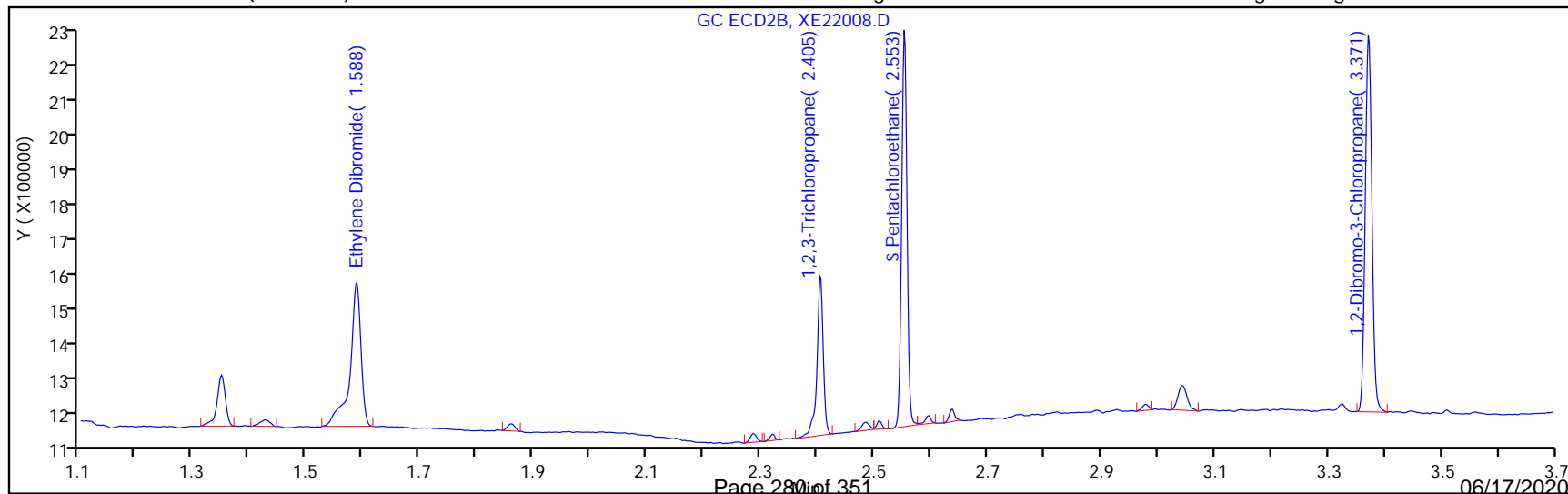
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D
 Lims ID: IC IV5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 22-May-2020 15:47:22 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-009
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:07 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Diff RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	----------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.063	1.062	0.001	3950087	7.00	7.00	
2	1.431	1.431	0.000	3294675	7.00	7.00	
						RPD = 0.00	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	522578	1.56	1.62	
2	1.588	1.587	0.001	410886	1.56	1.56	
						RPD = 4.04	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	308023	7.81	7.59	
2	2.404	2.406	-0.002	263838	7.81	7.67	
						RPD = 1.03	
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	653683	0.6250	0.6070	
2	2.553	2.552	0.001	516883	0.6250	0.6062	
						RPD = 0.14	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	742389	1.56	1.51	
2	3.371	3.371	0.000	651966	1.56	1.52	
						RPD = 0.72	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 26-May-2020 09:42:07

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22009.D

Injection Date: 22-May-2020 15:47:22

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv5

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

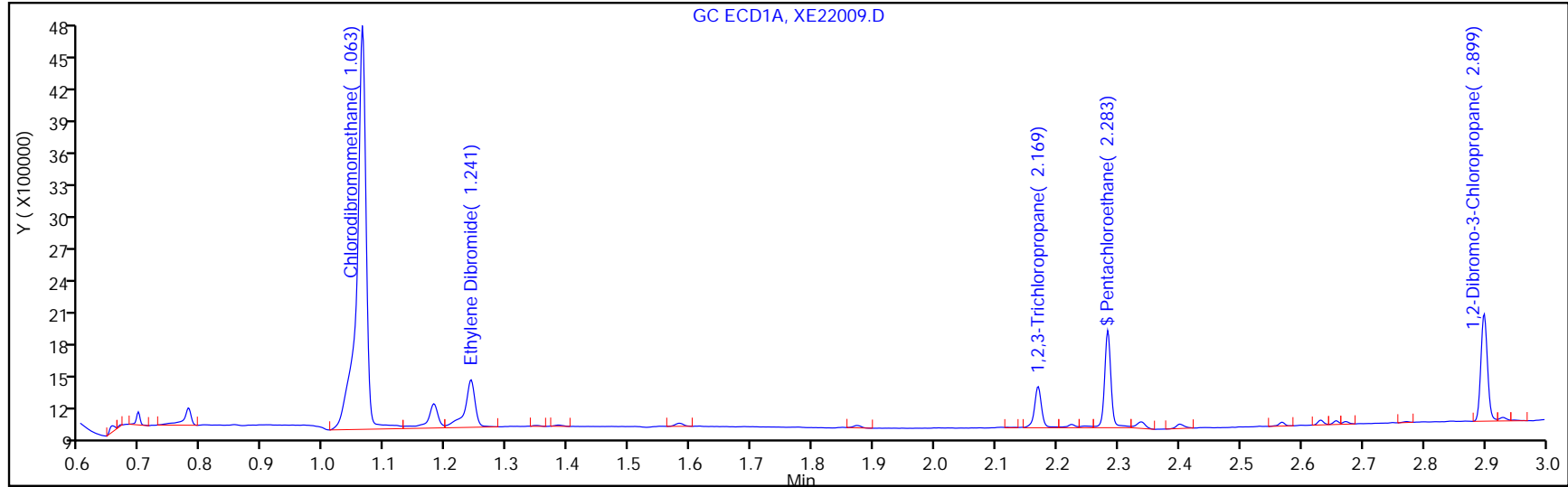
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

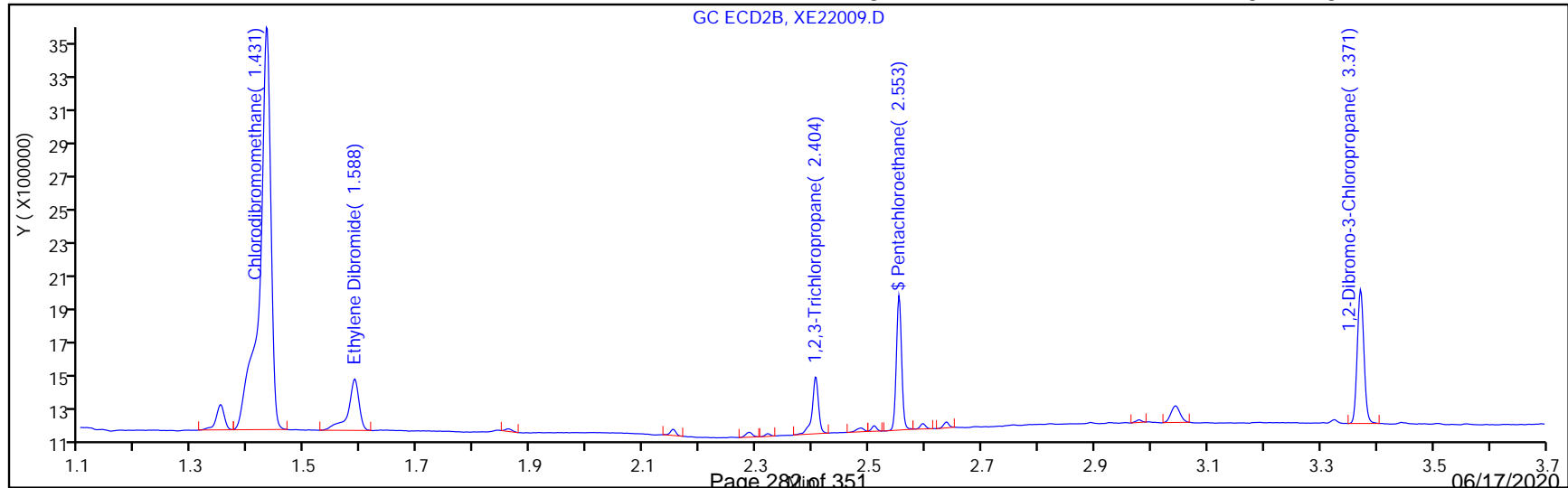
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D
 Lims ID: IC IV4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 22-May-2020 15:57:09 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-010
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:08 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	345381	1.09	1.07	
2	1.587	1.587	0.000	277948	1.09	1.05	
						RPD = 1.72	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	216575	5.47	5.34	
2	2.406	2.406	0.000	190841	5.47	5.55	
						RPD = 3.86	
\$ 4 Pentachloroethane							
1	2.282	2.282	0.000	460231	0.4375	0.4274	
2	2.552	2.552	0.000	362245	0.4375	0.4248	
						RPD = 0.60	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	530353	1.09	1.08	
2	3.371	3.371	0.000	467045	1.09	1.09	
						RPD = 1.00	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 09:42:08

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22010.D

Injection Date: 22-May-2020 15:57:09

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv4

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

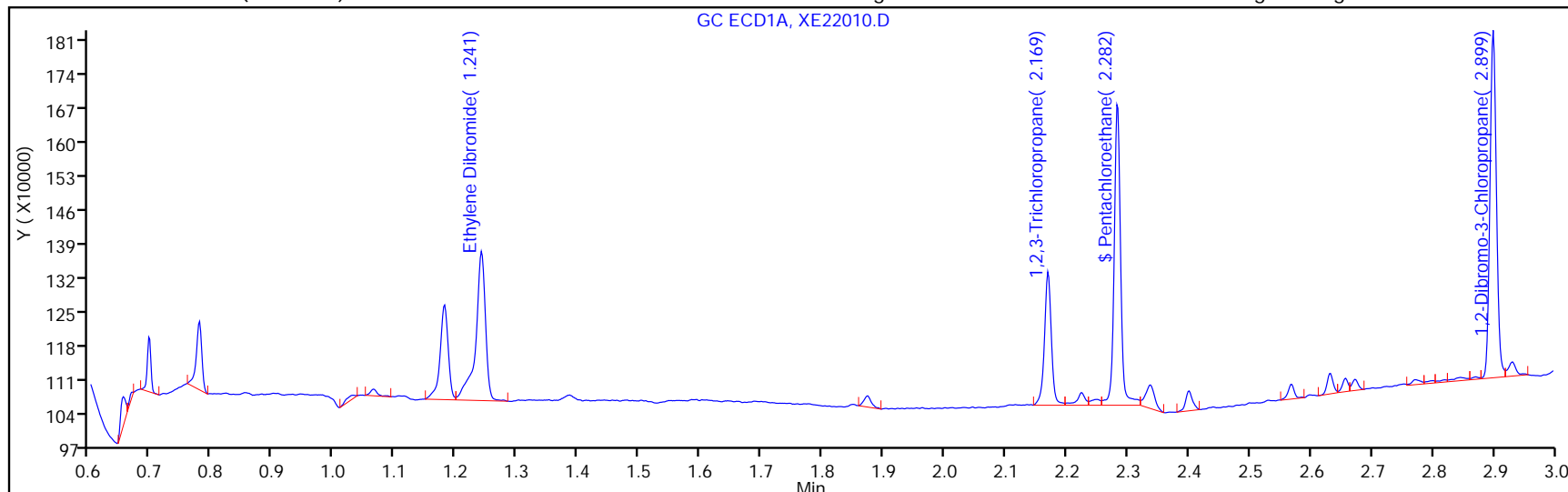
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

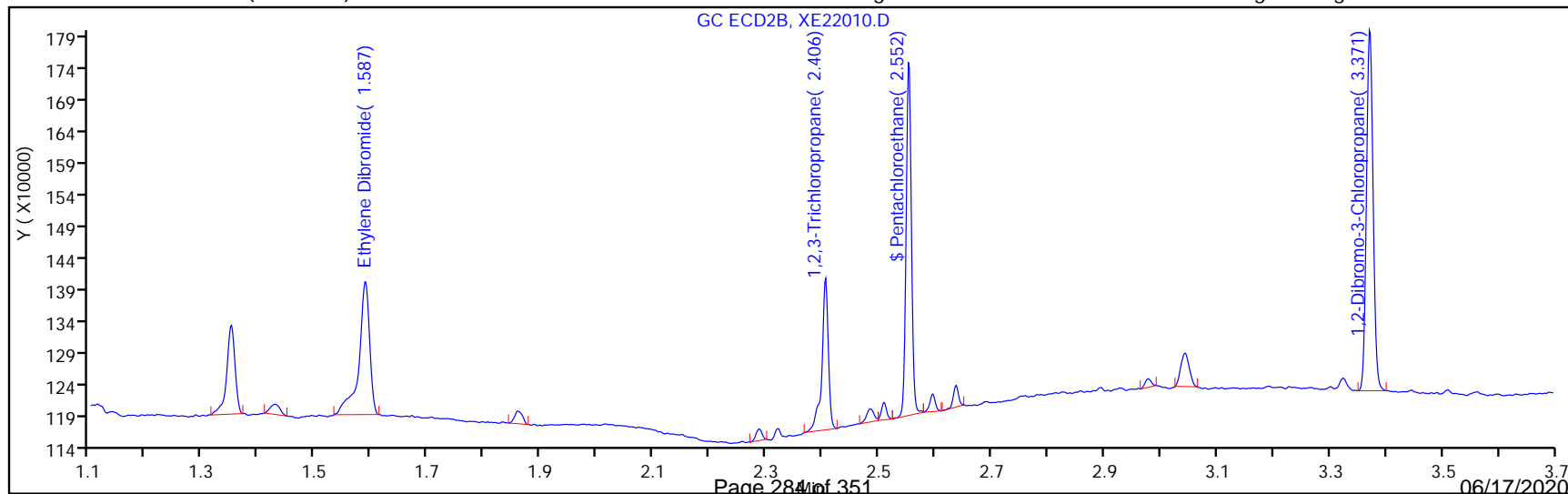
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:10

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D
 Lims ID: IC IV3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 22-May-2020 16:06:56 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-011
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:09 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.242	1.241	0.001	210710	0.6250	0.6542	
2	1.589	1.587	0.002	161561	0.6250	0.6126	
						RPD = 6.56	
3 1,2,3-Trichloropropane							
1	2.171	2.169	0.002	128805	3.13	3.17	
2	2.406	2.406	0.000	107999	3.13	3.14	
						RPD = 1.10	
\$ 4 Pentachloroethane							
1	2.284	2.282	0.002	254174	0.2500	0.2360	
2	2.554	2.552	0.002	210622	0.2500	0.2470	
						RPD = 4.54	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	317307	0.6250	0.6442	
2	3.372	3.371	0.001	277313	0.6250	0.6458	
						RPD = 0.24	

Reagents:

