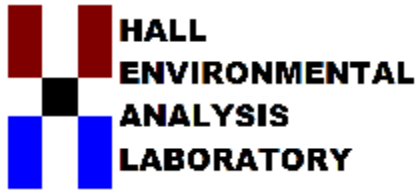


**APPENDIX B**

**ANALYTICAL LABORATORY REPORTS**

**(Provided in Electronic Format via CD Located on Front Cover of Report)**



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 19, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX

RE: Big Sky

OrderNo.: 1903148

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/5/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** LRG-4116

**Project:** Big Sky

**Collection Date:** 3/4/2019 12:01:00 PM

**Lab ID:** 1903148-001

**Matrix:** AQUEOUS

**Received Date:** 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	380	50		mg/L	100	3/5/2019 5:05:02 PM	R58153
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 4:27:47 PM	R58153
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/5/2019 4:27:47 PM	R58153
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1510	20.0	*	mg/L	1	3/11/2019 3:35:00 PM	43589
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** LRG-4001-5-2

**Project:** Big Sky

**Collection Date:** 3/4/2019 9:28:00 AM

**Lab ID:** 1903148-002

**Matrix:** AQUEOUS

**Received Date:** 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 5:17:26 PM	R58153
Nitrogen, Nitrate (As N)	3.4	1.0		mg/L	10	3/5/2019 5:17:26 PM	R58153
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

CLIENT: EA Engineering

Client Sample ID: 833-02

Project: Big Sky

Collection Date: 3/4/2019 9:25:00 AM

Lab ID: 1903148-003

Matrix: AQUEOUS

Received Date: 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1300	50		mg/L	100	3/5/2019 5:54:39 PM	R58153
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 5:42:14 PM	R58153
Nitrogen, Nitrate (As N)	66	1.0	*	mg/L	10	3/5/2019 5:42:14 PM	R58153
Sulfate	720	50		mg/L	100	3/5/2019 5:54:39 PM	R58153
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	4180	20.0	*	mg/L	1	3/11/2019 3:35:00 PM	43589
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 833-04

**Project:** Big Sky

**Collection Date:** 3/4/2019 11:51:00 AM

**Lab ID:** 1903148-004

**Matrix:** AQUEOUS

**Received Date:** 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	830	50		mg/L	100	3/5/2019 6:19:27 PM	R58153
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 6:07:03 PM	R58153
Nitrogen, Nitrate (As N)	31	1.0	*	mg/L	10	3/5/2019 6:07:03 PM	R58153
Sulfate	480	50		mg/L	100	3/5/2019 6:19:27 PM	R58153
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2900	20.0	*	mg/L	1	3/11/2019 3:35:00 PM	43589
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 833-07

**Project:** Big Sky

**Collection Date:** 3/4/2019 10:18:00 AM

**Lab ID:** 1903148-005

**Matrix:** AQUEOUS

**Received Date:** 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	50		mg/L	100	3/5/2019 7:09:05 PM	R58153
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 6:56:40 PM	R58153
Nitrogen, Nitrate (As N)	65	10	*	mg/L	100	3/5/2019 7:09:05 PM	R58153
Sulfate	600	50		mg/L	100	3/11/2019 10:59:34 AM	R58285
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3680	20.0	*	mg/L	1	3/11/2019 3:35:00 PM	43589
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 833-09

**Project:** Big Sky

**Collection Date:** 3/4/2019 10:47:00 AM

**Lab ID:** 1903148-006

**Matrix:** AQUEOUS

**Received Date:** 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	760	50		mg/L	100	3/5/2019 7:33:54 PM	R58153
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 7:21:30 PM	R58153
Nitrogen, Nitrate (As N)	45	1.0	*	mg/L	10	3/5/2019 7:21:30 PM	R58153
Sulfate	560	50		mg/L	100	3/11/2019 11:12:26 AM	R58285
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3130	20.0	*	mg/L	1	3/11/2019 3:35:00 PM	43589
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903148

Date Reported: 3/19/2019

CLIENT: EA Engineering

Client Sample ID: 833-10

Project: Big Sky

Collection Date: 3/4/2019 11:15:00 AM

Lab ID: 1903148-007

Matrix: AQUEOUS

Received Date: 3/5/2019 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	580	50		mg/L	100	3/5/2019 7:58:43 PM	R58153
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/5/2019 7:46:18 PM	R58153
Nitrogen, Nitrate (As N)	1.8	1.0		mg/L	10	3/5/2019 7:46:18 PM	R58153
Sulfate	400	50		mg/L	100	3/11/2019 11:25:18 AM	R58285
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2520	20.0	*	mg/L	1	3/11/2019 3:35:00 PM	43589
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/8/2019 3:00:00 PM	43573

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903148

19-Mar-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>1903148-001AMS</b>	SampType: <b>ms</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LRG-4116</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1950287</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	9.6	1.0	10.00	0	95.9	82.4	108			
Nitrogen, Nitrate (As N)	27	1.0	25.00	0.4793	104	79.1	116			
Sulfate	300	5.0	100.0	190.1	106	74.9	123			

Sample ID: <b>1903148-001AMSD</b>	SampType: <b>msd</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LRG-4116</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1950288</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	9.4	1.0	10.00	0	93.7	82.4	108	2.37	20	
Nitrogen, Nitrate (As N)	26	1.0	25.00	0.4793	102	79.1	116	2.37	20	
Sulfate	290	5.0	100.0	190.1	105	74.9	123	0.358	20	

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950327</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950328</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.5	90	110			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	97.4	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	103	90	110			
Sulfate	10	0.50	10.00	0	103	90	110			

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58285</b>	RunNo: <b>58285</b>								
Prep Date:	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954951</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903148

19-Mar-19

**Client:** EA Engineering

**Project:** Big Sky

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R58285</b>		RunNo: <b>58285</b>							
Prep Date:	Analysis Date: <b>3/11/2019</b>		SeqNo: <b>1954952</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.6	0.50	10.00	0	95.9	90	110			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903148

19-Mar-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>MB-43589</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43589</b>	RunNo: <b>58261</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954109</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43589</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43589</b>	RunNo: <b>58261</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954110</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	975	20.0	1000	0	97.5	80	120			

Sample ID: <b>1903148-003ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>833-02</b>	Batch ID: <b>43589</b>	RunNo: <b>58261</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954115</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	4130	20.0						1.03	10	*

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903148

19-Mar-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>MB-43573</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43573</b>	RunNo: <b>58238</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953199</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43573</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43573</b>	RunNo: <b>58238</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953200</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# Sample Log-In Check List

Client Name: **EA Engineering Alb**

Work Order Number: **1903148**

ReptNo: 1

Received By: **Isaiah Ortiz** 3/5/2019 10:00:00 AM

*I-Ox*

Completed By: **Isaiah Ortiz** 3/5/2019 10:07:48 AM

*I-Ox*

Reviewed By: *Tom - 3-5-19*

*CB: DAD 3/5/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
(If no, notify customer for authorization.)

# of preserved bottles checked for pH: 7  
(or >12 unless noted)  
Adjusted? NO  
Checked by: DAD 3/5/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: rmullen@eaest.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Project Manager:

Gina Mullen

Sampler: *Justin Vesper*

On Ice:  Yes  No

Sample Temperature: *1.2*

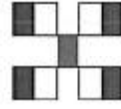
Time	Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
							<i>1903148</i>
	<i>1201</i>	<i>3:49</i>	<i>W</i>	<i>LRG-4116</i>	<i>2</i>		<i>-001</i>
	<i>920</i>			<i>LRG-4001-5-2</i>	<i>2</i>		<i>-002</i>
	<i>925</i>			<i>833-02</i>	<i>2</i>		<i>-003</i>
	<i>1151</i>			<i>833-04</i>	<i>2</i>		<i>-004</i>
	<i>1018</i>			<i>833-07</i>	<i>2</i>		<i>-005</i>
	<i>1017</i>			<i>833-09</i>	<i>2</i>		<i>-006</i>
	<i>1115</i>			<i>833-10</i>	<i>2</i>		<i>-007</i>

Remarks:

Received by: *Tom Fedex* Date: *3/5/19* Time: *1000*

Relinquished by: *July* Date: Time:

Relinquished by: Date: Time:



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

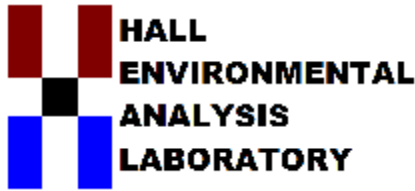
4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 19, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX

RE: Big Sky

OrderNo.: 1903204

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/6/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903204

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 833-05

**Project:** Big Sky

**Collection Date:** 3/5/2019 8:58:00 AM

**Lab ID:** 1903204-001

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50		mg/L	100	3/6/2019 7:11:18 PM	R58184
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 6:58:26 PM	R58184
Nitrogen, Nitrate (As N)	46	1.0	*	mg/L	10	3/6/2019 6:58:26 PM	R58184
Sulfate	510	50		mg/L	100	3/6/2019 7:11:18 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3520	20.0	*	mg/L	1	3/12/2019 7:22:00 PM	43609
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/12/2019 2:00:00 PM	43614

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903204

Date Reported: 3/19/2019

CLIENT: EA Engineering

Client Sample ID: 833-06

Project: Big Sky

Collection Date: 3/5/2019 10:55:00 AM

Lab ID: 1903204-002

Matrix: AQUEOUS

Received Date: 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	780	50		mg/L	100	3/6/2019 7:37:01 PM	R58184
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 7:24:09 PM	R58184
Nitrogen, Nitrate (As N)	47	1.0	*	mg/L	10	3/6/2019 7:24:09 PM	R58184
Sulfate	500	5.0		mg/L	10	3/6/2019 7:24:09 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2710	20.0	*	mg/L	1	3/12/2019 7:22:00 PM	43609
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/12/2019 2:00:00 PM	43614

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903204

Date Reported: 3/19/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 833-08

**Project:** Big Sky

**Collection Date:** 3/5/2019 9:42:00 AM

**Lab ID:** 1903204-003

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	890	50		mg/L	100	3/6/2019 8:02:44 PM	R58184
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 7:49:53 PM	R58184
Nitrogen, Nitrate (As N)	48	1.0	*	mg/L	10	3/6/2019 7:49:53 PM	R58184
Sulfate	460	50		mg/L	100	3/6/2019 8:02:44 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3040	20.0	*	mg/L	1	3/12/2019 7:22:00 PM	43609
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/12/2019 2:00:00 PM	43614

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 3 of 6
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903204

19-Mar-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58184</b>	RunNo: <b>58184</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951427</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58184</b>	RunNo: <b>58184</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951428</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.1	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	100	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	104	90	110			
Sulfate	10	0.50	10.00	0	102	90	110			

**NOTES:**

\* A cleanup step was performed on the extract before analysis.

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903204

19-Mar-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>MB-43609</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43609</b>	RunNo: <b>58309</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955585</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43609</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43609</b>	RunNo: <b>58309</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955586</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1903204-002ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>833-06</b>	Batch ID: <b>43609</b>	RunNo: <b>58309</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955589</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	2720	20.0						0.553	10	*

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903204

19-Mar-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>MB-43614</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43614</b>	RunNo: <b>58308</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955564</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43614</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43614</b>	RunNo: <b>58308</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955565</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903204

ReptNo: 1

Received By: Isaiah Ortiz 3/6/2019 9:00:00 AM

Completed By: Erin Melendrez 3/6/2019 9:40:06 AM

Reviewed By: IO 3/6/19  
 UB: VVZ 3/6/19

IO  
 UM

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 3  
 (<2 or >12 unless noted)  
 Adjusted: NO  
 Checked by: VVZ 3/6/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Gcod	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: rmullen@eaest.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Project Manager:

Gina Mullen

Sampler: Justin Vespa

On Ice:  Yes  No

Sample Temperature: 21°C

Date Time Matrix Sample Request ID

3-5-19 850 W 833-05  
 1055 V 833-06  
 942 W 833-08

Container Type and #

2  
2  
2

Preservative Type

-001  
-002  
-003

HEAL No.

1903204

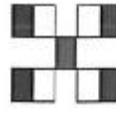
Turn-Around Time:

Standard  Rush

Project Name:

**Big Sky**

Project #:



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			

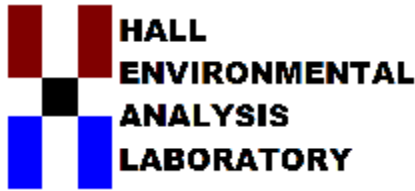
Remarks:

Received by: In On FedEx Date Time: 3-6-19 0900

Relinquished by: any Date Time: 1630

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 12, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Bright Star Dairy

OrderNo.: 1902A67

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/26/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A67

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-00953

**Project:** Bright Star Dairy

**Collection Date:** 2/25/2019 11:42:00 AM

**Lab ID:** 1902A67-001

**Matrix:** AQUEOUS

**Received Date:** 2/26/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	870	50		mg/L	100	2/26/2019 3:11:17 PM	R57967
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/26/2019 2:58:25 PM	R57967
Nitrogen, Nitrate (As N)	12	1.0	*	mg/L	10	2/26/2019 2:58:25 PM	R57967
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2700	20.0	*	mg/L	1	3/3/2019 6:56:00 PM	43445
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A67

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 340-01

**Project:** Bright Star Dairy

**Collection Date:** 2/25/2019 11:19:00 AM

**Lab ID:** 1902A67-002

**Matrix:** AQUEOUS

**Received Date:** 2/26/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	630	50		mg/L	100	2/26/2019 4:02:44 PM	R57967
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/26/2019 3:49:52 PM	R57967
Nitrogen, Nitrate (As N)	50	1.0	*	mg/L	10	2/26/2019 3:49:52 PM	R57967
Sulfate	520	50		mg/L	100	2/26/2019 4:02:44 PM	R57967
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3020	100	*D	mg/L	1	3/3/2019 6:56:00 PM	43445
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A67

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 340-02

**Project:** Bright Star Dairy

**Collection Date:** 2/25/2019 11:32:00 AM

**Lab ID:** 1902A67-003

**Matrix:** AQUEOUS

**Received Date:** 2/26/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	770	50		mg/L	100	2/26/2019 4:28:29 PM	R57967
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/26/2019 4:15:36 PM	R57967
Nitrogen, Nitrate (As N)	67	10	*	mg/L	100	2/26/2019 4:28:29 PM	R57967
Sulfate	420	50		mg/L	100	2/26/2019 4:28:29 PM	R57967
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3080	40.0	*D	mg/L	1	3/3/2019 6:56:00 PM	43445
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 3 of 8
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A67

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 86/340-01

**Project:** Bright Star Dairy

**Collection Date:** 2/25/2019 9:41:00 AM

**Lab ID:** 1902A67-004

**Matrix:** AQUEOUS

**Received Date:** 2/26/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	250	50		mg/L	100	2/26/2019 4:54:13 PM	R57967
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/26/2019 4:41:20 PM	R57967
Nitrogen, Nitrate (As N)	7.0	1.0		mg/L	10	2/26/2019 4:41:20 PM	R57967
Sulfate	650	50		mg/L	100	2/26/2019 4:54:13 PM	R57967
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	1910	20.0	*	mg/L	1	3/3/2019 6:56:00 PM	43445
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 4 of 8
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A67

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 70/86/340-01

**Project:** Bright Star Dairy

**Collection Date:** 2/25/2019 10:58:00 AM

**Lab ID:** 1902A67-005

**Matrix:** AQUEOUS

**Received Date:** 2/26/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1700	50		mg/L	100	2/26/2019 5:19:56 PM	R57967
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/26/2019 5:07:05 PM	R57967
Nitrogen, Nitrate (As N)	21	1.0	*	mg/L	10	2/26/2019 5:07:05 PM	R57967
Sulfate	950	50		mg/L	100	2/26/2019 5:19:56 PM	R57967
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	4750	20.0	*	mg/L	1	3/3/2019 6:56:00 PM	43445
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A67