504 WS #1_00168 Amount Added: 20.00 Units: uL

Report Date: 26-May-2020 09:42:10

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22011.D

Injection Date: 22-May-2020 16:06:56

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv3

Worklist Smp#: 11

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

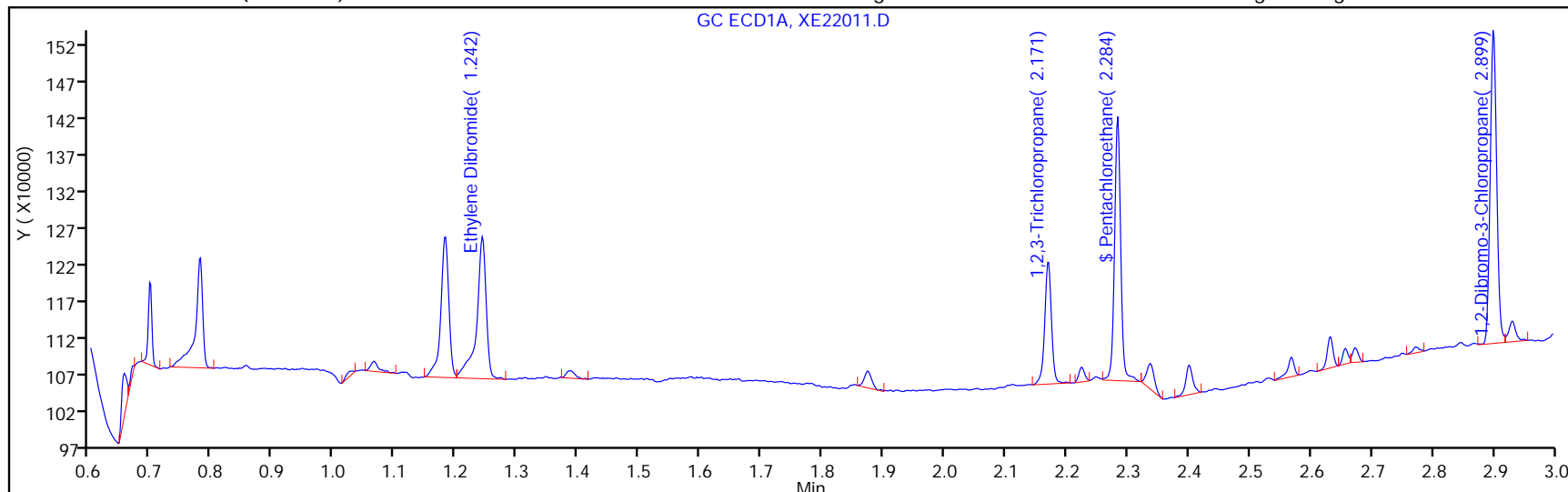
ALS Bottle#: 11

Method: EDBDBCP_CSGX

Limit Group: 504.1

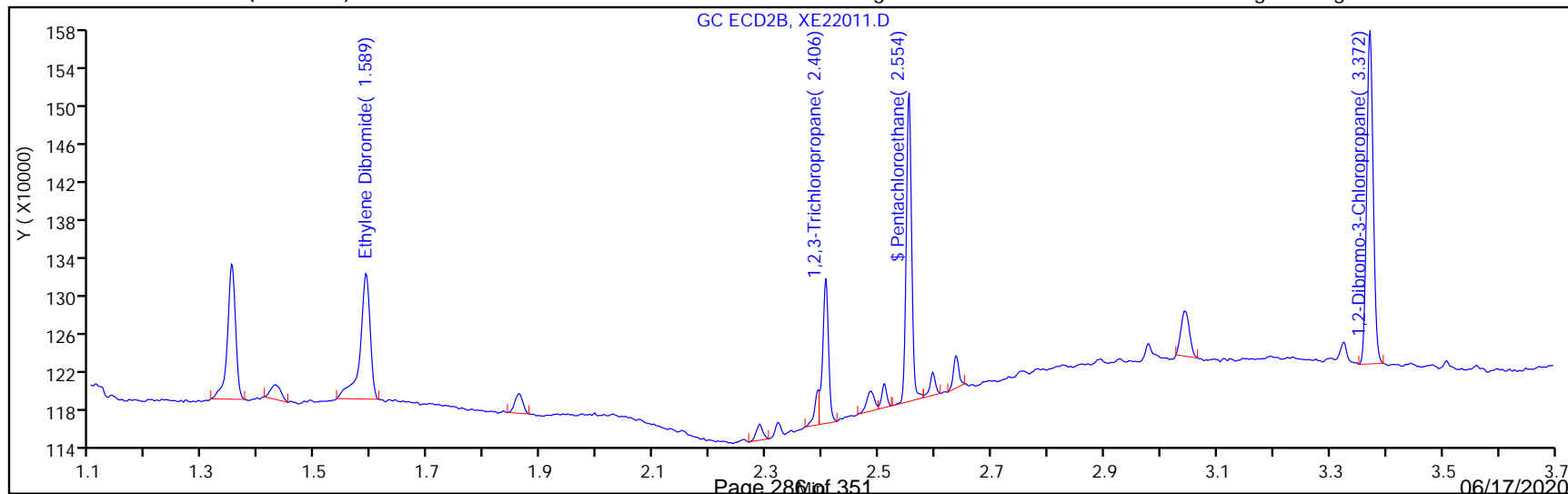
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D
 Lims ID: IC M2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 22-May-2020 16:16:45 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-012
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:11 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canady Date: 26-May-2020 09:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.243	1.241	0.002	103302	0.3125	0.3207	M
2	1.589	1.587	0.002	86794	0.3125	0.3291	M
							RPD = 2.59
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	67958	1.56	1.67	
2	2.406	2.406	0.000	60057	1.56	1.75	
							RPD = 4.15
\$ 4 Pentachloroethane							
1	2.283	2.282	0.001	141091	0.1250	0.1310	
2	2.553	2.552	0.001	105378	0.1250	0.1236	
							RPD = 5.84
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	167380	0.3125	0.3398	
2	3.371	3.371	0.000	143975	0.3125	0.3353	
							RPD = 1.35

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 10.00

Units: uL

Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D

Injection Date: 22-May-2020 16:16:45

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv2

Worklist Smp#: 12

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

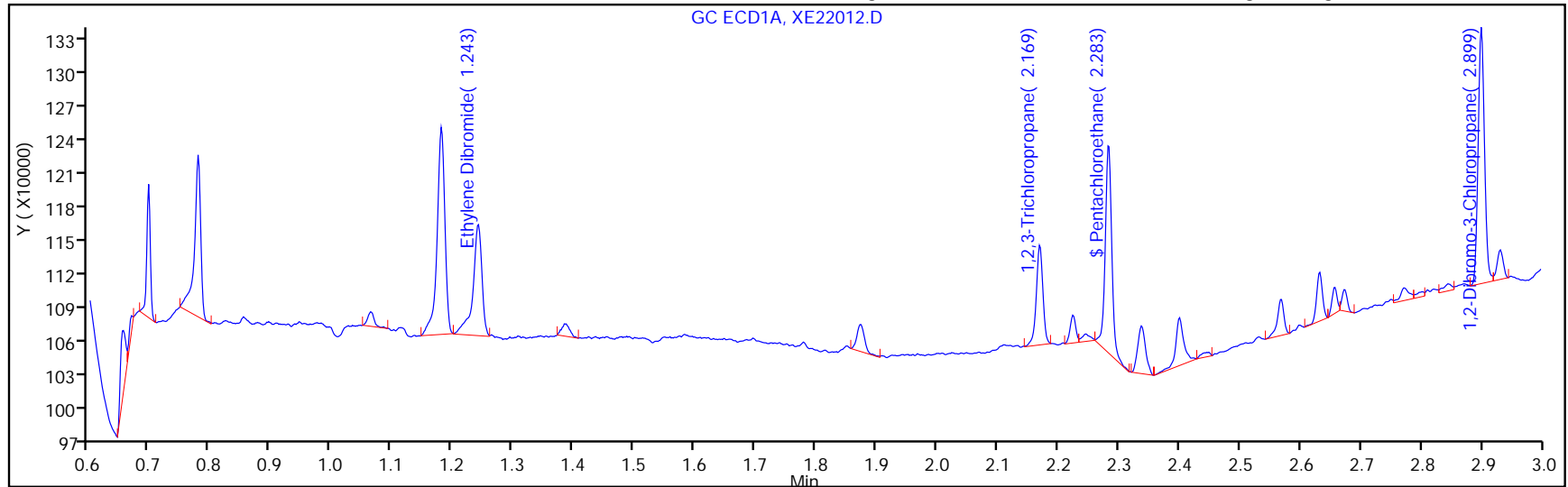
ALS Bottle#: 12

Method: EDBDBCP_CSGX

Limit Group: 504.1

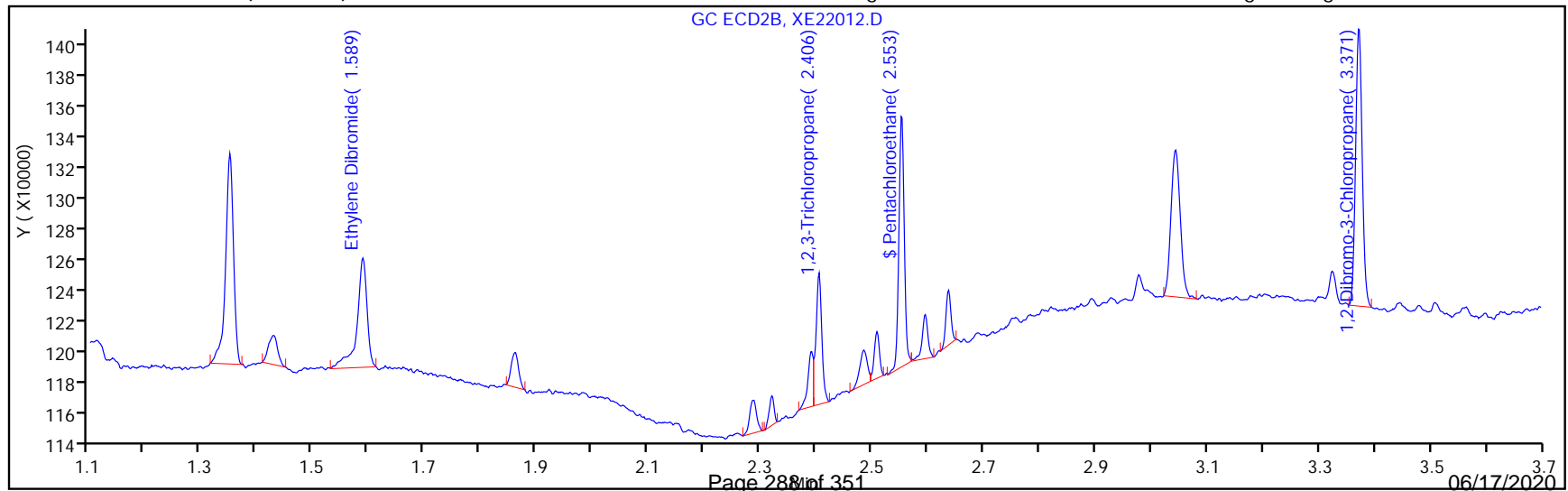
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:11

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

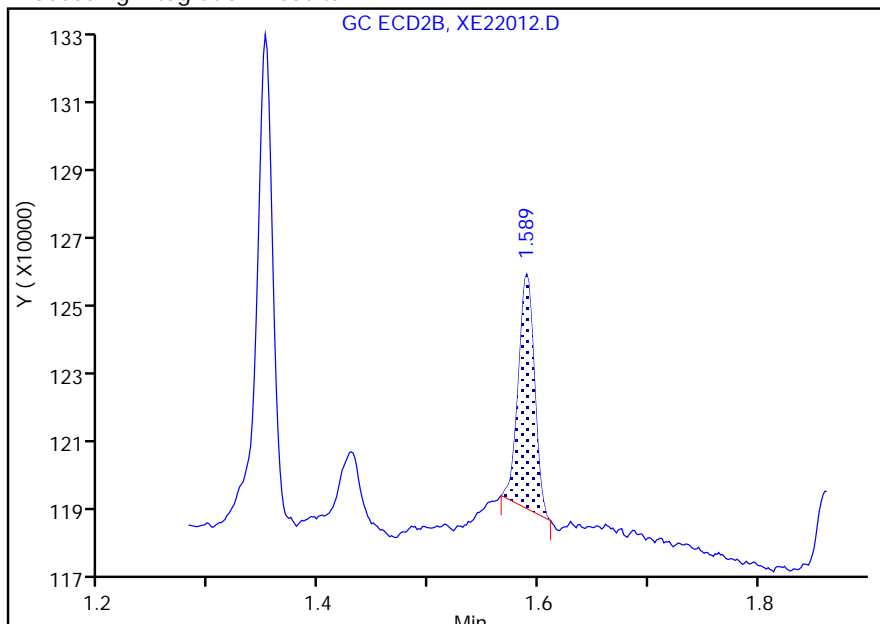
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22012.D		
Injection Date:	22-May-2020 16:16:45	Instrument ID:	CSGX
Lims ID:	IC IV2		
Client ID:			
Operator ID:		ALS Bottle#:	12
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	EEDBCP_CSGX	Limit Group:	504.1
Column:	CLPesticides II (0.25 mm)	Detector:	GC ECD2B
		Worklist Smp#:	12

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

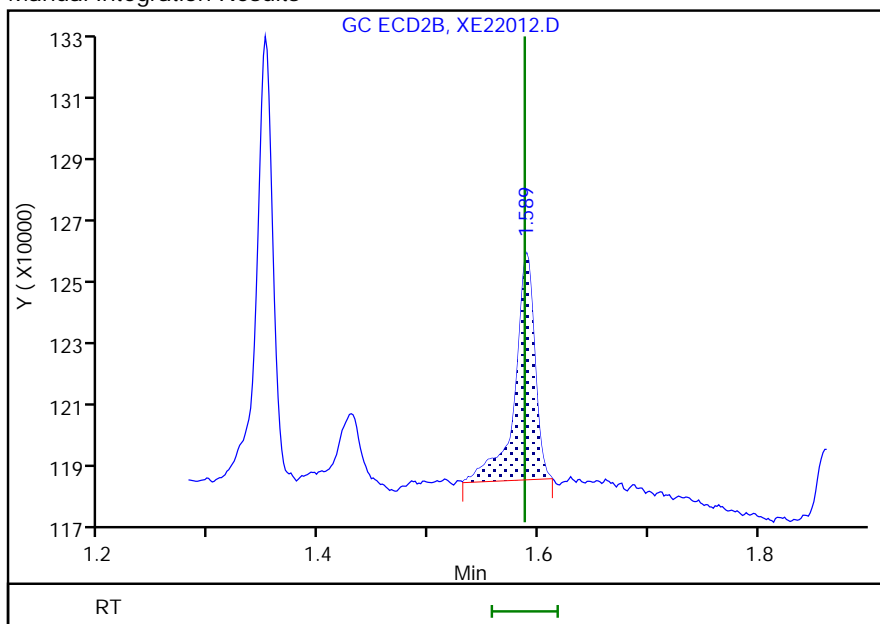
RT: 1.59
 Area: 64740
 Amount: 0.262787
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 86794
 Amount: 0.329122
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:33:41
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Lims ID: IC IV1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 22-May-2020 16:26:32 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-013
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 09:42:12 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:34:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

2 Ethylene Dibromide							M
1	1.241	1.241	0.000	54720	0.1563	0.1699	M
2	1.587	1.587	0.000	44945	0.1563	0.1704	M
RPD = 0.32							
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	37234	0.7813	0.9177	
2	2.406	2.406	0.000	31009	0.7813	0.9015	
RPD = 1.78							
\$ 4 Pentachloroethane							M
1	2.284	2.282	0.002	78296	0.0625	0.0727	M
2	2.552	2.552	0.000	60380	0.0625	0.0708	
RPD = 2.64							
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	89107	0.1563	0.1809	
2	3.371	3.371	0.000	74754	0.1563	0.1741	
RPD = 3.85							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 WS #1_00168

Amount Added: 5.00

Units: uL

Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D

Injection Date: 22-May-2020 16:26:32

Instrument ID: CSGX

Operator ID:

Lims ID: IC Iv1

Worklist Smp#: 13

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

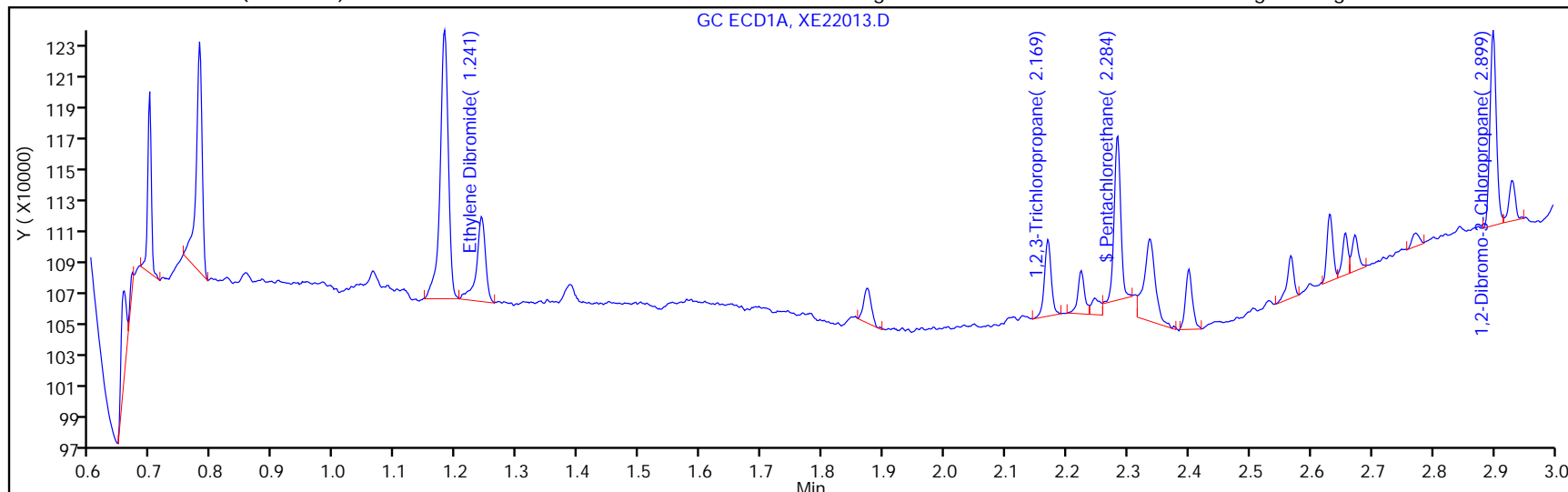
ALS Bottle#: 13

Method: EDBDBCP_CSGX

Limit Group: 504.1

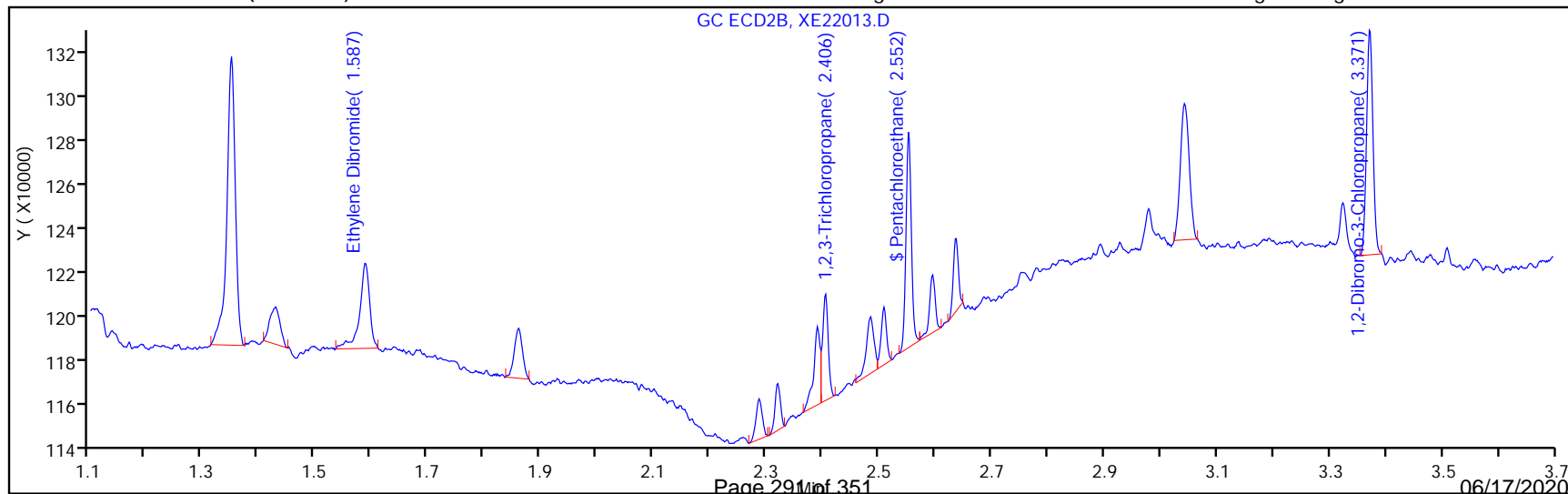
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 09:42:12