12-Mar-19

**Client:** EA Engineering Alb

**Project:** Bright Star Dairy

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R57967</b>	RunNo: <b>57967</b>								
Prep Date:	Analysis Date: <b>2/26/2019</b>	SeqNo: <b>1941276</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R57967</b>	RunNo: <b>57967</b>								
Prep Date:	Analysis Date: <b>2/26/2019</b>	SeqNo: <b>1941277</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.8	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	94.9	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	98.7	90	110			
Sulfate	9.8	0.50	10.00	0	98.3	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A67

12-Mar-19

**Client:** EA Engineering Alb  
**Project:** Bright Star Dairy

Sample ID: <b>MB-43445</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43445</b>	RunNo: <b>58064</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945938</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43445</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43445</b>	RunNo: <b>58064</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945939</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1902A67-005ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>70/86/340-01</b>	Batch ID: <b>43445</b>	RunNo: <b>58064</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945946</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	4740	20.0						0.295	10	*

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A67

12-Mar-19

**Client:** EA Engineering Alb

**Project:** Bright Star Dairy

Sample ID: <b>MB-43460</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947962</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43460</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947963</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

Sample ID: <b>1902A67-004AMS</b>	SampType: <b>MS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>86/340-01</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947977</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125			

Sample ID: <b>1902A67-004AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>86/340-01</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947978</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	75	125	1.36	20	

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1902A67

RcptNo: 1

Received By: Leah Baca

2/26/2019 8:50:00 AM

*Leah Baca*

Completed By: Isaiah Ortiz

2/26/2019 9:11:36 AM

*I-Or*

Reviewed By: *TMM 2-26-19*

*LB: YG 2/26/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? Courier

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 5  
 (<2 or >12 unless noted)  
 Adjusted? no  
 Checked by: YG 2/26/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *0*

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No
2-25-19	11:42	W	LRG-00953	1		1902467
	11:19		340-01	2		001
	11:32		340-02	2		002
	9:41		86/340-01	2		003
	10:50		70/86/340-01	2		004
						005

Turn-Around Time:

Standard  Rush

Project Name:

Bright Star Dairy

Project #:

Project Manager:

Gina Mullen

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Nitrate/Nitrite EPA Method 300	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			

Remarks:

Received by: \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

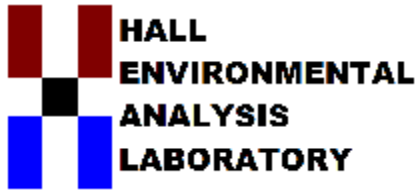
Received by: *Conner* Date *2/26/19* Time *0850*

Relinquished by: *JWS*

Date: 2-25-19 Time: 14:00

Relinquished by:

Date: \_\_\_\_\_ Time: \_\_\_\_\_



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 19, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Buena Vista Dairy #2

OrderNo.: 1903022

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/1/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903022

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2  
**Lab ID:** 1903022-001

**Client Sample ID:** LRG-01876  
**Collection Date:** 2/28/2019 11:17:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	370	50		mg/L	100	3/1/2019 2:58:01 PM	R58078
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 2:45:10 PM	R58078
Nitrogen, Nitrate (As N)	1.5	1.0		mg/L	10	3/1/2019 2:45:10 PM	R58078
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1450	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903022

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 74-01

**Project:** Buena Vista Dairy #2

**Collection Date:** 2/28/2019 1:15:00 PM

**Lab ID:** 1903022-002

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	930	50		mg/L	100	3/1/2019 3:49:28 PM	R58078
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 3:36:36 PM	R58078
Nitrogen, Nitrate (As N)	52	1.0	*	mg/L	10	3/1/2019 3:36:36 PM	R58078
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3460	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903022

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2  
**Lab ID:** 1903022-003

**Client Sample ID:** 74-02  
**Collection Date:** 2/28/2019 11:58:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	560	50		mg/L	100	3/1/2019 4:15:13 PM	R58078
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 4:02:20 PM	R58078
Nitrogen, Nitrate (As N)	36	1.0	*	mg/L	10	3/1/2019 4:02:20 PM	R58078
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2400	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903022

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2  
**Lab ID:** 1903022-004

**Client Sample ID:** 74-03  
**Collection Date:** 2/28/2019 12:28:00 PM  
**Matrix:** AQUEOUS  
**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	250	50		mg/L	100	3/1/2019 4:40:57 PM	R58078
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 4:28:05 PM	R58078
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/1/2019 4:28:05 PM	R58078
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1550	40.0	*D	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903022

19-Mar-19

**Client:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>
Client ID: <b>PBW</b>	Batch ID: <b>R58078</b>	RunNo: <b>58078</b>
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946868</b> Units: <b>mg/L</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>
Client ID: <b>LCSW</b>	Batch ID: <b>R58078</b>	RunNo: <b>58078</b>
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946869</b> Units: <b>mg/L</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	97.0	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	99.5	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903022

19-Mar-19

**Client:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2

Sample ID: <b>MB-43522</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953005</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43522</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953006</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	100	80	120			

Sample ID: <b>1903022-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LRG-01876</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953008</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1460	20.0						0.895	10	*

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903022

19-Mar-19

**Client:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2

Sample ID: <b>MB-43543</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952830</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43543</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952831</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

Sample ID: <b>1903022-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LRG-01876</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952838</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125			

Sample ID: <b>1903022-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LRG-01876</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952839</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125	0	20	

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903022

RcptNo: 1

Received By: Yazmine Garduno 3/1/2019 8:53:00 AM

Completed By: Victoria Zellar 3/1/2019 10:17:32 AM

Reviewed By: VVZ 3/1/19

*Victoria Zellar*  
*Labeled by  
DAD 3/1/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 4  
 (3 or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 3/1/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [gmullen@east.com](mailto:gmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *63 C*

Date Time Matrix Sample Request ID

*2-28-19 1117 W LRG-01876*  
*1315 W 74-01*  
*1158 W 74-02*  
*1228 W 7403*

Container Type and #

*2*  
*2*  
*2*  
*2*  
*2*

Preservative Type

*-001*  
*-002*  
*-003*  
*-004*

HEAL No.

*1906022*

Date: *2-28-19* Time: *1700*

Relinquished by: *[Signature]*

Relinquished by: *[Signature]*

Received by: *FED*

Date: *3/11/19* Time: *853*

Date: *3/11/19* Time: *853*

Remarks:

Turn-Around Time:

Standard  Rush

Project Name:

**Buena Vista Dairy #2**

Project #:

Project Manager:

**Gina Mullen**

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Analysis	Requested	Completed	Remarks
Nitrate/Nitrite EPA Method 300.0	<input checked="" type="checkbox"/>		
TKN SM 4500 NORG C	<input checked="" type="checkbox"/>		
Chloride EPA 300.0	<input checked="" type="checkbox"/>		
TDS SM 2540 C MOD	<input checked="" type="checkbox"/>		
Air Bubbles (Y or N)			

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 13, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Buena Vista Dairy #2

OrderNo.: 1903066

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/2/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903066

Date Reported: 3/13/2019

**CLIENT:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2  
**Lab ID:** 1903066-001

**Matrix:** AQUEOUS

**Client Sample ID:** 74-05  
**Collection Date:** 3/1/2019 10:11:00 AM  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	590	50		mg/L	100	3/4/2019 10:38:11 PM	A58113
Nitrate+Nitrite as N	15	1.0	*	mg/L	5	3/4/2019 11:42:29 PM	A58113
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2140	20.0	*	mg/L	1	3/11/2019 9:16:00 AM	43564
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/8/2019 1:00:00 PM	43572

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903066

Date Reported: 3/13/2019

**CLIENT:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2  
**Lab ID:** 1903066-002

**Client Sample ID:** 74-04  
**Collection Date:** 3/1/2019 9:26:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	600	50		mg/L	100	3/4/2019 11:03:53 PM	A58113
Nitrate+Nitrite as N	12	1.0	*	mg/L	5	3/4/2019 11:55:21 PM	A58113
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2140	20.0	*	mg/L	1	3/11/2019 9:16:00 AM	43564
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/8/2019 1:00:00 PM	43572