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

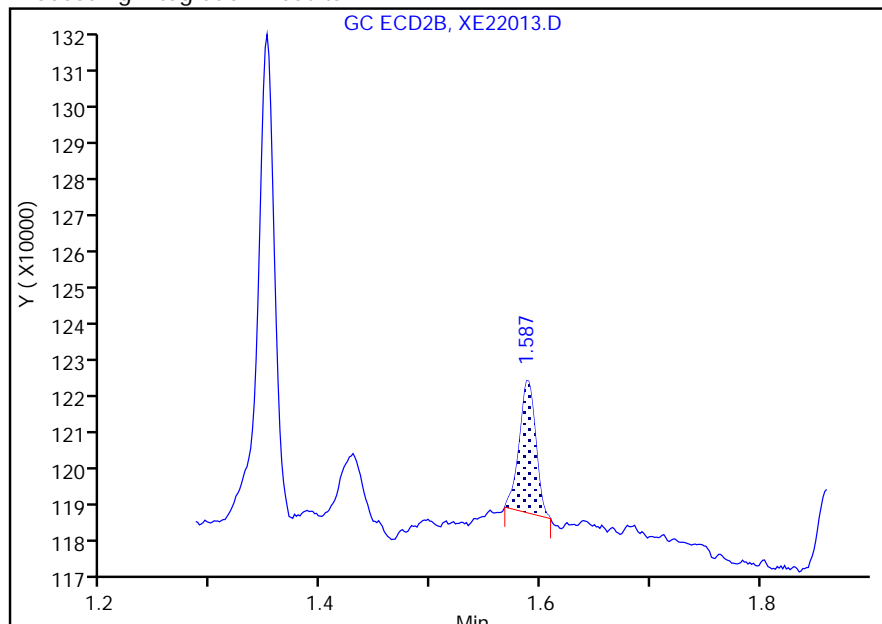
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D	Instrument ID:	CSGX
Injection Date:	22-May-2020 16:26:32		
Lims ID:	IC IV1		
Client ID:			
Operator ID:		ALS Bottle#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000
Method:	EDBDBCP_CSGX	Limit Group:	504.1
Column:	CLPesticides II (0.25 mm)	Detector:	GC ECD2B
		Worklist Smp#:	13

2 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

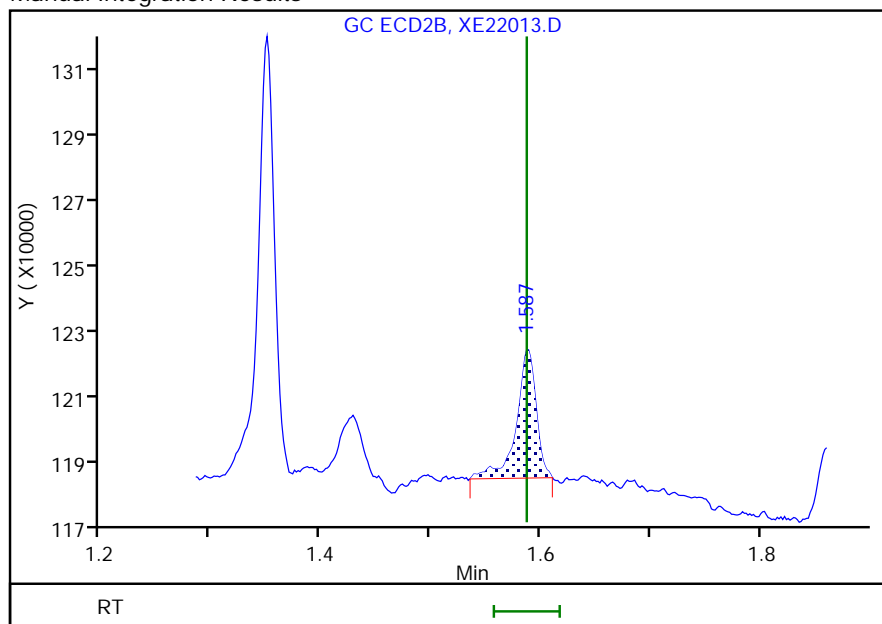
RT: 1.59
 Area: 34279
 Amount: 0.134332
 Amount Units: ng/ml

Processing Integration Results



RT: 1.59
 Area: 44945
 Amount: 0.170431
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:34:22
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322103	302471		1.64	1.75	-6.1	30.0
1,2,3-Trichloropropane	Ave	40573	39818		8.59	8.75	-1.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	492537	484055		1.72	1.75	-1.7	30.0
Pentachloroethane	Ave	1076894	992951		0.403	0.438	-7.8	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-May-2020 16:36:25 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 10:14:46 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canadyd Date: 26-May-2020 09:37:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.240	1.241	-0.001	529325	1.75	1.64	
2	1.587	1.587	0.000	442418	1.75	1.68	
							RPD = 2.07

3 1,2,3-Trichloropropane

1	2.169	2.169	0.000	348410	8.75	8.59	
2	2.405	2.406	-0.001	278027	8.75	8.08	
							RPD = 6.05

\$ 4 Pentachloroethane

1	2.284	2.282	0.002	434416	0.4375	0.4034	M
2	2.552	2.552	0.000	371043	0.4375	0.4351	
							RPD = 7.57

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	847096	1.75	1.72	
2	3.372	3.371	0.001	739379	1.75	1.72	
							RPD = 0.11

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 Spike_00156 Amount Added: 35.00 Units: uL
 504_NewSurr_00126 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D

Injection Date: 22-May-2020 16:36:25

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

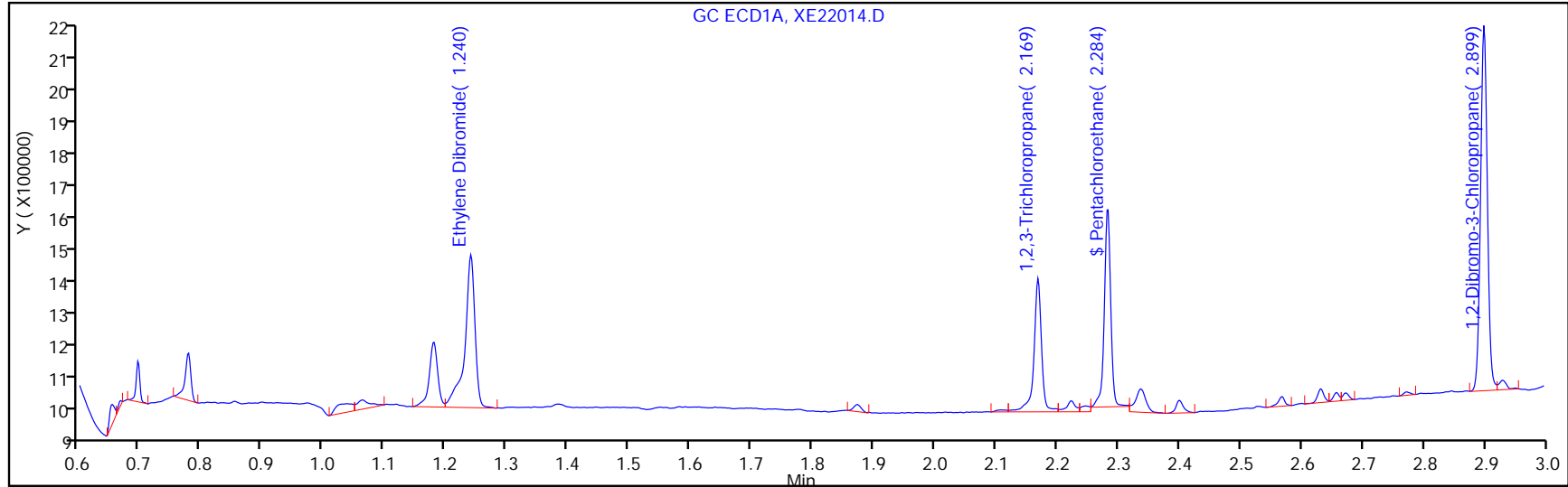
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

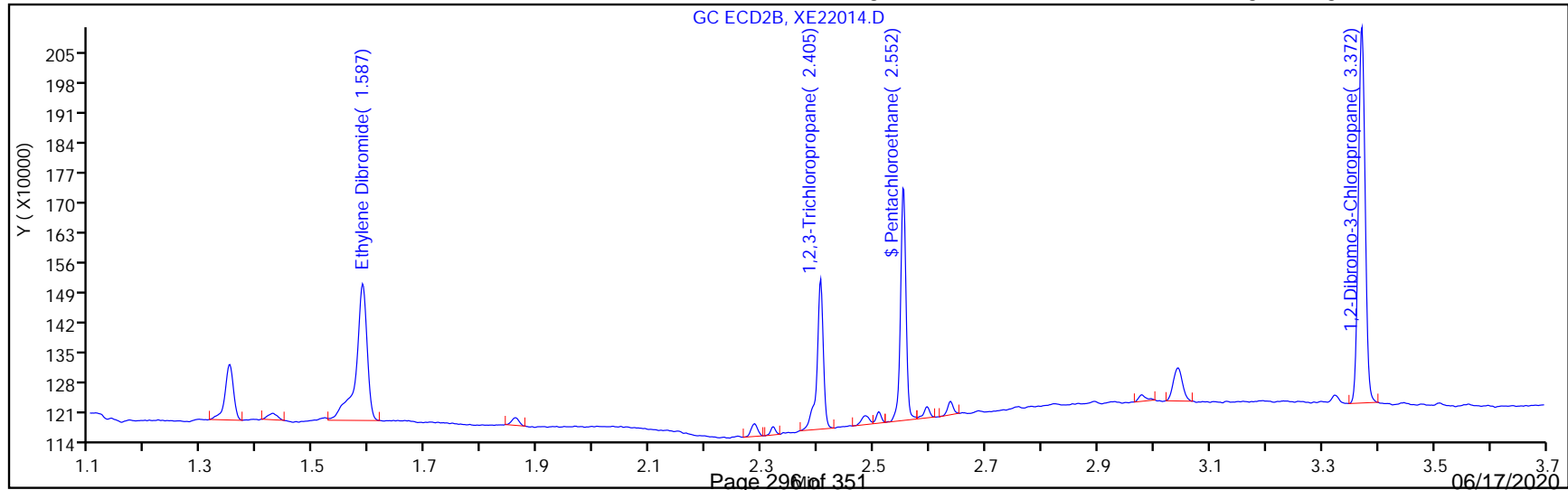
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18
 Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Savannah

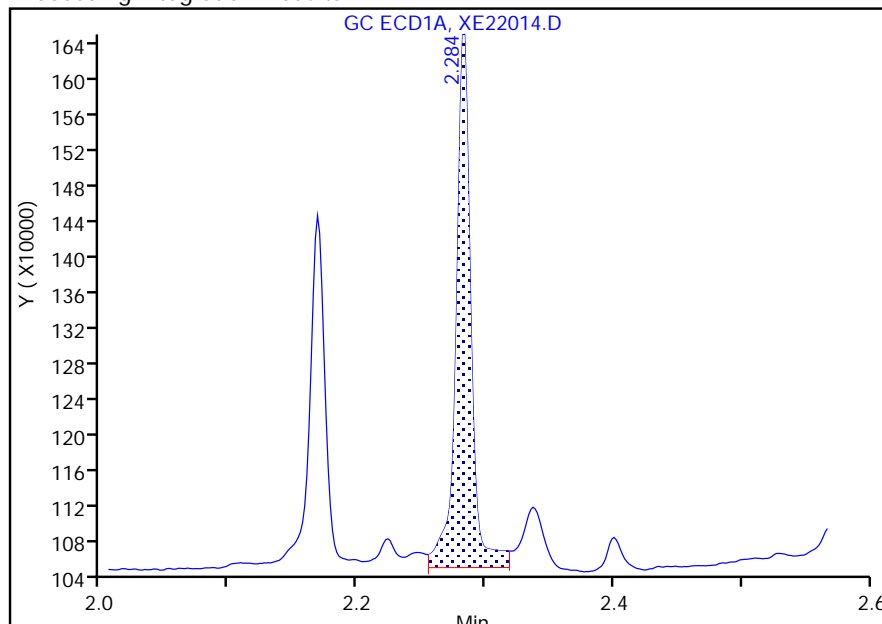
Data File:	\\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D	Instrument ID:	CSGX
Injection Date:	22-May-2020 16:36:25	ALS Bottle#:	14
Lims ID:	ICV	Dil. Factor:	1.0000
Client ID:		Limit Group:	504.1
Operator ID:		Detector:	GC ECD1A
Injection Vol:	2.0 ul	Worklist Smp#:	14
Method:	EDBDBCP_CSGX		
Column:	CLPesticides I (0.25 mm)		

\$ 4 Pentachloroethane, CAS: 76-01-7

Signal: 1

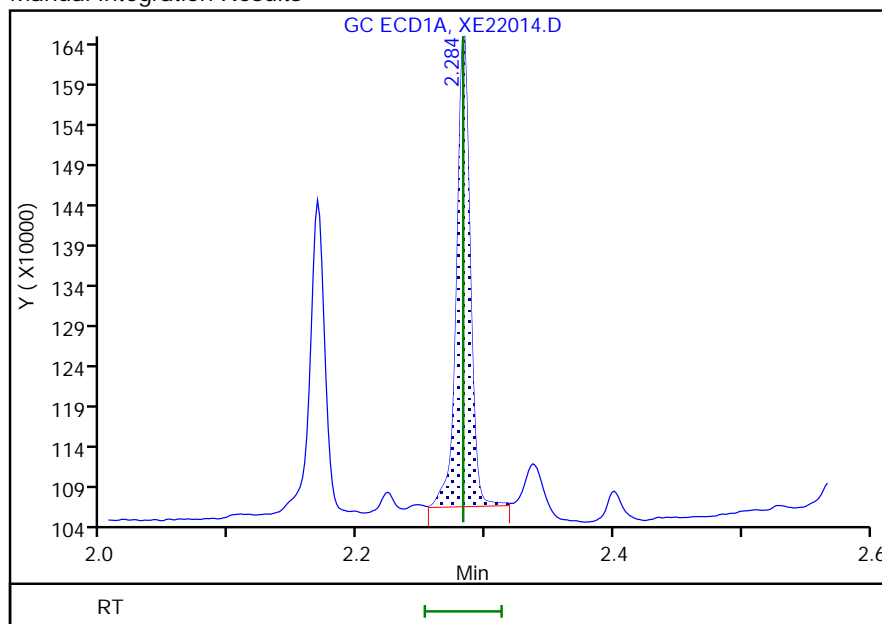
RT: 2.28
 Area: 490185
 Amount: 0.455184
 Amount Units: ng/ml

Processing Integration Results



RT: 2.28
 Area: 434416
 Amount: 0.403397
 Amount Units: ng/ml

Manual Integration Results



Reviewer: canadyd, 26-May-2020 09:37:01
 Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing
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06/17/2020
 September 2020

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263713	252810		1.68	1.75	-4.1	30.0
1,2,3-Trichloropropane	Ave	34397	31775		8.08	8.75	-7.6	30.0
1,2-Dibromo-3-Chloropropane	Ave	429430	422502		1.72	1.75	-1.6	30.0
Pentachloroethane	Ave	852717	848098		0.435	0.438	-0.5	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: ICV 680-619731/14 Calibration Date: 05/22/2020 16:36
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XE22014.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.41	2.38	2.44
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D
 Lims ID: ICV
 Client ID:
 Sample Type: CCV
 Inject. Date: 22-May-2020 16:36:25 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0063886-014
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 26-May-2020 10:14:46 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1021

First Level Reviewer: canady Date: 26-May-2020 09:37:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.240	1.241	-0.001	529325	1.75	1.64	
2	1.587	1.587	0.000	442418	1.75	1.68	
							RPD = 2.07

3 1,2,3-Trichloropropane

1	2.169	2.169	0.000	348410	8.75	8.59	
2	2.405	2.406	-0.001	278027	8.75	8.08	
							RPD = 6.05

\$ 4 Pentachloroethane

1	2.284	2.282	0.002	434416	0.4375	0.4034	M
2	2.552	2.552	0.000	371043	0.4375	0.4351	
							RPD = 7.57

5 1,2-Dibromo-3-Chloropropane

1	2.899	2.899	0.000	847096	1.75	1.72	
2	3.372	3.371	0.001	739379	1.75	1.72	
							RPD = 0.11

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

504 Spike_00156 Amount Added: 35.00 Units: uL
 504_NewSurr_00126 Amount Added: 35.00 Units: uL

Report Date: 26-May-2020 10:14:46

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22014.D

Injection Date: 22-May-2020 16:36:25

Instrument ID: CSGX

Operator ID:

Lims ID: ICV

Worklist Smp#: 14

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

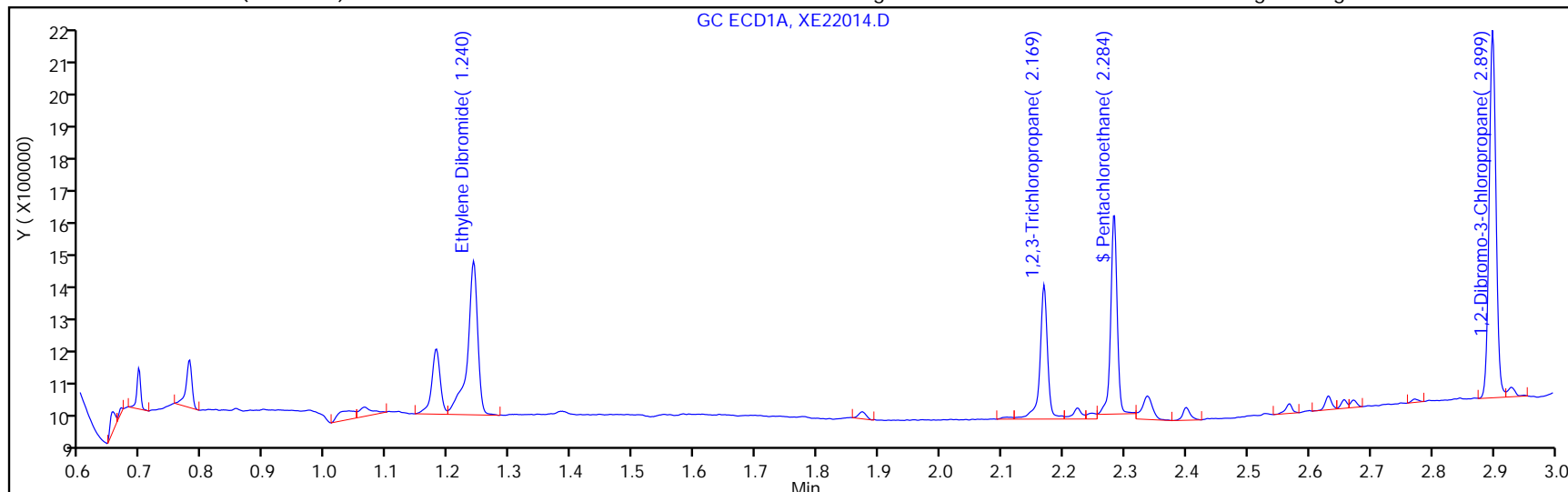
ALS Bottle#: 14

Method: EDBDBCP_CSGX

Limit Group: 504.1

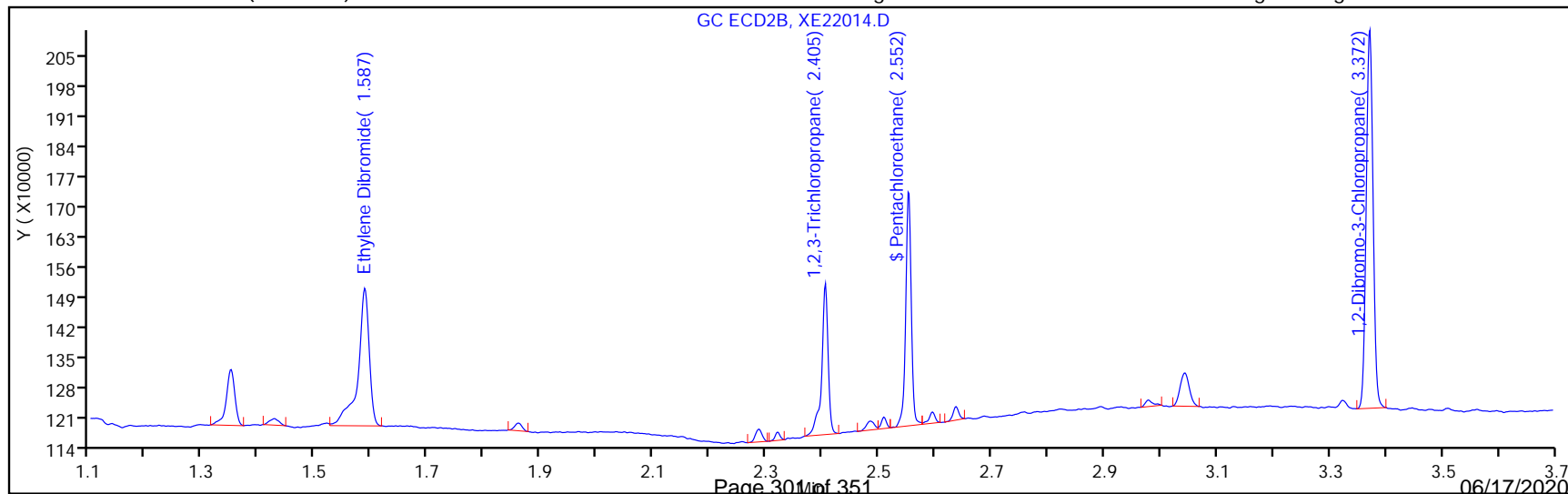
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322103	308134		1.49	1.56	-4.3	30.0
1,2,3-Trichloropropane	Ave	40573	37537		7.23	7.81	-7.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	492537	491359		1.56	1.56	-0.2	30.0
Pentachloroethane	Ave	1076894	1027616		0.596	0.625	-4.6	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 15:34:45 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.063	1.063	0.000	4001585	7.00	7.09	
2	1.431	1.431	0.000	3321831	7.00	7.06	
						RPD = 0.47	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	481459	1.56	1.49	
2	1.588	1.588	0.000	398156	1.56	1.51	
						RPD = 1.00	
3 1,2,3-Trichloropropane							
1	2.170	2.170	0.000	293257	7.81	7.23	
2	2.405	2.405	0.000	249942	7.81	7.27	
						RPD = 0.53	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	642260	0.6250	0.5964	
2	2.553	2.553	0.000	552269	0.6250	0.6477	
						RPD = 8.24	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.898	0.000	767749	1.56	1.56	
2	3.371	3.371	0.000	662037	1.56	1.54	
						RPD = 1.10	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D

Injection Date: 05-Jun-2020 15:34:45

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvi5

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

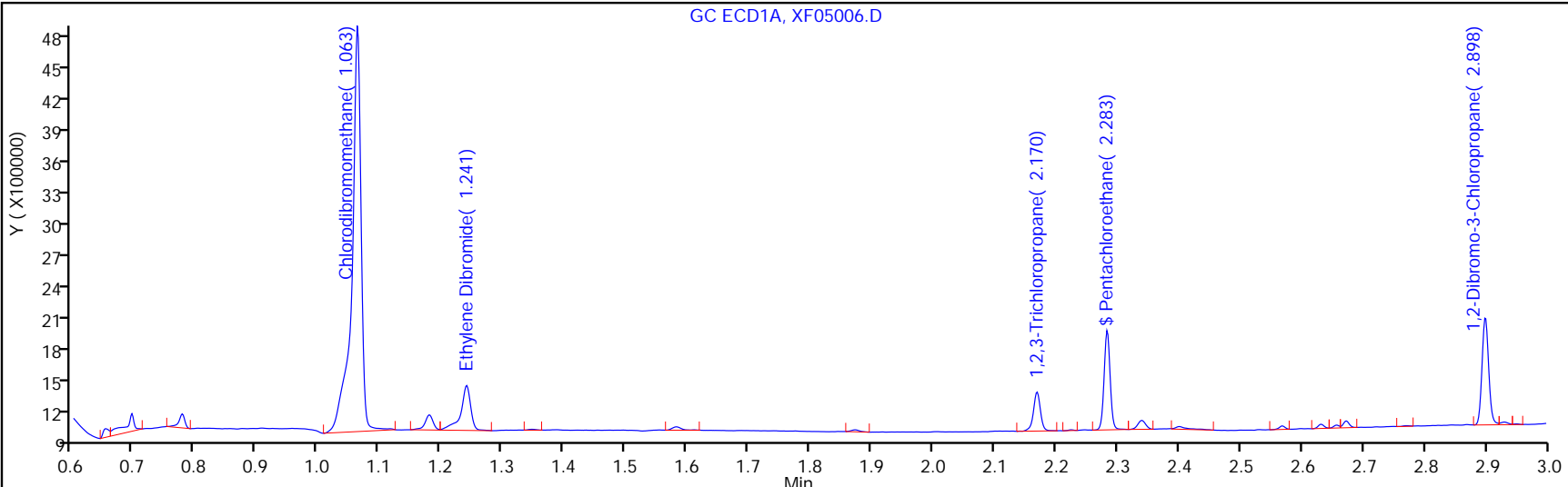
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

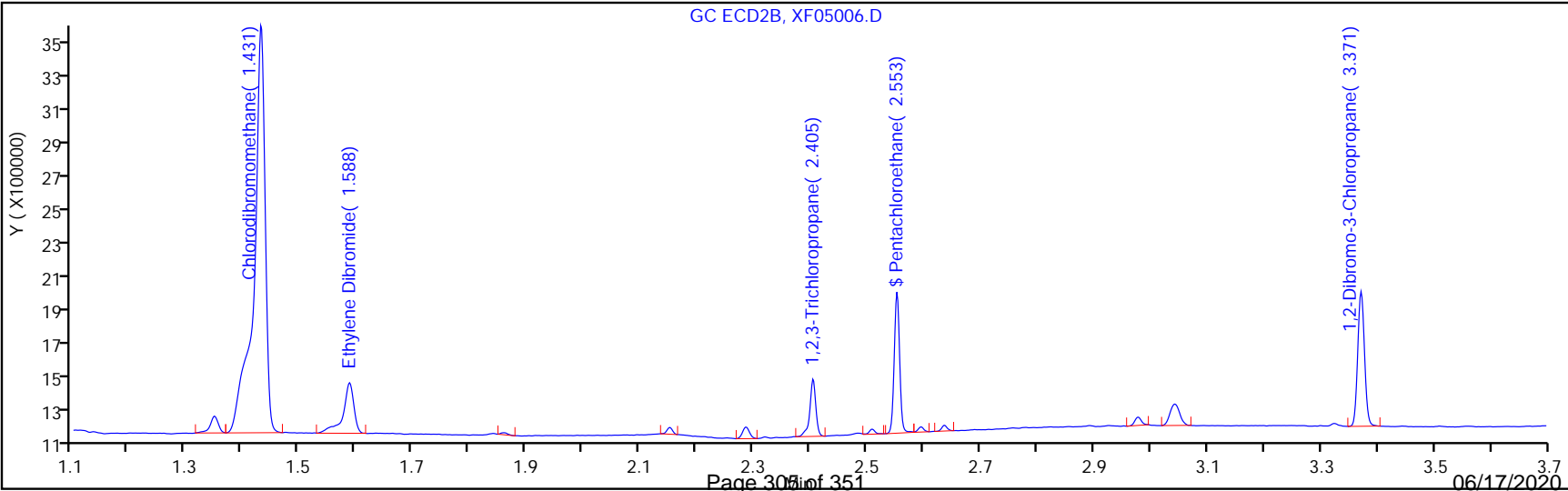
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263713	254820		1.51	1.56	-3.4	30.0
1,2,3-Trichloropropane	Ave	34397	31993		7.27	7.81	-7.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	429430	423704		1.54	1.56	-1.3	30.0
Pentachloroethane	Ave	852717	883630		0.648	0.625	3.6	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/6 Calibration Date: 06/05/2020 15:34
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05006.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.41	2.38	2.44
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D
 Lims ID: CCV lvl5
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 15:34:45 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-006
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub2
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
-----	-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Chlorodibromomethane							
1	1.063	1.063	0.000	4001585	7.00	7.09	
2	1.431	1.431	0.000	3321831	7.00	7.06	
						RPD = 0.47	
2 Ethylene Dibromide							
1	1.241	1.241	0.000	481459	1.56	1.49	
2	1.588	1.588	0.000	398156	1.56	1.51	
						RPD = 1.00	
3 1,2,3-Trichloropropane							
1	2.170	2.170	0.000	293257	7.81	7.23	
2	2.405	2.405	0.000	249942	7.81	7.27	
						RPD = 0.53	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	642260	0.6250	0.5964	
2	2.553	2.553	0.000	552269	0.6250	0.6477	
						RPD = 8.24	
5 1,2-Dibromo-3-Chloropropane							
1	2.898	2.898	0.000	767749	1.56	1.56	
2	3.371	3.371	0.000	662037	1.56	1.54	
						RPD = 1.10	

Reagents:

504 WS #1_00168 Amount Added: 50.00 Units: uL
 504-DBCM_00132 Amount Added: 50.00 Units: uL

Report Date: 08-Jun-2020 10:57:34

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05006.D

Injection Date: 05-Jun-2020 15:34:45

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lvl5

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

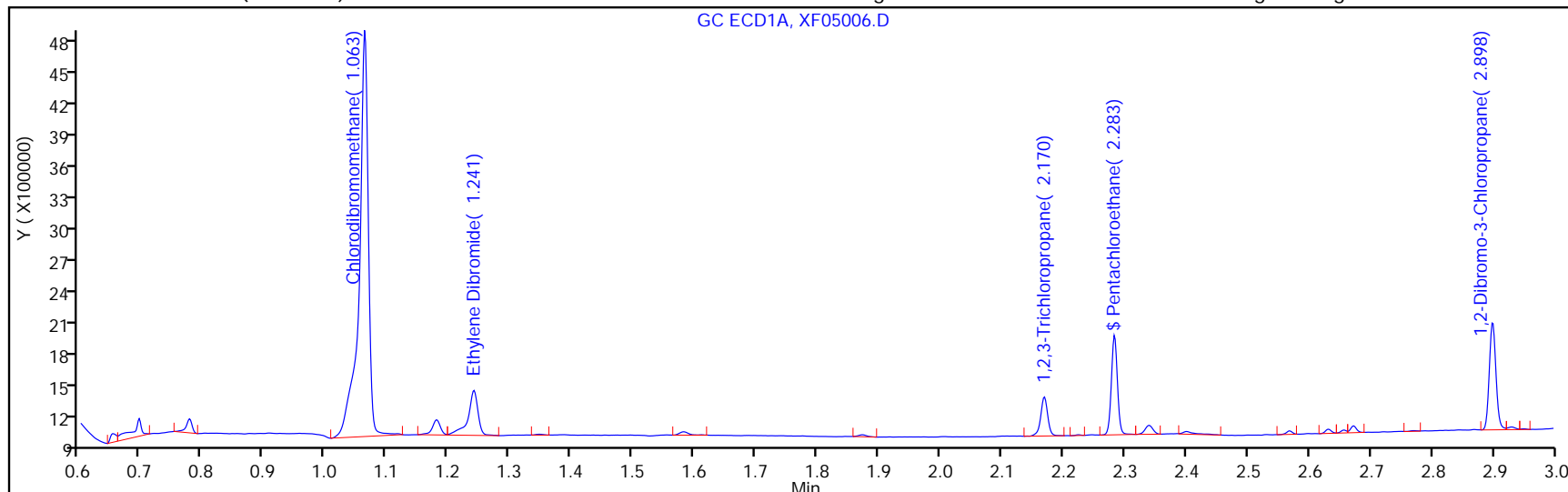
ALS Bottle#: 6

Method: EDBDBCP_CSGX

Limit Group: 504.1

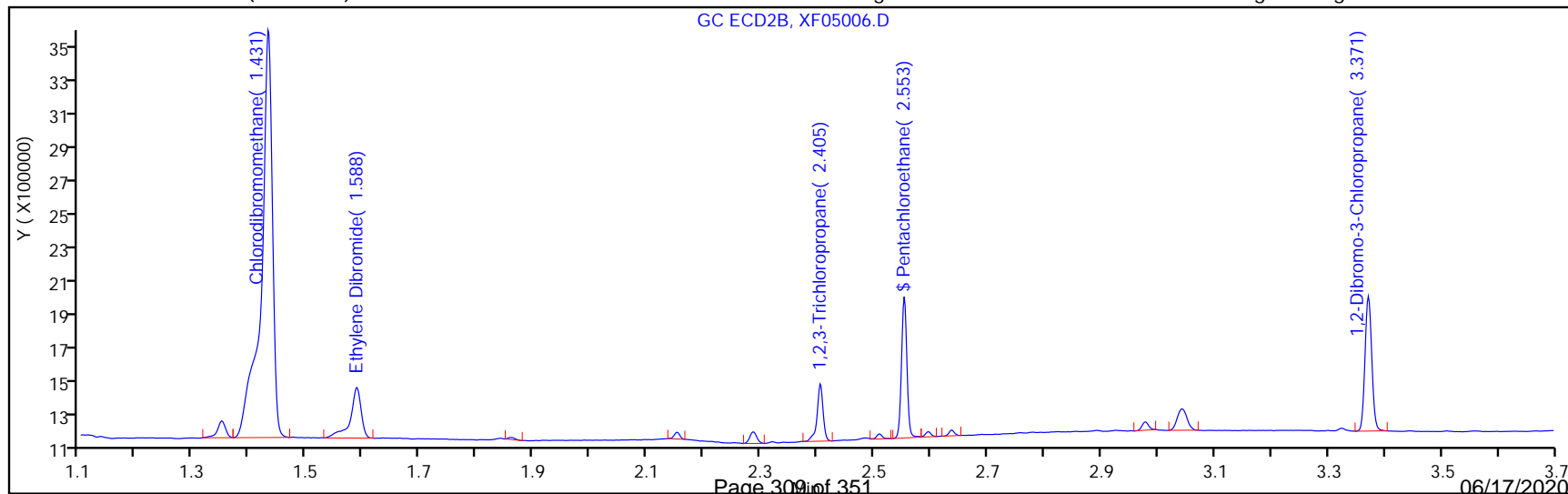
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	322103	298204		1.01	1.09	-7.4	30.0
1,2,3-Trichloropropane	Ave	40573	40589		5.47	5.47	0.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	492537	501384		1.11	1.09	1.8	30.0
Pentachloroethane	Ave	1076894	929614		0.378	0.438	-13.7	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP I 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.24	1.21	1.27
1,2,3-Trichloropropane	2.17	2.14	2.20
1,2-Dibromo-3-Chloropropane	2.90	2.87	2.93
Pentachloroethane	2.28	2.25	2.31