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903066

13-Mar-19

**Client:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>A58113</b>	RunNo: <b>58113</b>								
Prep Date:	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1948632</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>A58113</b>	RunNo: <b>58113</b>								
Prep Date:	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1948633</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.3	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.8	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903066

13-Mar-19

**Client:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2

Sample ID: <b>MB-43564</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43564</b>	RunNo: <b>58249</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1953574</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43564</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43564</b>	RunNo: <b>58249</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1953575</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1903066-002ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>74-04</b>	Batch ID: <b>43564</b>	RunNo: <b>58249</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1953591</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	2140	20.0						0.281	10	*

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903066

13-Mar-19

**Client:** EA Engineering Alb  
**Project:** Buena Vista Dairy #2

Sample ID: <b>MB-43572</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43572</b>	RunNo: <b>58237</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953179</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43572</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43572</b>	RunNo: <b>58237</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953180</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903066

RcptNo: 1

Received By: Desiree Dominguez 3/2/2019 9:30:00 AM *DD*

Completed By: Desiree Dominguez 3/2/2019 10:01:15 AM *DD*

Reviewed By: *JD* 3/5/19

*LB: DAD 3/2/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2  
 (2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 3/2/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp. °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Not Present			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:  
 Standard  Rush

Project Name:

**Buena Vista Dairy #2**

Project #:

Project Manager:

**Gina Mullen**

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *18-20.4 = 14°C*

Container Type and #

Preservative Type

HEAL No. **1903066**

*2*

*-001*

*2*

*-002*

Date Time Matrix Sample Request ID

*3-1-19 1611 W 74-05*

*3-1-19 926 W 74-04*

**Analysis Request**

Nitrate/Nitrite EPA Method 300.0	X	X	X																
TKN SM 4500 NOR C	X	X	X																
Chloride EPA 300.0	X	X	X																
TDS SM 2540 C MOD	X	X	X																
Air Bubbles (Y or N)																			

Remarks:

Received by: *[Signature]* Date: *3/2/19* Time: *9:30*  
 Received by: *Fed Ex* Date: Time

Date: *3-1-19* Time: *1330* Relinquished by: *[Signature]*  
 Date: Time Relinquished by:



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 25, 2019

Regina Mullen  
EA Engineering  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dona Ana Dairies Consortium

OrderNo.: 1903407

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/8/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-20**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/7/2019 12:22:00 PM**Lab ID:** 1903407-001**Matrix:** AQUEOUS**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	900	50		mg/L	100	3/8/2019 6:09:11 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 5:31:57 PM
Nitrogen, Nitrate (As N)	35	1.0	*	mg/L	10	3/8/2019 5:31:57 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2530	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 8
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903407**

Date Reported: 3/25/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-26

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/7/2019 11:53:00 AM

**Lab ID:** 1903407-002

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	800	50		mg/L	100	3/8/2019 6:34:00 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 6:21:35 PM
Nitrogen, Nitrate (As N)	50	1.0	*	mg/L	10	3/8/2019 6:21:35 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2670	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 8
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903407**

Date Reported: 3/25/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-22

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/7/2019 11:27:00 AM

**Lab ID:** 1903407-003

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	670	50		mg/L	100	3/8/2019 7:23:39 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:11:14 PM
Nitrogen, Nitrate (As N)	26	1.0	*	mg/L	10	3/8/2019 7:11:14 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2200	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-09**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/7/2019 11:15:00 AM**Lab ID:** 1903407-004**Matrix:** AQUEOUS**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	950	50		mg/L	100	3/8/2019 7:48:28 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:36:03 PM
Nitrogen, Nitrate (As N)	100	10	*	mg/L	100	3/8/2019 7:48:28 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	3290	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Page 4 of 8
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903407**

Date Reported: 3/25/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-21

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/7/2019 10:54:00 AM

**Lab ID:** 1903407-005

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	860	50		mg/L	100	3/8/2019 8:13:17 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 8:00:53 PM
Nitrogen, Nitrate (As N)	80	10	*	mg/L	100	3/8/2019 8:13:17 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	3030	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903407

25-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953630</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953631</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.8	0.50	5.000	0	96.6	90	110			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	96.7	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			

Sample ID: <b>1903407-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>DAD-20</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953670</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	9.0	1.0	10.00	0	89.7	82.4	108			
Nitrogen, Nitrate (As N)	63	1.0	25.00	34.77	112	79.1	116			

Sample ID: <b>1903407-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>DAD-20</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953671</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	8.8	1.0	10.00	0	88.4	82.4	108	1.50	20	
Nitrogen, Nitrate (As N)	61	1.0	25.00	34.77	105	79.1	116	2.61	20	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903407

25-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43683</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43683</b>	RunNo: <b>58425</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960537</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43683</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43683</b>	RunNo: <b>58425</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960538</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	999	20.0	1000	0	99.9	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903407

25-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43774</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963233</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43774</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963234</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

### Qualifiers:

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903407

RcptNo: 1

Received By: **Isaiah Ortiz** 3/8/2019 8:50:00 AM

Completed By: **Erin Melendrez** 3/8/2019 9:36:20 AM

Reviewed By: **IO** 3/8/19

LB: YG 3/8/19

*IO*  
*EM*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 05  
 (<2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: YG 3/8/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Dona Ana Dairies Consortium**

Project #:

Project Manager:

**Gina Mullen**

Sampler: Justin Vasquez

On Ice:  Yes  No

Sample Temperature: 0.8

Date	Time	Matrix	Sample Request ID
3-7-19	1222	W	DAD-20
	1153		DAD-26
	1127		DAD-22
	1115		DAD-09
	1054		DAD-21

Container Type and #	Preservative Type	HEAL No.
2		1903407
2		-001
2		-002
2		-003
2		-004
2		-005

Date:	Time:	Relinquished by:
3-7-19	1330	<u>Jim</u>
Date:	Time:	Relinquished by:

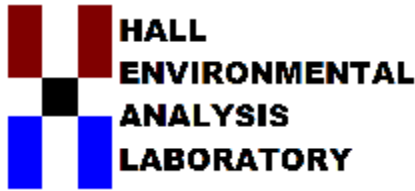
Received by:	Date	Time
<u>Tom Fedex</u>	3/8/19	0850
Received by:	Date	Time

Analysis Request		TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)
Nitrate/Nitrite EPA Method 300.0	X	X	X	X	
	X	X	X	X	
	X	X	X	X	
	X	X	X	X	
	X	X	X	X	

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 21, 2019

Regina Mullen  
EA Engineering  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dona Ana Dairies Consortium

OrderNo.: 1903218

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/6/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903218

Date Reported: 3/21/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-01

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/5/2019 11:28:00 AM

**Lab ID:** 1903218-001

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	350	50		mg/L	100	3/6/2019 6:46:17 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 6:33:27 PM
Nitrogen, Nitrate (As N)	11	1.0	*	mg/L	10	3/6/2019 6:33:27 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>KS</b>
Total Dissolved Solids	1690	100	*D	mg/L	1	3/12/2019 7:22:00 PM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/15/2019 12:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903218

Date Reported: 3/21/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-02

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/5/2019 11:50:00 AM

**Lab ID:** 1903218-002

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	290	50		mg/L	100	3/6/2019 7:12:01 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 6:59:10 PM
Nitrogen, Nitrate (As N)	7.6	1.0		mg/L	10	3/6/2019 6:59:10 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>KS</b>
Total Dissolved Solids	1350	40.0	*D	mg/L	1	3/12/2019 7:22:00 PM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/15/2019 12:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903218

Date Reported: 3/21/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-03

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/5/2019 12:11:00 PM

**Lab ID:** 1903218-003

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	330	50		mg/L	100	3/6/2019 8:29:15 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 8:16:24 PM
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2019 8:16:24 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>KS</b>
Total Dissolved Solids	2180	200	*D	mg/L	1	3/12/2019 7:22:00 PM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	3.1	2.0	D	mg/L	1	3/15/2019 12:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903218

Date Reported: 3/21/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-04

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/5/2019 12:32:00 PM

**Lab ID:** 1903218-004

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	340	50		mg/L	100	3/6/2019 8:54:58 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 8:42:07 PM
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2019 8:42:07 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>KS</b>
Total Dissolved Solids	1820	40.0	*D	mg/L	1	3/12/2019 7:22:00 PM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/15/2019 12:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903218

Date Reported: 3/21/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-05

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/5/2019 1:08:00 PM

**Lab ID:** 1903218-005

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	370	50		mg/L	100	3/6/2019 9:20:42 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 9:07:50 PM
Nitrogen, Nitrate (As N)	2.0	1.0		mg/L	10	3/6/2019 9:07:50 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>KS</b>
Total Dissolved Solids	2260	100	*D	mg/L	1	3/12/2019 7:22:00 PM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	1.3	1.0		mg/L	1	3/15/2019 12:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903218

Date Reported: 3/21/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-08

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/5/2019 1:25:00 PM

**Lab ID:** 1903218-006

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	1900	50		mg/L	100	3/6/2019 9:46:24 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 9:33:33 PM
Nitrogen, Nitrate (As N)	42	1.0	*	mg/L	10	3/6/2019 9:33:33 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>KS</b>
Total Dissolved Solids	5460	100	*D	mg/L	1	3/12/2019 7:22:00 PM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/15/2019 12:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 6 of 8
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903218

21-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>A58183</b>	RunNo: <b>58183</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951348</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>A58183</b>	RunNo: <b>58183</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951349</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.7	0.50	5.000	0	95.0	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	95.0	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58183</b>	RunNo: <b>58183</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951364</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58183</b>	RunNo: <b>58183</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951365</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.7	0.50	5.000	0	93.7	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	94.7	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	99.3	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903218

21-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43609</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43609</b>	RunNo: <b>58309</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955585</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43609</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43609</b>	RunNo: <b>58309</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955586</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903218

RcptNo: 1

Received By: Isaiah Ortiz 3/6/2019 9:00:00 AM

I-OX

Completed By: Isaiah Ortiz 3/6/2019 10:43:45 AM

I-OX

Reviewed By: IO 3/6/19

CB: VVZ 3/6/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6 (2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: VVZ 3/6/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1330 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: rmullen@eaest.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Project Manager:

Gina Mullen

Sampler:

Justin Vasquez

On Ice:  Yes  No

Sample Temperature: 0.1°C

Date Time Matrix Sample Request ID

3-5-19	1126	W	DAD-01
	1150		DAD-02
	1211		DAD-03
	1232		DAD-04
	1308		DAD-05
	1325		DAD-06

Container Type and #

2  
2  
2  
2  
2  
2

Preservative Type

HEAL No.

1903218  
-001  
-002  
-003  
-004  
-005  
-006

Date Time Requisitioned by

3-5-19 1630 [Signature]

Date Time Requisitioned by

3-6-19 0900 [Signature]

Received by: Date Time

Received by: Date Time

Remarks:



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 25, 2019

Regina Mullen  
EA Engineering  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dona Ana Dairies Consortium

OrderNo.: 1903407

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/8/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-20**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/7/2019 12:22:00 PM**Lab ID:** 1903407-001**Matrix:** AQUEOUS**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	900	50		mg/L	100	3/8/2019 6:09:11 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 5:31:57 PM
Nitrogen, Nitrate (As N)	35	1.0	*	mg/L	10	3/8/2019 5:31:57 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2530	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 8
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903407**

Date Reported: 3/25/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-26

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/7/2019 11:53:00 AM

**Lab ID:** 1903407-002

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	800	50		mg/L	100	3/8/2019 6:34:00 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 6:21:35 PM
Nitrogen, Nitrate (As N)	50	1.0	*	mg/L	10	3/8/2019 6:21:35 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2670	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 2 of 8
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903407**

Date Reported: 3/25/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-22

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/7/2019 11:27:00 AM

**Lab ID:** 1903407-003

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	670	50		mg/L	100	3/8/2019 7:23:39 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:11:14 PM
Nitrogen, Nitrate (As N)	26	1.0	*	mg/L	10	3/8/2019 7:11:14 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2200	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-09**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/7/2019 11:15:00 AM**Lab ID:** 1903407-004**Matrix:** AQUEOUS**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	950	50		mg/L	100	3/8/2019 7:48:28 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:36:03 PM
Nitrogen, Nitrate (As N)	100	10	*	mg/L	100	3/8/2019 7:48:28 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	3290	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Page 4 of 8
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903407**

Date Reported: 3/25/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-21

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/7/2019 10:54:00 AM

**Lab ID:** 1903407-005

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	860	50		mg/L	100	3/8/2019 8:13:17 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 8:00:53 PM
Nitrogen, Nitrate (As N)	80	10	*	mg/L	100	3/8/2019 8:13:17 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	3030	40.0	*D	mg/L	1	3/18/2019 10:30:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 5 of 8
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903407

25-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953630</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953631</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.8	0.50	5.000	0	96.6	90	110			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	96.7	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			

Sample ID: <b>1903407-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>DAD-20</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953670</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	9.0	1.0	10.00	0	89.7	82.4	108			
Nitrogen, Nitrate (As N)	63	1.0	25.00	34.77	112	79.1	116			

Sample ID: <b>1903407-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>DAD-20</b>	Batch ID: <b>R58228</b>	RunNo: <b>58228</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953671</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	8.8	1.0	10.00	0	88.4	82.4	108	1.50	20	
Nitrogen, Nitrate (As N)	61	1.0	25.00	34.77	105	79.1	116	2.61	20	

### Qualifiers:

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903407

25-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43683</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43683</b>	RunNo: <b>58425</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960537</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43683</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43683</b>	RunNo: <b>58425</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960538</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	999	20.0	1000	0	99.9	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903407

25-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43774</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963233</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43774</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963234</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

### Qualifiers:

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903407

RcptNo: 1

Received By: **Isaiah Ortiz** 3/8/2019 8:50:00 AM

Completed By: **Erin Melendrez** 3/8/2019 9:36:20 AM

Reviewed By: **IO** 3/8/19

LB: YG 3/8/19

*IO*  
*EM*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 05  
 (<2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: YG 3/8/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Dona Ana Dairies Consortium**

Project #:

Project Manager:

**Gina Mullen**

Sampler: Justin Vasquez

On Ice:  Yes  No

Sample Temperature: 0.8

Date	Time	Matrix	Sample Request ID
3-7-19	1222	W	DAD-20
	1153		DAD-26
	1127		DAD-22
	1115		DAD-09
	1054		DAD-21

Container Type and #	Preservative Type	HEAL No.
2		1903407
2		-001
2		-002
2		-003
2		-004
2		-005

Date:	Time:	Relinquished by:
3-7-19	1330	<u>Jim</u>
Date:	Time:	Relinquished by:

Received by:	Date	Time
<u>TAC</u>	3/8/19	0850
Received by:	Date	Time

Analysis Request						
Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)		
X	X	X	X			
X	X	X	X			
X	X	X	X			
X	X	X	X			
X	X	X	X			

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 26, 2019

Regina Mullen  
EA Engineering  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dona Ana Dairies Consortium

OrderNo.: 1903460

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/9/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903460**