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D
 Lims ID: CCV lvl4
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 20:19:19 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-035
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	326161	1.09	1.01	
2	1.588	1.588	0.000	275853	1.09	1.05	
						RPD = 3.25	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	221973	5.47	5.47	
2	2.404	2.404	0.000	182292	5.47	5.30	
						RPD = 3.18	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	406706	0.4375	0.3777	
2	2.553	2.553	0.000	378275	0.4375	0.4436	
						RPD = 16.06	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	548389	1.09	1.11	
2	3.371	3.371	0.000	461405	1.09	1.07	
						RPD = 3.56	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D

Injection Date: 05-Jun-2020 20:19:19

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lml4

Worklist Smp#: 35

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

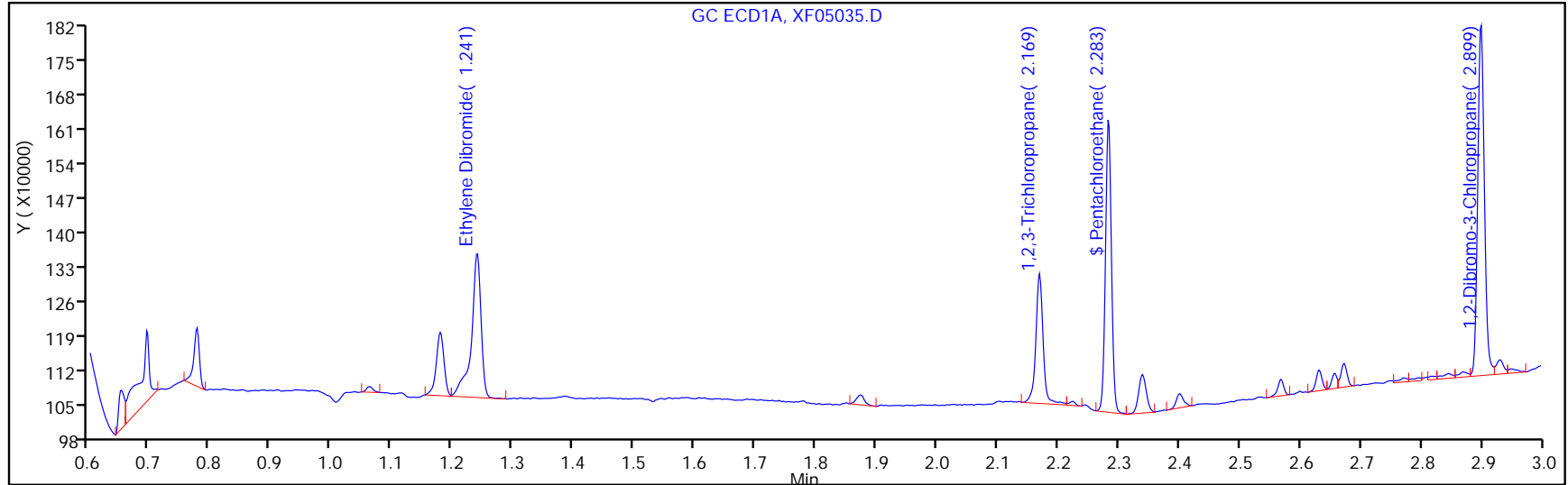
ALS Bottle#: 35

Method: EDBDBCP_CSGX

Limit Group: 504.1

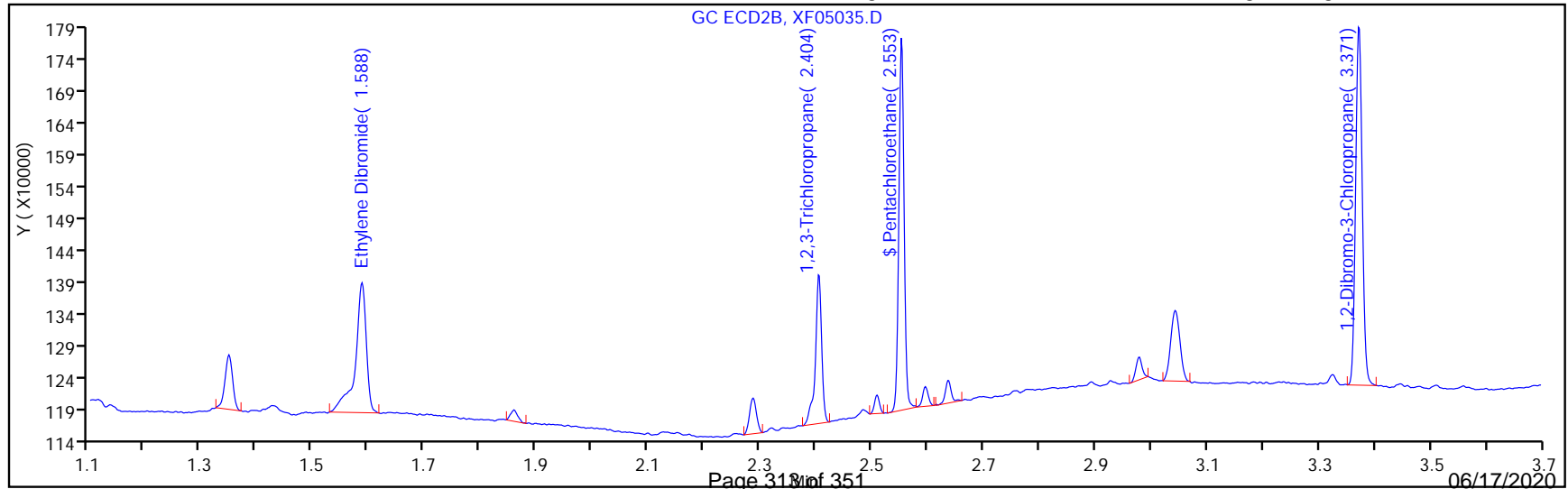
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylene Dibromide	Ave	263713	252208		1.05	1.09	-4.4	30.0
1,2,3-Trichloropropane	Ave	34397	33333		5.30	5.47	-3.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	429430	421856		1.07	1.09	-1.8	30.0
Pentachloroethane	Ave	852717	864629		0.444	0.438	1.4	30.0

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Lab Sample ID: CCV 680-621463/35 Calibration Date: 06/05/2020 20:19
 Instrument ID: CSGX Calib Start Date: 05/22/2020 15:18
 GC Column: CLP II 0.25 ID: 0.25 (mm) Calib End Date: 05/22/2020 16:26
 Lab File ID: XF05035.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene Dibromide	1.59	1.56	1.62
1,2,3-Trichloropropane	2.40	2.37	2.43
1,2-Dibromo-3-Chloropropane	3.37	3.34	3.40
Pentachloroethane	2.55	2.52	2.58

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D
 Lims ID: CCV Iv4
 Client ID:
 Sample Type: CCV
 Inject. Date: 05-Jun-2020 20:19:19 ALS Bottle#: 35 Worklist Smp#: 35
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-035
 Operator ID: Instrument ID: CSGX
 Sublist: chrom-EDBDBCP_CSGX*sub1
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.241	1.241	0.000	326161	1.09	1.01	
2	1.588	1.588	0.000	275853	1.09	1.05	
						RPD = 3.25	
3 1,2,3-Trichloropropane							
1	2.169	2.169	0.000	221973	5.47	5.47	
2	2.404	2.404	0.000	182292	5.47	5.30	
						RPD = 3.18	
\$ 4 Pentachloroethane							
1	2.283	2.283	0.000	406706	0.4375	0.3777	
2	2.553	2.553	0.000	378275	0.4375	0.4436	
						RPD = 16.06	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.899	0.000	548389	1.09	1.11	
2	3.371	3.371	0.000	461405	1.09	1.07	
						RPD = 3.56	

Reagents:

504 WS #1_00168 Amount Added: 35.00 Units: uL

Report Date: 08-Jun-2020 10:57:51

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05035.D

Injection Date: 05-Jun-2020 20:19:19

Instrument ID: CSGX

Operator ID:

Lims ID: CCV lml4

Worklist Smp#: 35

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

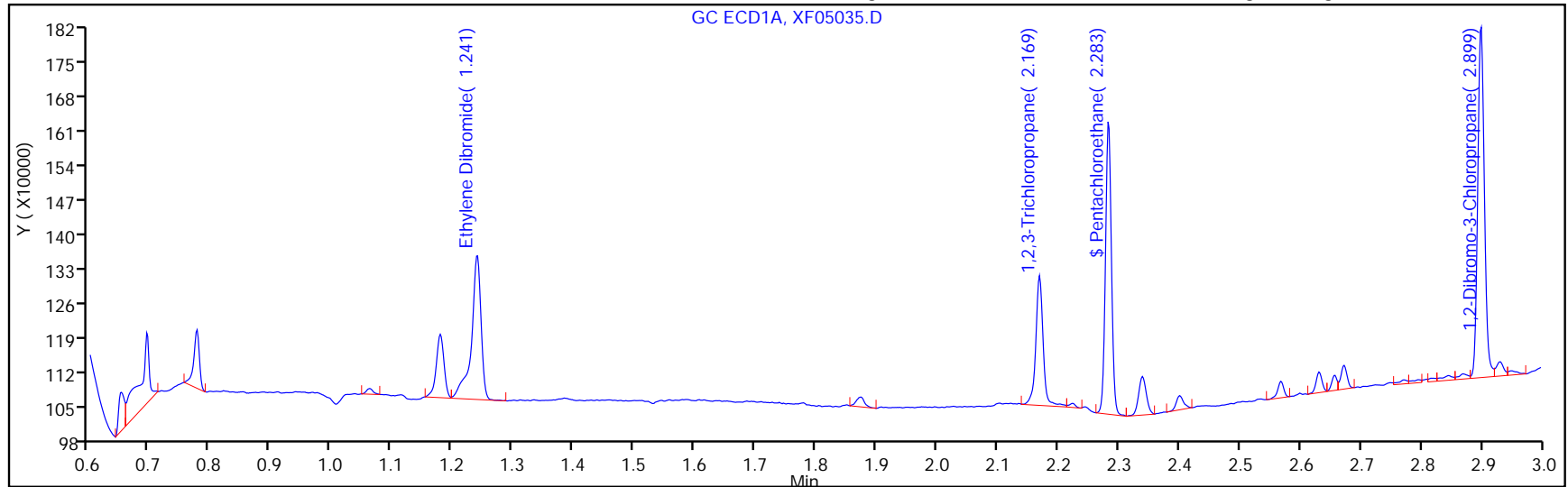
ALS Bottle#: 35

Method: EDBDBCP_CSGX

Limit Group: 504.1

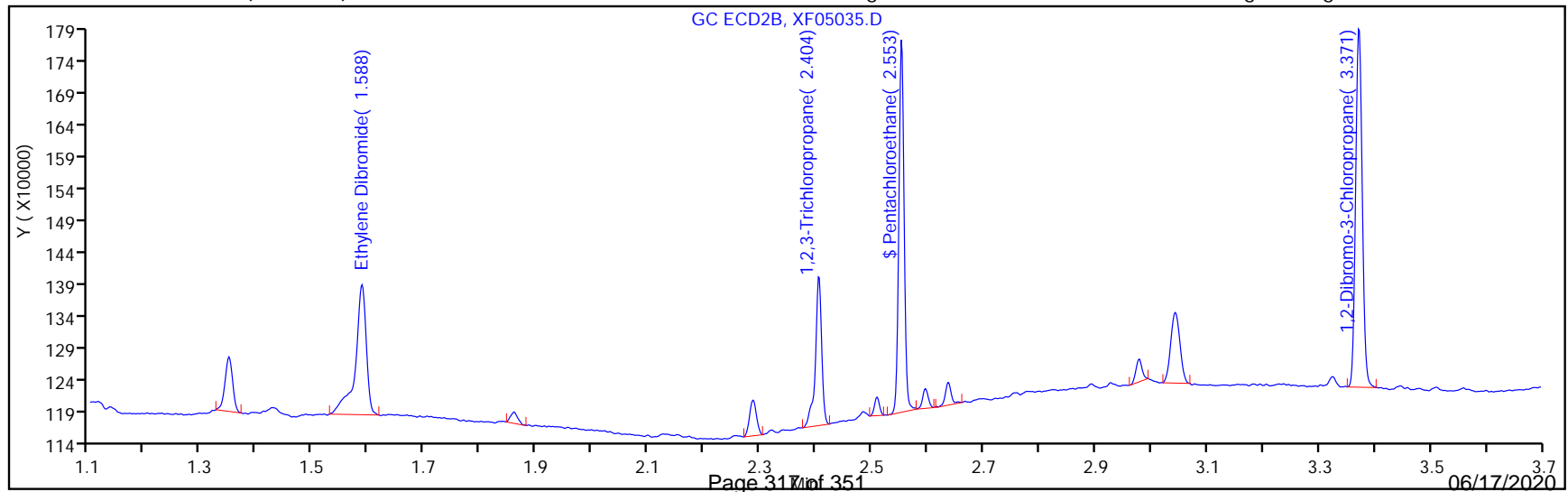
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 680-621423/3-A
 Matrix: Water Lab File ID: XF05008.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35 (mL) Date Analyzed: 06/05/2020 15:54
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP I 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	101		70-130

Report Date: 08-Jun-2020 10:57:36

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05008.D
 Lims ID: MB 680-621423/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Jun-2020 15:54:22 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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\$ 4 Pentachloroethane

1	2.282	2.283	-0.001	477536	0.4375	0.4434	
2	2.552	2.553	-0.001	374287	0.4375	0.4389	

RPD = 1.02

Report Date: 08-Jun-2020 10:57:36

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05008.D

Injection Date: 05-Jun-2020 15:54:22

Instrument ID: CSGX

Operator ID:

Lims ID: MB 680-621423/3-A

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

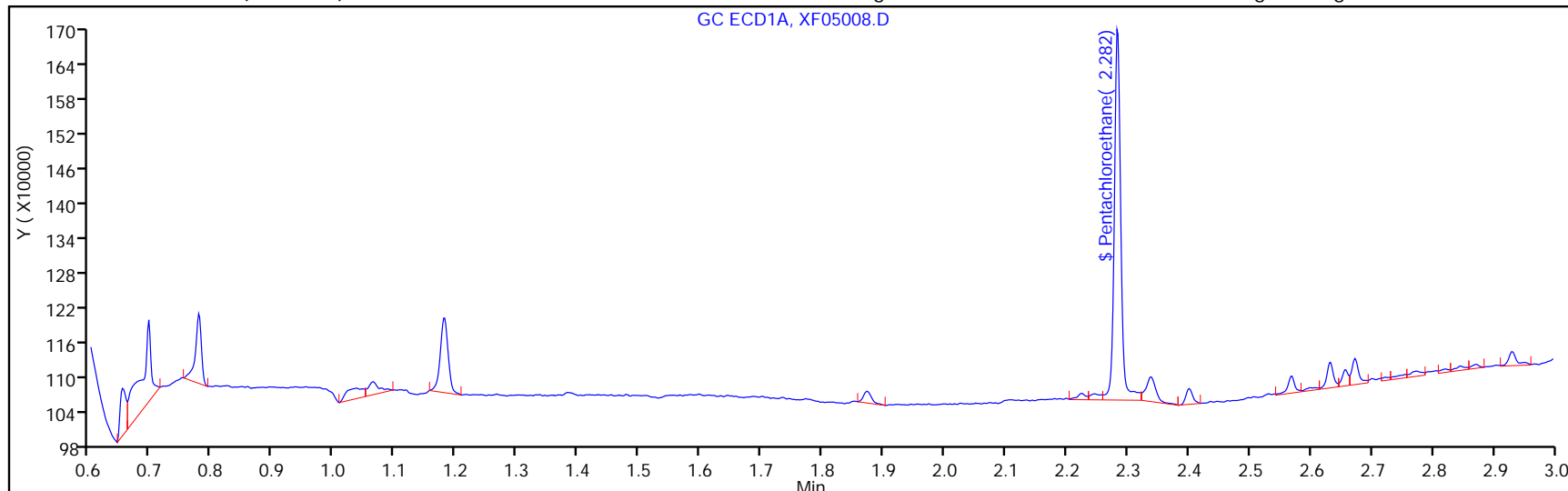
ALS Bottle#: 8

Method: EDBDBCP_CSGX

Limit Group: 504.1

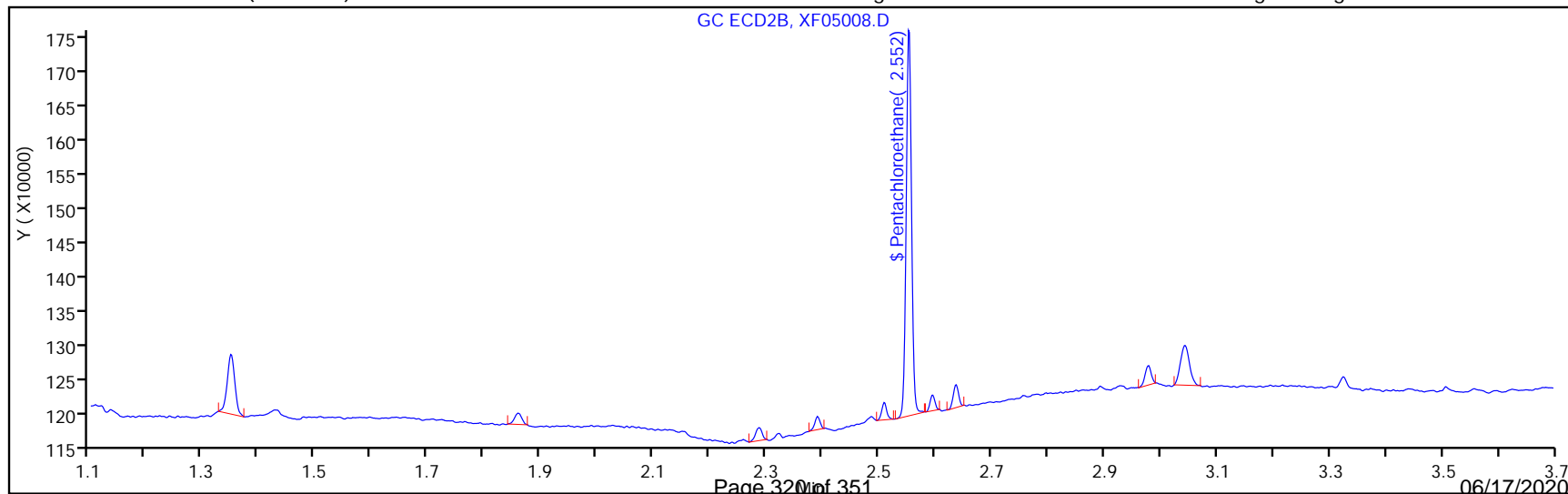
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:36

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05008.D
 Lims ID: MB 680-621423/3-A
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Jun-2020 15:54:22 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-008
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4434	101.36

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4389	100.33

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/7
 Matrix: Water Lab File ID: XF05007.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 15:44
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 15:44:33 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-007
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052
 First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D

Injection Date: 05-Jun-2020 15:44:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

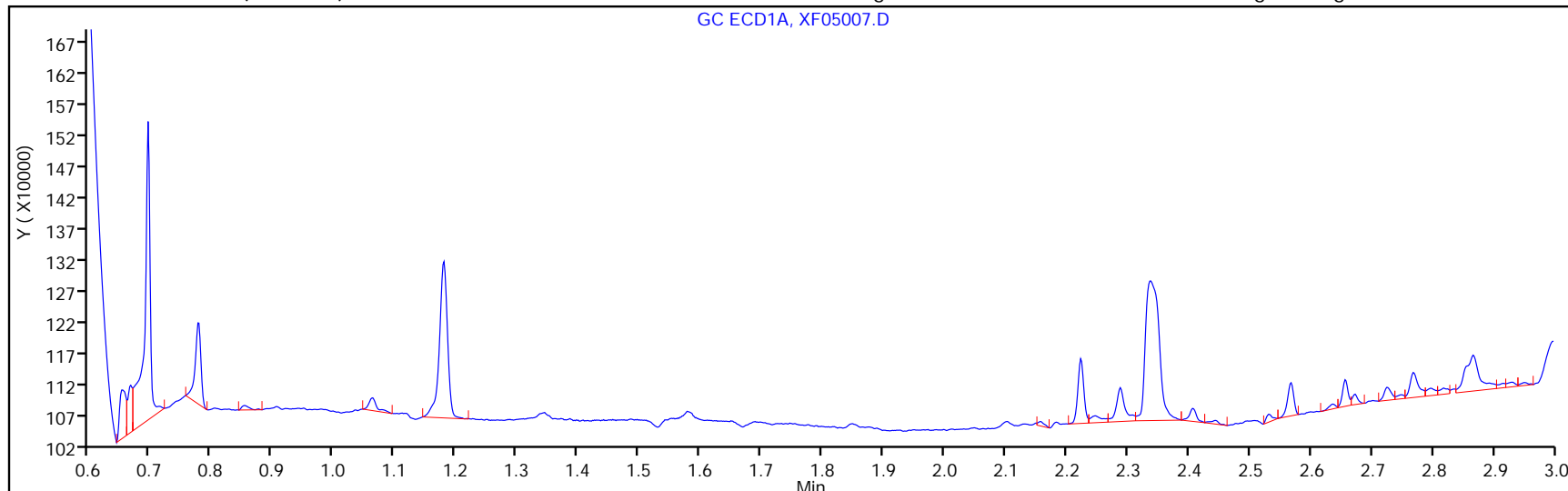
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

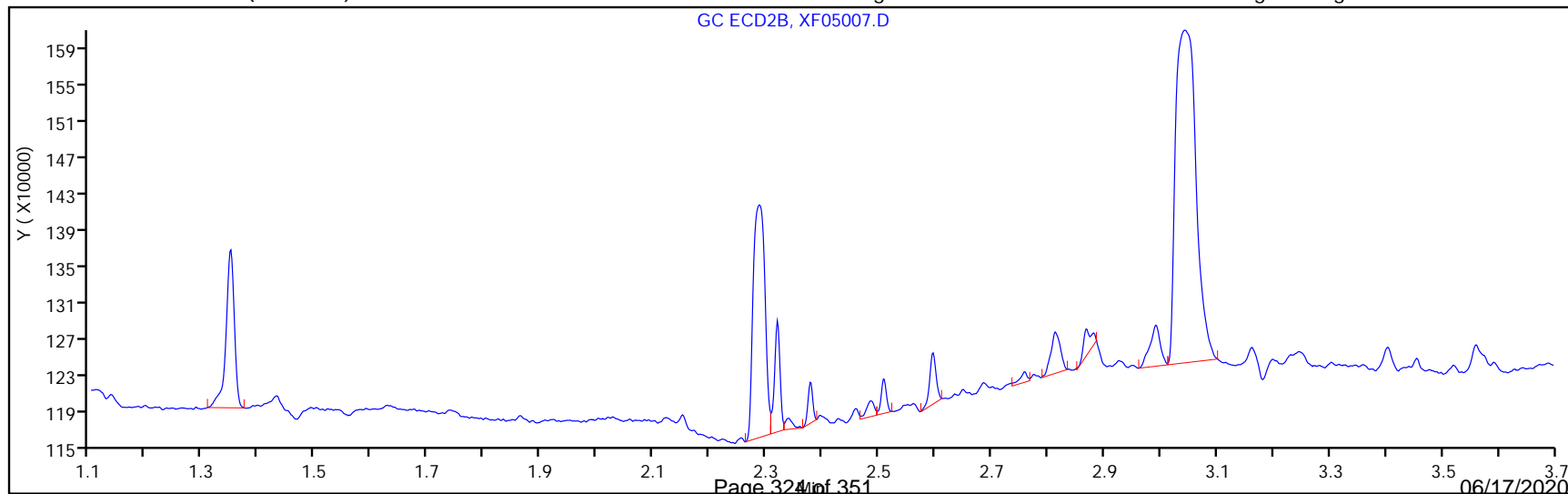
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/7
 Matrix: Water Lab File ID: XF05007.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 15:44
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 15:44:33 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-007
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052
 First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:35

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05007.D

Injection Date: 05-Jun-2020 15:44:33

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

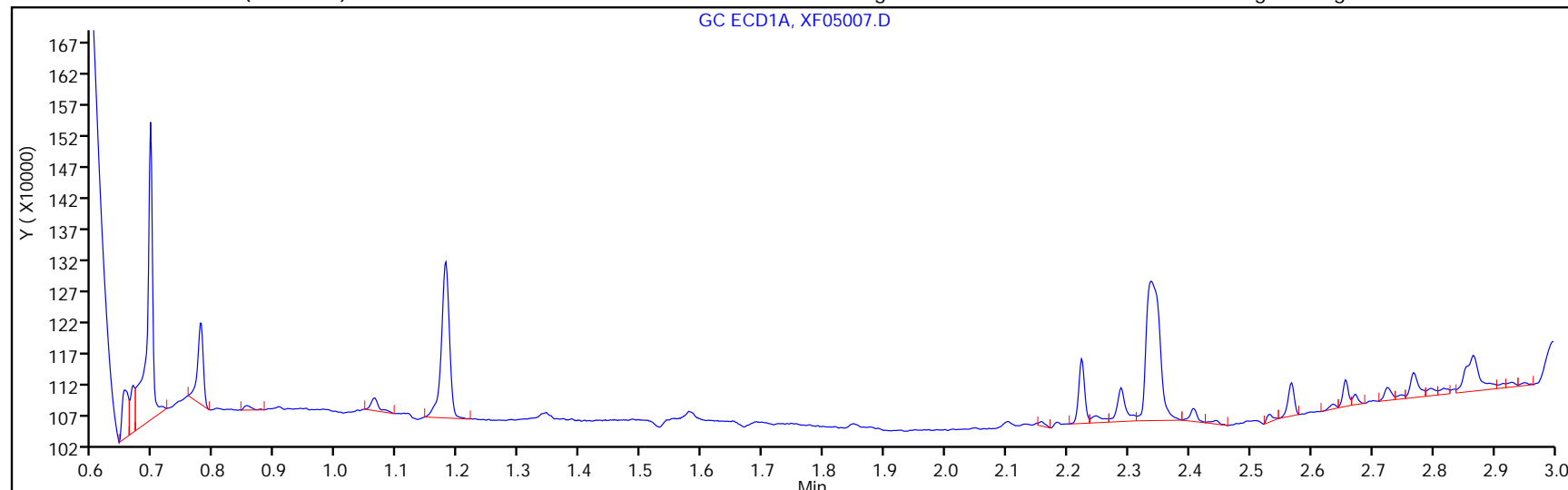
ALS Bottle#: 7

Method: EDBDBCP_CSGX

Limit Group: 504.1

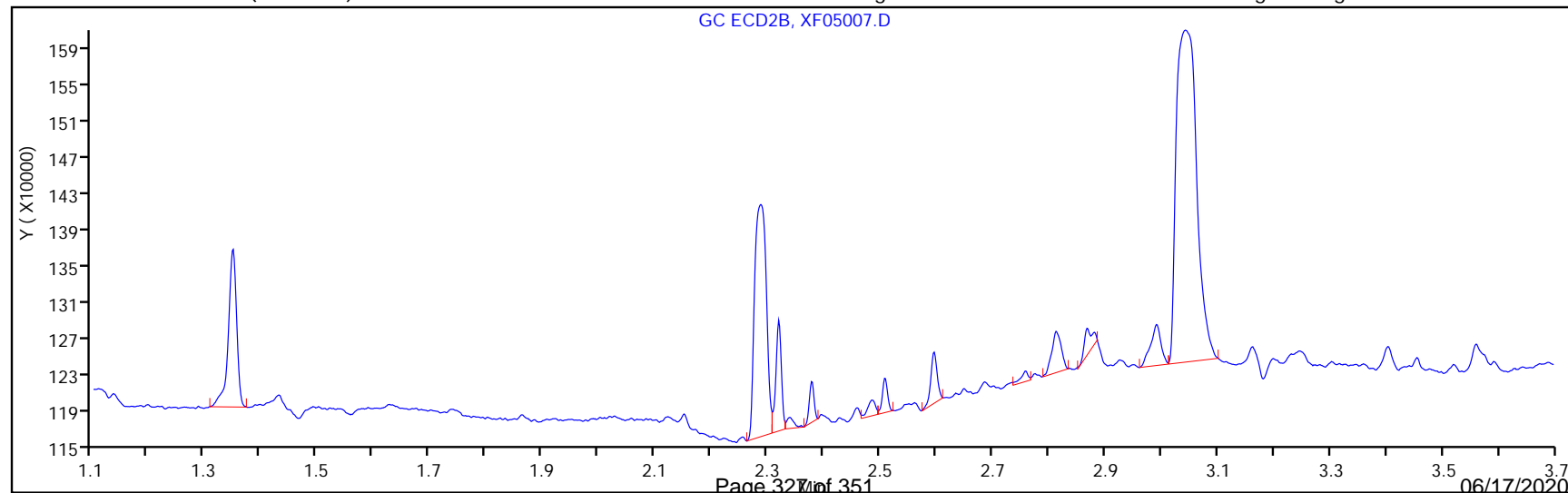
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/36
 Matrix: Water Lab File ID: XF05036.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 20:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP I 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	ND		0.018	0.0022

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 20:29:08 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-036
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D

Injection Date: 05-Jun-2020 20:29:08

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 36

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

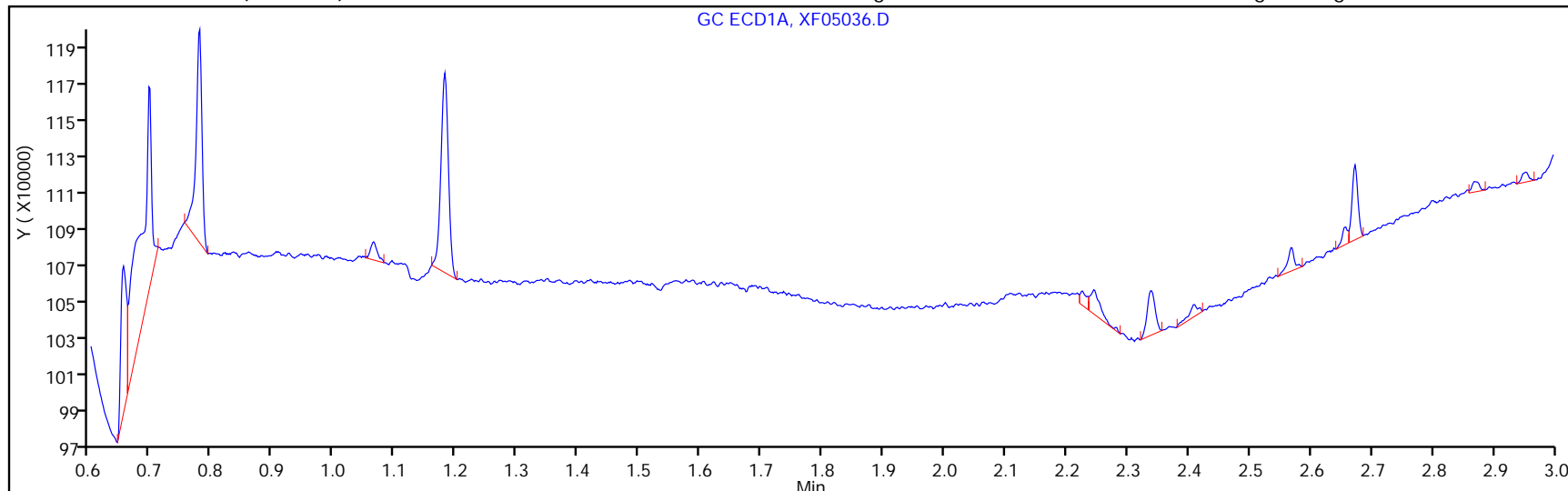
ALS Bottle#: 36

Method: EDBDBCP_CSGX

Limit Group: 504.1

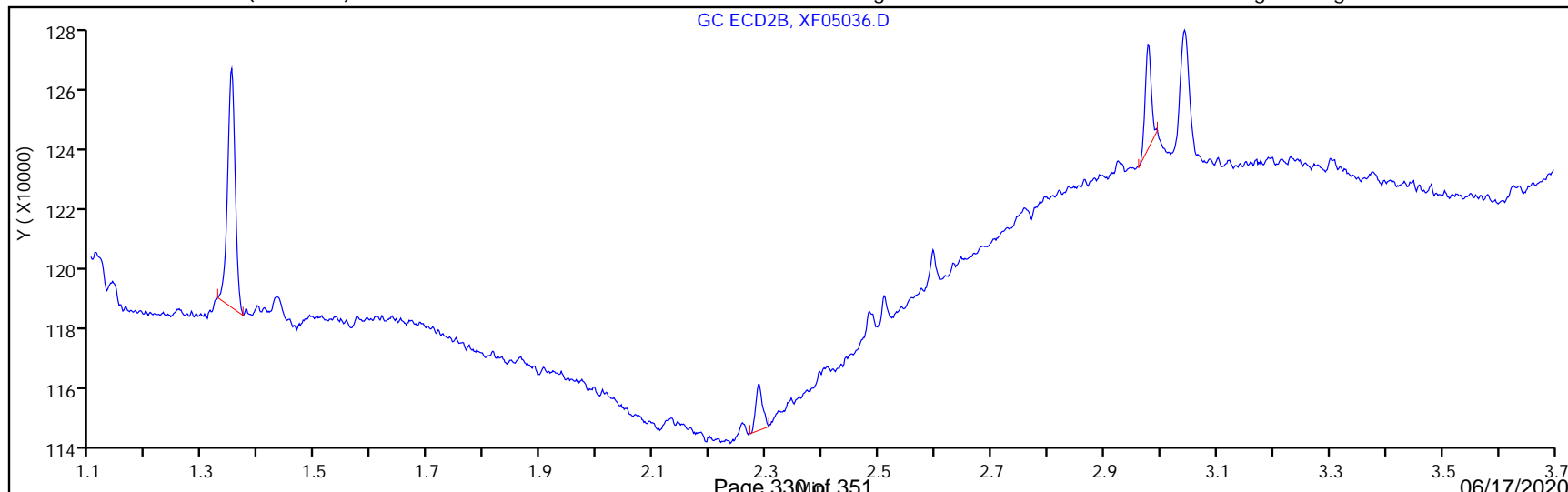
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: PIBLK 680-621463/36
 Matrix: Water Lab File ID: XF05036.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 06/05/2020 20:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: CLP II 0.25 ID: 0.25(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ng/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
<i>106-93-4</i>	<i>Ethylene Dibromide</i>	<i>ND</i>		<i>0.018</i>	<i>0.0022</i>