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-07

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/8/2019 12:26:00 PM

**Lab ID:** 1903460-001

**Matrix:** AQUEOUS

**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	530	50		mg/L	100	3/11/2019 7:20:49 PM
Nitrate+Nitrite as N	12	1.0	*	mg/L	5	3/11/2019 10:59:35 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2050	20.0	*	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-13**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/8/2019 9:06:00 AM**Lab ID:** 1903460-002**Matrix:** AQUEOUS**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	570	50		mg/L	100	3/11/2019 7:46:32 PM
Nitrate+Nitrite as N	10	1.0		mg/L	5	3/11/2019 11:12:27 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2000	40.0	*D	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-14**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/8/2019 9:44:00 AM**Lab ID:** 1903460-003**Matrix:** AQUEOUS**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	830	50		mg/L	100	3/11/2019 8:38:05 PM
Nitrate+Nitrite as N	22	1.0	*	mg/L	5	3/11/2019 11:25:18 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	3310	40.0	*D	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-15**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/8/2019 10:57:00 AM**Lab ID:** 1903460-004**Matrix:** AQUEOUS**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	540	50		mg/L	100	3/11/2019 9:03:50 PM
Nitrate+Nitrite as N	7.5	1.0		mg/L	5	3/11/2019 11:38:10 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	1970	20.0	*	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-16**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/8/2019 11:19:00 AM**Lab ID:** 1903460-005**Matrix:** AQUEOUS**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	450	50		mg/L	100	3/11/2019 9:29:33 PM
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/11/2019 11:51:01 PM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	1990	40.0	*D	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-17**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/8/2019 11:58:00 AM**Lab ID:** 1903460-006**Matrix:** AQUEOUS**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	89	5.0		mg/L	10	3/11/2019 9:42:25 PM
Nitrate+Nitrite as N	2.4	1.0		mg/L	5	3/12/2019 12:03:53 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	638	40.0	*D	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EA Engineering**Client Sample ID:** DAD-23**Project:** Dona Ana Dairies Consortium**Collection Date:** 3/8/2019 10:11:00 AM**Lab ID:** 1903460-007**Matrix:** AQUEOUS**Received Date:** 3/9/2019 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	540	50		mg/L	100	3/11/2019 10:21:00 PM
Nitrate+Nitrite as N	17	1.0	*	mg/L	5	3/12/2019 12:16:44 AM
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>						Analyst: <b>CJS</b>
Total Dissolved Solids	2260	100	*D	mg/L	1	3/18/2019 9:44:00 AM
<b>SM 4500 NORG C: TKN</b>						Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/21/2019 3:00:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903460

26-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>A58285</b>	RunNo: <b>58285</b>								
Prep Date:	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954986</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>A58285</b>	RunNo: <b>58285</b>								
Prep Date:	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954987</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.2	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.9	90	110			

### Qualifiers:

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903460

26-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43695</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43695</b>	RunNo: <b>58418</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960343</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43695</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43695</b>	RunNo: <b>58418</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960344</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	993	20.0	1000	0	99.3	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903460

26-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID: <b>MB-43805</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43805</b>	RunNo: <b>58564</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1966420</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43805</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43805</b>	RunNo: <b>58564</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1966421</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: **EA Engineering Alb**

Work Order Number: **1903460**

RcptNo: 1

Received By: **Anne Thorne**

3/9/2019 10:50:00 AM

*Anne Thorne*

Completed By: **Leah Baca**

3/11/2019 8:11:33 AM

*Leah Baca*

Reviewed By: **DAD 3/11/19**

Labeled by **YG 3/11/19**

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? Courier

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 7  
 (<2 or >12 unless noted)

Adjusted? NO

Checked by: YG 3/11/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Dona Ana Dairies Consortium**

Project #:

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

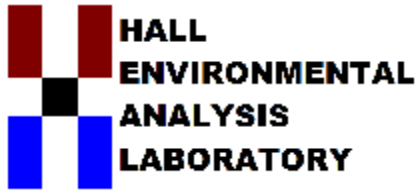
Tel. 505-345-3975 Fax 505-345-4107

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)	
3-8-19	1226	W	DAD-07	2		1902460	X	X	X	X		
	906		DAD-13	2		-007	X	X	X	X		
	944		DAD-14	2		-003	X	X	X	X		
	1057		DAD-15	2		-004	X	X	X	X		
	1119		DAD-16	2		-005	X	X	X	X		
	1158		DAD-17	2		-006	X	X	X	X		
	1011		DAD-23	2		-007	X	X	X	X		
Received by: <i>[Signature]</i>							Date	Time	Remarks:			
3-8-19	1445											
Relinquished by: <i>[Signature]</i>							Date	Time				
Received by:							Date	Time				
Relinquished by:							Date	Time				

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 26, 2019

Regina Mullen  
EA Engineering  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dona Ana Dairies Consortium

OrderNo.: 1903515

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/12/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903515

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-10

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/11/2019 12:39:00 PM

**Lab ID:** 1903515-001

**Matrix:** AQUEOUS

**Received Date:** 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	380	50		mg/L	100	3/12/2019 2:10:15 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 1:57:22 PM	R58326
Nitrogen, Nitrate (As N)	2.5	1.0		mg/L	10	3/12/2019 1:57:22 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1280	100	*D	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903515

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-11

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/11/2019 12:11:00 PM

**Lab ID:** 1903515-002

**Matrix:** AQUEOUS

**Received Date:** 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	670	50		mg/L	100	3/12/2019 3:01:42 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 2:48:50 PM	R58326
Nitrogen, Nitrate (As N)	13	1.0	*	mg/L	10	3/12/2019 2:48:50 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2740	20.0	*	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903515

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-12

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/11/2019 11:29:00 AM

**Lab ID:** 1903515-003

**Matrix:** AQUEOUS

**Received Date:** 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1100	50		mg/L	100	3/12/2019 6:27:31 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 6:14:39 PM	R58326
Nitrogen, Nitrate (As N)	18	1.0	*	mg/L	10	3/12/2019 6:14:39 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3630	20.0	*	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903515

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-18

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/11/2019 9:13:00 AM

**Lab ID:** 1903515-004

**Matrix:** AQUEOUS

**Received Date:** 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	620	50		mg/L	100	3/12/2019 3:53:09 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 3:40:17 PM	R58326
Nitrogen, Nitrate (As N)	9.4	1.0		mg/L	10	3/12/2019 3:40:17 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2600	20.0	*	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering

Client Sample ID: DAD-19

Project: Dona Ana Dairies Consortium

Collection Date: 3/11/2019 10:28:00 AM

Lab ID: 1903515-005

Matrix: AQUEOUS

Received Date: 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	970	50		mg/L	100	3/12/2019 4:44:36 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 4:06:01 PM	R58326
Nitrogen, Nitrate (As N)	34	1.0	*	mg/L	10	3/12/2019 4:06:01 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2920	20.0	*	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903515

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-24

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/11/2019 11:02:00 AM

**Lab ID:** 1903515-006

**Matrix:** AQUEOUS

**Received Date:** 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	940	50		mg/L	100	3/12/2019 5:36:03 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 5:23:11 PM	R58326
Nitrogen, Nitrate (As N)	6.0	1.0		mg/L	10	3/12/2019 5:23:11 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2490	20.0	*	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903515

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** DAD-25

**Project:** Dona Ana Dairies Consortium

**Collection Date:** 3/11/2019 9:43:00 AM

**Lab ID:** 1903515-007

**Matrix:** AQUEOUS

**Received Date:** 3/12/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	560	50		mg/L	100	3/12/2019 6:01:48 PM	R58326
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/12/2019 5:48:56 PM	R58326
Nitrogen, Nitrate (As N)	4.8	1.0		mg/L	10	3/12/2019 5:48:56 PM	R58326
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1570	40.0	*D	mg/L	1	3/19/2019 2:46:00 PM	43716
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/22/2019 4:00:00 PM	43827

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903515

26-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID <b>1903515-005AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>DAD-19</b>	Batch ID: <b>R58326</b>		RunNo: <b>58326</b>							
Prep Date:	Analysis Date: <b>3/12/2019</b>		SeqNo: <b>1956675</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	10	1.0	10.00	0	104	82.4	108			
Nitrogen, Nitrate (As N)	62	1.0	25.00	34.22	112	79.1	116			

Sample ID <b>1903515-005AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>DAD-19</b>	Batch ID: <b>R58326</b>		RunNo: <b>58326</b>							
Prep Date:	Analysis Date: <b>3/12/2019</b>		SeqNo: <b>1956676</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	10	1.0	10.00	0	105	82.4	108	0.918	20	
Nitrogen, Nitrate (As N)	63	1.0	25.00	34.22	115	79.1	116	1.27	20	

Sample ID <b>MB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R58326</b>		RunNo: <b>58326</b>							
Prep Date:	Analysis Date: <b>3/12/2019</b>		SeqNo: <b>1956687</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID <b>LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R58326</b>		RunNo: <b>58326</b>							
Prep Date:	Analysis Date: <b>3/12/2019</b>		SeqNo: <b>1956688</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.4	90	110			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	97.2	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	99.0	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903515

26-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID <b>MB-43716</b>	SampType: <b>MBLK</b>		TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>							
Client ID: <b>PBW</b>	Batch ID: <b>43716</b>		RunNo: <b>58471</b>							
Prep Date: <b>3/15/2019</b>	Analysis Date: <b>3/19/2019</b>		SeqNo: <b>1962398</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID <b>LCS-43716</b>	SampType: <b>LCS</b>		TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>43716</b>		RunNo: <b>58471</b>							
Prep Date: <b>3/15/2019</b>	Analysis Date: <b>3/19/2019</b>		SeqNo: <b>1962399</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	991	20.0	1000	0	99.1	80	120			

Sample ID <b>1903515-005ADUP</b>	SampType: <b>DUP</b>		TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>							
Client ID: <b>DAD-19</b>	Batch ID: <b>43716</b>		RunNo: <b>58471</b>							
Prep Date: <b>3/15/2019</b>	Analysis Date: <b>3/19/2019</b>		SeqNo: <b>1962407</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	2920	20.0						0.0685	10	*

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903515

26-Mar-19

**Client:** EA Engineering  
**Project:** Dona Ana Dairies Consortium

Sample ID <b>MB-43827</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43827</b>	RunNo: <b>58594</b>								
Prep Date: <b>3/21/2019</b>	Analysis Date: <b>3/22/2019</b>	SeqNo: <b>1967309</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID <b>LCS-43827</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43827</b>	RunNo: <b>58594</b>								
Prep Date: <b>3/21/2019</b>	Analysis Date: <b>3/22/2019</b>	SeqNo: <b>1967310</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903515

ReptNo: 1

Received By: Desiree Dominguez 3/12/2019 9:05:00 AM *DD*  
 Completed By: Desiree Dominguez 3/12/2019 10:32:01 AM *DD*  
 Reviewed By: *IO* 3/12/19  
*LB: DAD 3/12/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log in**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 7  
 (or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 3/12/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: Crina Mullen Date: 3/12/19 → 3/14/19  
 By Whom: Leah Baca Via:  eMail  Phone  Fax  In Person  
 Regarding: Collection date discrepancy between COC and label  
 Client Instructions: Use collection date on COC

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Gcod	Not Present			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Dona Ana Dairies Consortium**

Project #:

Project Manager:

**Gina Mullen**

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: 0.9°C

Container Type and #

Preservative Type

HEAL No.

1903515

L -001

L -002

L -003

L -004

L -005

L -006

L -007

Date Time Matrix Sample Request ID

3/11/19 12:39 V DAD-10

12:11 DAD-11

11:29 DAD-12

9:15 DAD-16

10:28 DAD-19

11:02 DAD-24

9:43 DAD-25

Date: 3/11/19

Time: 1:15

Relinquished by:

*[Signature]*

Date:

Time:

Relinquished by:

*[Signature]*

Received by:

*[Signature]*

Date:

Time:

3/12/19

9:05

Remarks:

FEDEX

↓

↓

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORC C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 26, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX:

RE: Del Oro

OrderNo.: 1903425

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/8/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903425

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 692-02

**Project:** Del Oro

**Collection Date:** 3/7/2019 10:35:00 AM

**Lab ID:** 1903425-001

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	640	50		mg/L	100	3/8/2019 7:13:17 PM	R58254
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:00:25 PM	R58254
Nitrogen, Nitrate (As N)	67	1.0	*	mg/L	10	3/8/2019 7:00:25 PM	R58254
Sulfate	410	5.0		mg/L	10	3/8/2019 7:00:25 PM	R58254
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2560	20.0	*	mg/L	1	3/18/2019 9:36:00 AM	43684
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 5:00:00 PM	43774

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903425

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 692-06

**Project:** Del Oro

**Collection Date:** 3/7/2019 9:36:00 AM

**Lab ID:** 1903425-002

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	420	50		mg/L	100	3/8/2019 7:39:00 PM	R58254
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:26:09 PM	R58254
Nitrogen, Nitrate (As N)	3.1	1.0		mg/L	10	3/8/2019 7:26:09 PM	R58254
Sulfate	210	5.0		mg/L	10	3/8/2019 7:26:09 PM	R58254
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1450	20.0	*	mg/L	1	3/18/2019 9:36:00 AM	43684
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 5:00:00 PM	43774

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903425

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 692-07

**Project:** Del Oro

**Collection Date:** 3/7/2019 9:10:00 AM

**Lab ID:** 1903425-003

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	580	50		mg/L	100	3/8/2019 8:04:43 PM	R58254
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 7:51:52 PM	R58254
Nitrogen, Nitrate (As N)	3.5	1.0		mg/L	10	3/8/2019 7:51:52 PM	R58254
Sulfate	220	5.0		mg/L	10	3/8/2019 7:51:52 PM	R58254
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1680	40.0	*D	mg/L	1	3/18/2019 9:36:00 AM	43684
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 5:00:00 PM	43774

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903425

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 692-08

**Project:** Del Oro

**Collection Date:** 3/7/2019 8:56:00 AM

**Lab ID:** 1903425-004

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	420	50		mg/L	100	3/8/2019 8:56:14 PM	R58254
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 8:43:23 PM	R58254
Nitrogen, Nitrate (As N)	2.6	1.0		mg/L	10	3/8/2019 8:43:23 PM	R58254
Sulfate	190	5.0		mg/L	10	3/8/2019 8:43:23 PM	R58254
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1400	40.0	*D	mg/L	1	3/18/2019 9:36:00 AM	43684
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 5:00:00 PM	43774

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903425

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 692-09

**Project:** Del Oro

**Collection Date:** 3/7/2019 10:01:00 AM

**Lab ID:** 1903425-005

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	390	50		mg/L	100	3/8/2019 9:21:58 PM	R58254
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 9:09:06 PM	R58254
Nitrogen, Nitrate (As N)	3.0	1.0		mg/L	10	3/8/2019 9:09:06 PM	R58254
Sulfate	200	5.0		mg/L	10	3/8/2019 9:09:06 PM	R58254
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1400	20.0	*	mg/L	1	3/18/2019 9:36:00 AM	43684
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 5:00:00 PM	43774

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903425**

Date Reported: 3/26/2019

**CLIENT:** EA Engineering

**Client Sample ID:** LRG-5820

**Project:** Del Oro

**Collection Date:** 3/7/2019 10:10:00 AM

**Lab ID:** 1903425-006

**Matrix:** AQUEOUS

**Received Date:** 3/8/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	370	50		mg/L	100	3/8/2019 9:47:41 PM	R58254
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/8/2019 9:34:49 PM	R58254
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/8/2019 9:34:49 PM	R58254
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1310	20.0	*	mg/L	1	3/18/2019 9:36:00 AM	43684
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 5:00:00 PM	43774

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903425

26-Mar-19

**Client:** EA Engineering

**Project:** Del Oro

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58254</b>	RunNo: <b>58254</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953912</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58254</b>	RunNo: <b>58254</b>								
Prep Date:	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953913</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	96.2	90	110			
Nitrogen, Nitrite (As N)	0.98	0.10	1.000	0	97.8	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	102	90	110			
Sulfate	10	0.50	10.00	0	99.9	90	110			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903425

26-Mar-19

**Client:** EA Engineering  
**Project:** Del Oro

Sample ID: <b>MB-43684</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43684</b>	RunNo: <b>58417</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960280</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43684</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43684</b>	RunNo: <b>58417</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960281</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Sample ID: <b>1903425-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>692-02</b>	Batch ID: <b>43684</b>	RunNo: <b>58417</b>								
Prep Date: <b>3/14/2019</b>	Analysis Date: <b>3/18/2019</b>	SeqNo: <b>1960286</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	2530	20.0						1.06	10	*