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane			

Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D
 Lims ID: piblk
 Client ID:
 Sample Type: PIBLK
 Inject. Date: 05-Jun-2020 20:29:08 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-036
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:51 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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Report Date: 08-Jun-2020 10:57:53

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05036.D

Injection Date: 05-Jun-2020 20:29:08

Instrument ID: CSGX

Operator ID:

Lims ID: piblk

Worklist Smp#: 36

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

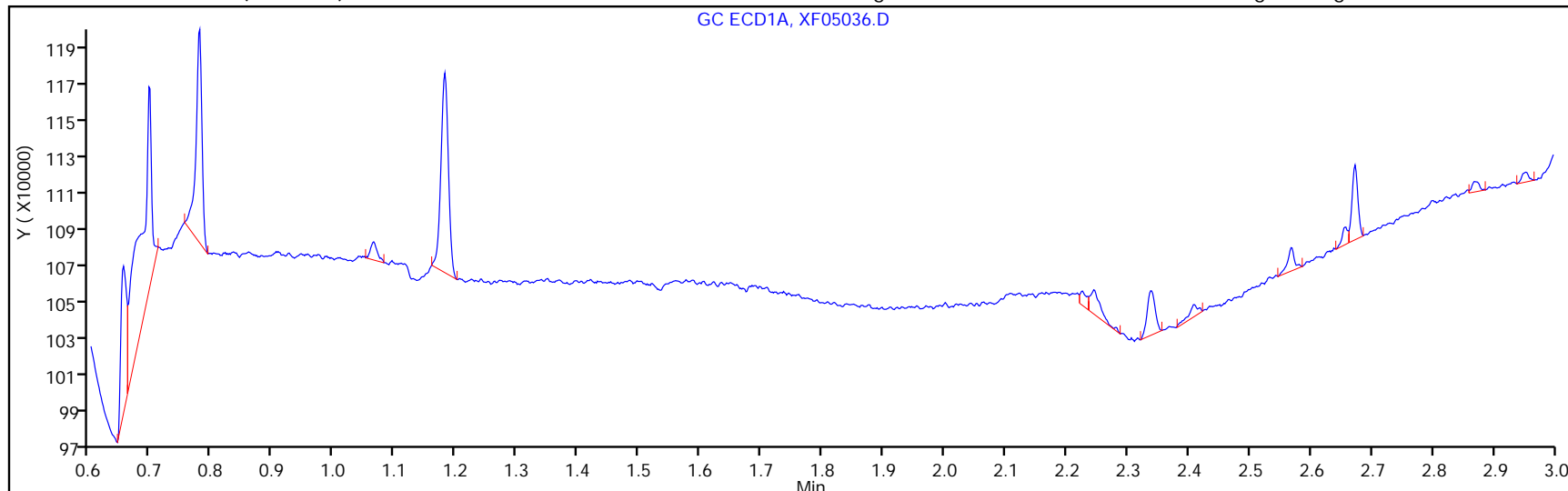
ALS Bottle#: 36

Method: EDBDBCP_CSGX

Limit Group: 504.1

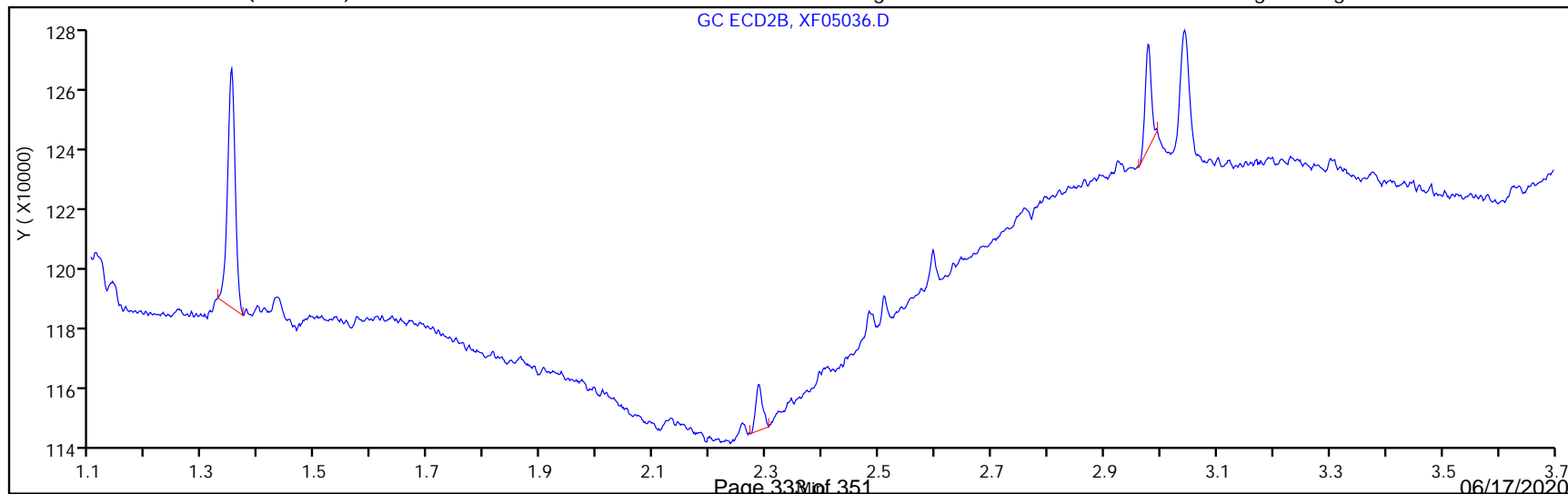
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 680-621423/4-A
 Matrix: Water Lab File ID: XF05009.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35 (mL) Date Analyzed: 06/05/2020 16:04
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.102		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	102		70-130

Report Date: 08-Jun-2020 10:57:37

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05009.D
 Lims ID: LCS 680-621423/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Jun-2020 16:04:10 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 Ethylene Dibromide							
1	1.243	1.241	0.002	555539	1.75	1.72	
2	1.591	1.588	0.003	468926	1.75	1.78	
						RPD = 3.05	
3 1,2,3-Trichloropropane							
1	2.169	2.170	-0.001	324959	8.75	8.01	
2	2.406	2.405	0.001	276133	8.75	8.03	
						RPD = 0.23	
\$ 4 Pentachloroethane							
1	2.284	2.283	0.001	468010	0.4375	0.4346	
2	2.554	2.553	0.001	380457	0.4375	0.4462	
						RPD = 2.63	
5 1,2-Dibromo-3-Chloropropane							
1	2.899	2.898	0.001	886049	1.75	1.80	
2	3.373	3.371	0.002	761908	1.75	1.77	
						RPD = 1.38	

Report Date: 08-Jun-2020 10:57:37

Chrom Revision: 2.3 05-May-2020 17:48:18

Euofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05009.D

Injection Date: 05-Jun-2020 16:04:10

Instrument ID: CSGX

Operator ID:

Lims ID: LCS 680-621423/4-A

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

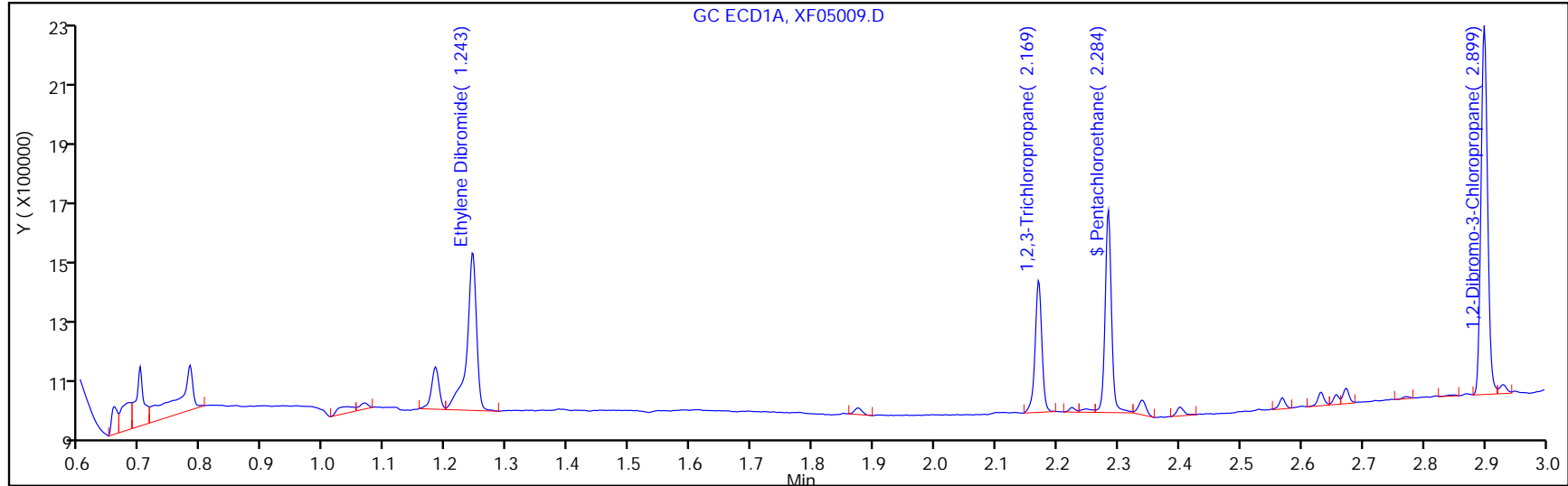
ALS Bottle#: 9

Method: EDBDBCP_CSGX

Limit Group: 504.1

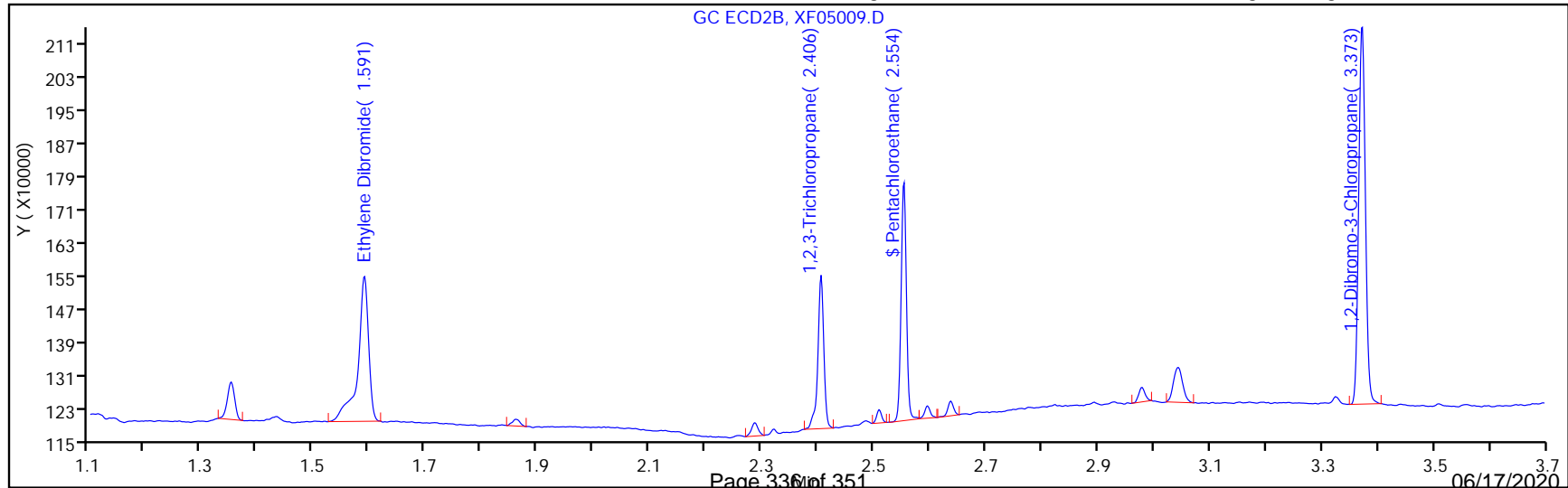
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:37

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05009.D
 Lims ID: LCS 680-621423/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Jun-2020 16:04:10 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-009
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4346	99.34

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4462	101.98

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 680-621423/5-A
 Matrix: Water Lab File ID: XF05010.D
 Analysis Method: 504.1 Date Collected: _____
 Extraction Method: 504.1 Date Extracted: 06/05/2020 13:32
 Sample wt/vol: 35 (mL) Date Analyzed: 06/05/2020 16:13
 Con. Extract Vol.: 2 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: CLP II 0.25 ID: 0.25 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 621463 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-93-4	Ethylene Dibromide	0.0972		0.018	0.0025

CAS NO.	SURROGATE	%REC	Q	LIMITS
76-01-7	Pentachloroethane	98		70-130

Report Date: 08-Jun-2020 10:57:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05010.D
 Lims ID: LCSD 680-621423/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 05-Jun-2020 16:13:55 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052

First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
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2 Ethylene Dibromide

1	1.241	1.241	0.000	520384	1.75	1.62	
2	1.588	1.588	0.000	448711	1.75	1.70	
							RPD = 5.18

3 1,2,3-Trichloropropane

1	2.169	2.170	-0.001	327987	8.75	8.08	
2	2.404	2.405	-0.001	271474	8.75	7.89	
							RPD = 2.40

\$ 4 Pentachloroethane

1	2.283	2.283	0.000	431714	0.4375	0.4009	M
2	2.553	2.553	0.000	364347	0.4375	0.4273	
							RPD = 6.37

5 1,2-Dibromo-3-Chloropropane

1	2.898	2.898	0.000	854804	1.75	1.74	
2	3.371	3.371	0.000	736070	1.75	1.71	
							RPD = 1.24

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 08-Jun-2020 10:57:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05010.D

Injection Date: 05-Jun-2020 16:13:55

Instrument ID: CSGX

Operator ID:

Lims ID: LCSD 680-621423/5-A

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

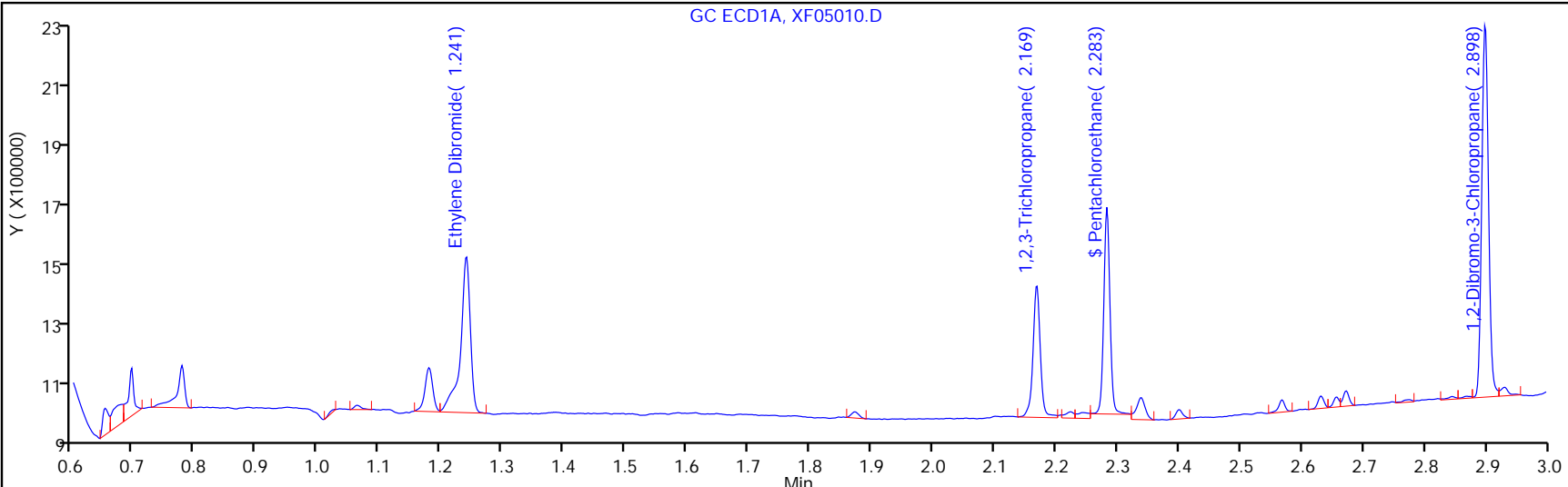
ALS Bottle#: 10

Method: EDBDBCP_CSGX

Limit Group: 504.1

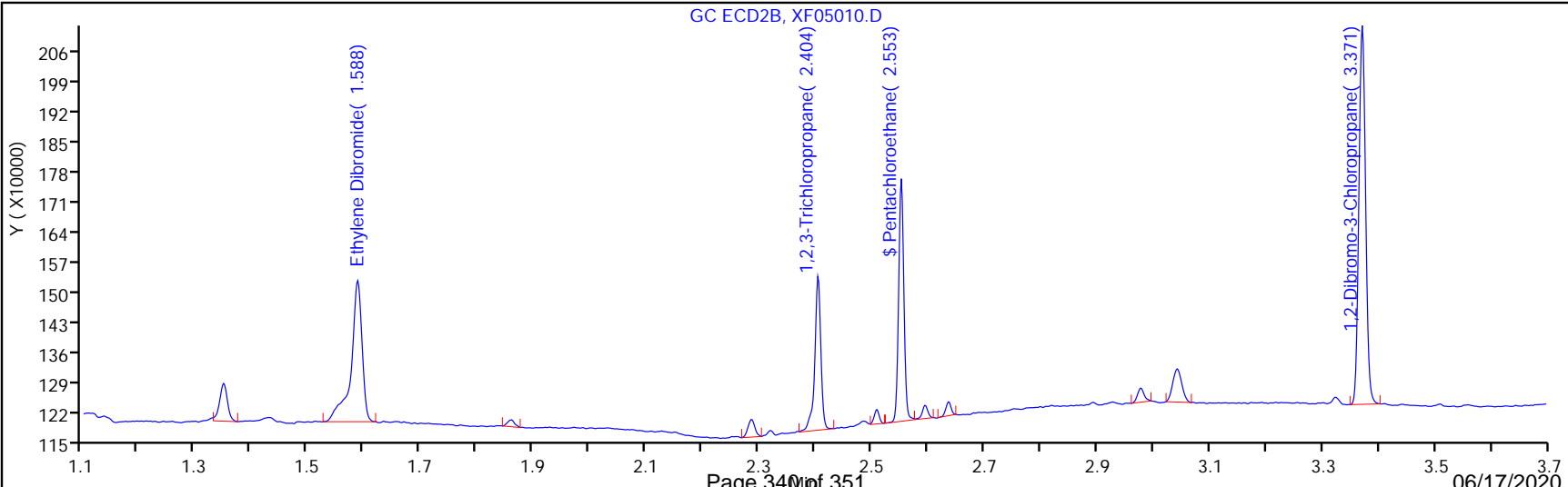
Column: CLPesticides I (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: CLPesticides II (0.25 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 08-Jun-2020 10:57:38

Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Savannah
Recovery Report

Data File: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\XF05010.D
 Lims ID: LCSD 680-621423/5-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 05-Jun-2020 16:13:55 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0064135-010
 Operator ID: Instrument ID: CSGX
 Method: \\chromfs\Savannah\ChromData\CSGX\20200605-64135.b\EDBDBCP_CSGX.m
 Limit Group: 504.1
 Last Update: 08-Jun-2020 10:57:34 Calib Date: 22-May-2020 16:26:32
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CSGX\20200522-63886.b\XE22013.D
 Column 1 : CLPesticides I (0.25 mm) Det: GC ECD1A
 Column 2 : CLPesticides II (0.25 mm) Det: GC ECD2B
 Process Host: CTX1052
 First Level Reviewer: canadyd Date: 08-Jun-2020 10:50:49

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4009	91.63

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Pentachloroethane	0.4375	0.4273	97.66

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Instrument ID: CSGX Start Date: 05/22/2020 15:18

Analysis Batch Number: 619731 End Date: 05/22/2020 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-619731/6		05/22/2020 15:18	1	XE22006.D	CLP I 0.25 0.25 (mm)
IC 680-619731/6		05/22/2020 15:18	1	XE22006.D	CLP II 0.25 0.25 (mm)
IC 680-619731/7		05/22/2020 15:27	1	XE22007.D	CLP I 0.25 0.25 (mm)
IC 680-619731/7		05/22/2020 15:27	1	XE22007.D	CLP II 0.25 0.25 (mm)
IC 680-619731/8		05/22/2020 15:37	1	XE22008.D	CLP I 0.25 0.25 (mm)
IC 680-619731/8		05/22/2020 15:37	1	XE22008.D	CLP II 0.25 0.25 (mm)
IC 680-619731/9		05/22/2020 15:47	1	XE22009.D	CLP I 0.25 0.25 (mm)
IC 680-619731/9		05/22/2020 15:47	1	XE22009.D	CLP II 0.25 0.25 (mm)
IC 680-619731/10		05/22/2020 15:57	1	XE22010.D	CLP I 0.25 0.25 (mm)
IC 680-619731/10		05/22/2020 15:57	1	XE22010.D	CLP II 0.25 0.25 (mm)
IC 680-619731/11		05/22/2020 16:06	1	XE22011.D	CLP I 0.25 0.25 (mm)
IC 680-619731/11		05/22/2020 16:06	1	XE22011.D	CLP II 0.25 0.25 (mm)
IC 680-619731/12		05/22/2020 16:16	1	XE22012.D	CLP I 0.25 0.25 (mm)
IC 680-619731/12		05/22/2020 16:16	1	XE22012.D	CLP II 0.25 0.25 (mm)
IC 680-619731/13		05/22/2020 16:26	1	XE22013.D	CLP I 0.25 0.25 (mm)
IC 680-619731/13		05/22/2020 16:26	1	XE22013.D	CLP II 0.25 0.25 (mm)
ICV 680-619731/14 CCV		05/22/2020 16:36	1	XE22014.D	CLP I 0.25 0.25 (mm)
ICV 680-619731/14 CCV		05/22/2020 16:36	1	XE22014.D	CLP II 0.25 0.25 (mm)
PIBLK 680-619731/15		05/22/2020 16:46	1		CLP I 0.25 0.25 (mm)
PIBLK 680-619731/15		05/22/2020 16:46	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 16:56	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 16:56	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:05	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:05	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:15	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:15	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:25	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:25	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:35	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:35	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:45	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:45	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:54	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 17:54	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:04	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:04	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:14	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:14	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:24	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 18:24	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:01	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:01	1		CLP II 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:11	1		CLP I 0.25 0.25 (mm)
ZZZZZ		05/22/2020 21:11	1		CLP II 0.25 0.25 (mm)

504.1

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Instrument ID: CSGX Start Date: 05/22/2020 15:18Analysis Batch Number: 619731 End Date: 05/22/2020 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-619731/43		05/22/2020 21:21	1		CLP I 0.25 0.25 (mm)
CCV 680-619731/43		05/22/2020 21:21	1		CLP II 0.25 0.25 (mm)
PIBLK 680-619731/44		05/22/2020 21:30	1		CLP I 0.25 0.25 (mm)
PIBLK 680-619731/44		05/22/2020 21:30	1		CLP II 0.25 0.25 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1
 SDG No.: _____
 Instrument ID: CSGX Start Date: 06/05/2020 15:34
 Analysis Batch Number: 621463 End Date: 06/05/2020 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 680-621463/6		06/05/2020 15:34	1	XF05006.D	CLP I 0.25 0.25 (mm)
CCV 680-621463/6		06/05/2020 15:34	1	XF05006.D	CLP II 0.25 0.25 (mm)
PIBLK 680-621463/7		06/05/2020 15:44	1	XF05007.D	CLP I 0.25 0.25 (mm)
PIBLK 680-621463/7		06/05/2020 15:44	1	XF05007.D	CLP II 0.25 0.25 (mm)
MB 680-621423/3-A		06/05/2020 15:54	1	XF05008.D	CLP I 0.25 0.25 (mm)
MB 680-621423/3-A		06/05/2020 15:54	1	XF05008.D	CLP II 0.25 0.25 (mm)
LCS 680-621423/4-A		06/05/2020 16:04	1	XF05009.D	CLP I 0.25 0.25 (mm)
LCS 680-621423/4-A		06/05/2020 16:04	1	XF05009.D	CLP II 0.25 0.25 (mm)
LCS 680-621423/5-A		06/05/2020 16:13	1	XF05010.D	CLP I 0.25 0.25 (mm)
LCS 680-621423/5-A		06/05/2020 16:13	1	XF05010.D	CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:23	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:23	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:33	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:33	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:43	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:43	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:53	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 16:53	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:03	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:03	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:12	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 17:12	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 18:31	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 18:31	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 18:41	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 18:41	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 18:50	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 18:50	1		CLP II 0.25 0.25 (mm)
680-184600-1		06/05/2020 19:00	1	XF05027.D	CLP I 0.25 0.25 (mm)
680-184600-1		06/05/2020 19:00	1	XF05027.D	CLP II 0.25 0.25 (mm)
680-184600-2		06/05/2020 19:10	1	XF05028.D	CLP I 0.25 0.25 (mm)
680-184600-2		06/05/2020 19:10	1	XF05028.D	CLP II 0.25 0.25 (mm)
680-184600-3		06/05/2020 19:20	1	XF05029.D	CLP I 0.25 0.25 (mm)
680-184600-3		06/05/2020 19:20	1	XF05029.D	CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:40	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:40	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:49	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:49	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:59	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 19:59	1		CLP II 0.25 0.25 (mm)
ZZZZZ		06/05/2020 20:09	1		CLP I 0.25 0.25 (mm)
ZZZZZ		06/05/2020 20:09	1		CLP II 0.25 0.25 (mm)
CCV 680-621463/35		06/05/2020 20:19	1	XF05035.D	CLP I 0.25 0.25 (mm)
CCV 680-621463/35		06/05/2020 20:19	1	XF05035.D	CLP II 0.25 0.25 (mm)
PIBLK 680-621463/36		06/05/2020 20:29	1	XF05036.D	CLP I 0.25 0.25 (mm)

504.1

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Instrument ID: CSGX Start Date: 06/05/2020 15:34Analysis Batch Number: 621463 End Date: 06/05/2020 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 680-621463/36		06/05/2020 20:29	1	XF05036.D	CLP II 0.25 0.25 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-184600-1

SDG No.: _____

Batch Number: 621423 Batch Start Date: 06/05/20 13:32 Batch Analyst: Canady, Daniel

Batch Method: 504.1 Batch End Date: 06/05/20 14:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ResidualChlorine	504 Spike 00156
MB 680-621423/3		504.1, 504.1				35 mL	2 mL		
LCS 680-621423/4		504.1, 504.1				35 mL	2 mL		35 uL
LCSD 680-621423/5		504.1, 504.1				35 mL	2 mL		35 uL
680-184600-A-1	GWK003-2023	504.1, 504.1	T	62.01 g	26.71 g	35.3 mL	2 mL	No	
680-184600-B-2	GWK016-2023	504.1, 504.1	T	62.51 g	26.79 g	35.7 mL	2 mL	No	
680-184600-A-3	TB2023-2	504.1, 504.1	T	62.47 g	27.10 g	35.4 mL	2 mL	No	

Lab Sample ID	Client Sample ID	Method Chain	Basis	504 NewSurr 00126	AnalysisComment				
MB 680-621423/3		504.1, 504.1		35 uL					
LCS 680-621423/4		504.1, 504.1		35 uL					
LCSD 680-621423/5		504.1, 504.1		35 uL					
680-184600-A-1	GWK003-2023	504.1, 504.1	T	35 uL	Na2S2O3				
680-184600-B-2	GWK016-2023	504.1, 504.1	T	35 uL	Na2S2O3				
680-184600-A-3	TB2023-2	504.1, 504.1	T	35 uL	Na2S2O3				

Batch Notes	
Balance ID	36
Analyst ID - Extraction	CanadyD
NaCl ID	6586568
Pipette/Syringe/Dispenser ID	SG6
Prep Solvent ID	6541511
Residual Chlorine Indicator ID	6088022
Analyst ID - Spike Analyst	CanadyD
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

504.1

Shipping and Receiving Documents

CHAIN-OF-CUSTODY RECORD

EA
225 Schilling Circle, Suite 400
Hunt Valley, MD
Tel No: (410) 584-7000
Fax No: (410) 771-1625

PROJECT NUMBER:
62735DM02

PROJECT NAME:
Kirtland AFB Bulk Fuels Facility

PROJECT SITE AND PHASE:
ST106/SS111

LABORATORY NAME AND CONTACT:
Test America Sample Receiving
5102 LaRoche Ave Savannah, GA 31404

LAB PO NUMBER:
16065

LAB CONTACT:
1 (912) 354-7858

COC NUMBER:
COC-K003-2023


YEAR:
2020

QUARTER:
2 - June

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@east.com EA
Amanda Smith: asmith@east.com EA

FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@east.com EA

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS				
				(EPA Method 524.2) VOCs	(EPA Method 524.2) BTEX	(EPA Method 524.2) BTEXN	(EPA Method 504.1) EDB	(6020A/6010C) Total (As, Pb, Ca, K, Na, Mg)	(6010C) Dissolved Fe, Mn	(300.0A) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(2320B) Alkalinity (Total, Carbonate, and Bicarbonate)	(4500NH3B/C) Ammonia Nitrogen		(4500 S2CF) Sulfide			
Page 348 of 351	GWK003-2023	6/2/2020	1040	6	3	3	3											



680-184600 Chain of Custody

SAMPLER(S): G. Bracht

RELINQUISHED BY: GINNY BRACHT *[Signature]*

PRINTED NAME AND SIGNATURE: GINNY BRACHT

DATE: 06/17/2020

RECEIVED BY: S. S. Y. *[Signature]*


PRINTED NAME AND SIGNATURE: S. S. Y.

DATE: 6/3/2020

TIME: 0930

TB2023-2


CHAIN-OF-CUSTODY RECORD

 225 Schilling Circle Suite 400 Hunt Valley RD Tel No: (410) 564-7000 Fax No: (410) 771-1625	PROJECT NUMBER: 62735DM02	COC NUMBER COC-K016-2023
PROJECT NAME: Kirtland AFB Bulk Fuels Facility	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	YEAR: 2020
PROJECT SITE AND PHASE: ST106/SS111	FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA Amanda Smith: asmith@eaest.com EA Pam Moss: pmoss@eaest.com EA	QUARTER: 2 - June
LAB CONTACT: 1 (912) 354-7858		
LAB PO NUMBER: 16065		



ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)	COMMENTS
1	GWK016-2023	6/17/2020	0930	(4500 S2CF) Sulfide (4500NH3B/C) Ammonia Nitrogen (2320B) Alkalinity (Total, Carbonate, and Bicarbonate) (353.2) Nitrate-Nitrite (300.0A) Chloride, bromide, sulfate (6010C) Dissolved Fe, Mn (6020A/6010C) Total (As,Pb,Ca,K,Na,Mg) (EPA Method 504.1) EDB (EPA Method 524.2) BTEXN (EPA Method 524.2) BTEX (EPA Method 524.2) VOCs Total Number of Bottles	
2					
3					
4					
5					
6					

SAMPLER(S): <i>G. Bachd</i>	RELINQUISHED BY: <i>[Signature]</i>	COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7833	RECEIVED BY:
Printed Name and Signature: GINNY BRACHI	Printed Name and Signature: <i>[Signature]</i>	DATE: 6/12/2020	DATE: 6/3/2020
TIME: 1500	TIME: 0930		

CHAIN-OF-CUSTODY RECORD

 PROJECT NAME: Kirtland AFB Bulk Fuels Facility	PROJECT NUMBER: 62735DM02	LABORATORY NAME AND CONTACT: Test America Sample Receiving 5102 LaRoche Ave Savannah, GA 31404	FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@east.com EA Amanda Smith: asmith@east.com EA Pam Moss: pmoss@east.com EA	COC NUMBER COC-TB2023-2 YEAR: 2020 QUARTER: 2 - June
PROJECT SITE AND PHASE: ST106/SS111	LAB PO NUMBER: 16665	LAB CONTACT: 1 (912) 354-7858		

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)		COMMENTS
				DATE	TIME	
1	TB2023-2	6/12/2020	0800	4	2 - 2	Associated with: GWK016-2023 GWK003-2023
2						
3						
4						
5						
6						

SAMPLER(S): G. Bracht	RELINQUISHED BY:  Printed Name and Signature: GIMY BRACHT	DATE: 6/12/2020	TIME: 1500
COURIER AND SHIPPING NUMBER: FedEx 4538 3732 7833		RECEIVED BY:  Printed Name and Signature:	DATE: 6/3/2020
Printed Name and Signature: _____		DATE: _____	TIME: _____

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 680-184600-1

Login Number: 184600**List Source: Eurofins TestAmerica, Savannah****List Number: 1****Creator: Laughlin, Paul D**

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ ($1/4''$).	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	