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903425

26-Mar-19

**Client:** EA Engineering  
**Project:** Del Oro

Sample ID: <b>MB-43774</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963233</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43774</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963234</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

Sample ID: <b>1903425-003AMS</b>	SampType: <b>MS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>692-07</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963244</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	75	125			

Sample ID: <b>1903425-003AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>692-07</b>	Batch ID: <b>43774</b>	RunNo: <b>58486</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963245</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	75	125	0	20	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1903425

RcptNo: 1

Received By: **Isaiah Ortiz** 3/8/2019 8:50:00 AM

Completed By: **Erin Melendrez** 3/8/2019 11:06:16 AM

Reviewed By: **LB** *3/8/19*

*I-Ox*  
*uug*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: 6  
 (<2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: LB 3/8/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Del Oro**

Project #:

Project Manager:

**Gina Mullen**

Sampler: Justin Vespa

On Ice:  Yes  No

Sample Temperature: 0.8 C

Date Time Matrix Sample Request ID

3-7-19	1035	W	692-02
	936		692-06
	910		692-07
	856		692-08
	1001		692-09
	1010		LR6-5820

Container Type and #

2  
2  
2  
2  
2  
2

Preservative Type

-001  
-002  
-003  
-004  
-005  
-006

HEAL No.

1903425

Date: 3-7-19

Time: 1330

Relinquished by: JMS

Relinquished by:

Received by:

JMS Fedex

Date: 3/8/19

Time: 0850

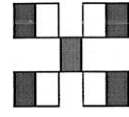
Received by:

Date: Time

Remarks:

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Total Sulfur	Air Bubbles (Y or N)
X	X	X	X	X		
X	X	X	X	X		
X	X	X	X	X		
X	X	X	X	X		
X	X	X	X	X		
X	X	X	X	X		

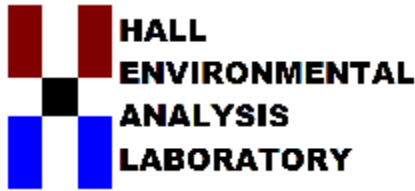


# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 19, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dominguez Dairy 1

OrderNo.: 1903025

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/1/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903025

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-00591-S

**Project:** Dominguez Dairy 1

**Collection Date:** 2/28/2019 10:53:00 AM

**Lab ID:** 1903025-001

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1200	50		mg/L	100	3/1/2019 3:07:30 PM	R58073
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 2:28:55 PM	R58073
Nitrogen, Nitrate (As N)	28	1.0	*	mg/L	10	3/1/2019 2:28:55 PM	R58073
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3410	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903025

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-00591-S-2

**Project:** Dominguez Dairy 1

**Collection Date:** 2/28/2019 10:46:00 AM

**Lab ID:** 1903025-002

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	440	50		mg/L	100	3/1/2019 3:33:12 PM	R58073
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 3:20:21 PM	R58073
Nitrogen, Nitrate (As N)	2.3	1.0		mg/L	10	3/1/2019 3:20:21 PM	R58073
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1730	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903025

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 624-01

**Project:** Dominguez Dairy 1

**Collection Date:** 2/28/2019 9:28:00 AM

**Lab ID:** 1903025-003

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1000	50		mg/L	100	3/1/2019 3:58:56 PM	R58073
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 3:46:04 PM	R58073
Nitrogen, Nitrate (As N)	11	1.0	*	mg/L	10	3/1/2019 3:46:04 PM	R58073
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3170	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903025

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 624-02

**Project:** Dominguez Dairy 1

**Collection Date:** 2/28/2019 10:04:00 AM

**Lab ID:** 1903025-004

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	950	50		mg/L	100	3/1/2019 4:24:39 PM	R58073
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 4:11:48 PM	R58073
Nitrogen, Nitrate (As N)	8.2	1.0		mg/L	10	3/1/2019 4:11:48 PM	R58073
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3130	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903025

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 624-05

**Project:** Dominguez Dairy 1

**Collection Date:** 2/28/2019 10:28:00 AM

**Lab ID:** 1903025-005

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	370	50		mg/L	100	3/1/2019 5:16:04 PM	R58073
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 5:03:13 PM	R58073
Nitrogen, Nitrate (As N)	6.6	1.0		mg/L	10	3/1/2019 5:03:13 PM	R58073
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1920	40.0	*D	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903025

19-Mar-19

**Client:** EA Engineering Alb  
**Project:** Dominguez Dairy 1

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58073</b>	RunNo: <b>58073</b>								
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946167</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58073</b>	RunNo: <b>58073</b>								
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946168</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.8	0.50	5.000	0	95.8	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

Sample ID: <b>1903025-001AMS</b>	SampType: <b>ms</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LRG-00591-S</b>	Batch ID: <b>R58073</b>	RunNo: <b>58073</b>								
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946192</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	6.4	1.0	10.00	0	64.5	82.4	108			S
Nitrogen, Nitrate (As N)	53	1.0	25.00	27.67	102	79.1	116			

Sample ID: <b>1903025-001AMSD</b>	SampType: <b>msd</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LRG-00591-S</b>	Batch ID: <b>R58073</b>	RunNo: <b>58073</b>								
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946193</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	6.5	1.0	10.00	0	64.7	82.4	108	0.381	20	S
Nitrogen, Nitrate (As N)	53	1.0	25.00	27.67	101	79.1	116	0.291	20	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903025

19-Mar-19

**Client:** EA Engineering Alb

**Project:** Dominguez Dairy 1

Sample ID: <b>MB-43522</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953005</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43522</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953006</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	100	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903025

19-Mar-19

**Client:** EA Engineering Alb

**Project:** Dominguez Dairy 1

Sample ID: <b>MB-43543</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952830</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43543</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952831</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1903025

RcptNo: 1

Received By: Yazmine Garduno

3/1/2019 8:53:00 AM

*Yazmine Garduno*

Completed By: Victoria Zellar

3/1/2019 10:32:45 AM

*Victoria Zellar*

Reviewed By: *VUZ 3/1/19*

*Labelled by  
DAD 3/1/19*

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH:	<u>5</u>
(3 or >12 unless noted)	
Adjusted?	<u>NO</u>
Checked by:	<u>DAD 3/1/19</u>

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: rmullen@east.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

Domniguez /

Project #:

Project Manager:

Gina Mullen

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *0°C*

Date Time Matrix Sample Request ID

2-18-14	1053	W	LR6-00591-5
	1096	W	LR6-00591-5-2
	928	W	624-01
	1004	W	624-02
	1028	W	624-05

Container Type and #

2  
2  
2  
2  
2

Preservative Type

HEAL No.  
*1903025*  
-001  
-002  
-003  
-004  
-005

Nitrate/Nitrite EPA Method 300.0

TKN SM 4500 NORG C

Chloride EPA 300.0

TDS SM 2540 C MOD

Air Bubbles (Y or N)

## Analysis Request

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Remarks:

Received by: *FEDER* Date Time

*Margaret Winters* 3/11 853

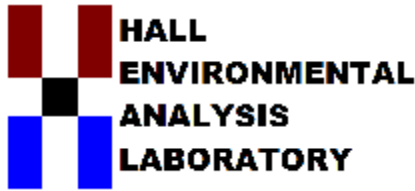
Relinquished by:

*gmw*

Date: 1700

Relinquished by:

Date: Time



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 21, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dominguez 2

OrderNo.: 1903305

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/7/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-02

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 9:42:00 AM

**Lab ID:** 1903305-001

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	460	50		mg/L	100	3/11/2019 10:59:46 AM	R58284
Nitrate+Nitrite as N	7.0	1.0		mg/L	5	3/11/2019 4:10:02 PM	R58284
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2750	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-03

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 11:39:00 AM

**Lab ID:** 1903305-002

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1100	50		mg/L	100	3/11/2019 11:24:35 AM	R58284
Nitrate+Nitrite as N	32	1.0	*	mg/L	5	3/11/2019 4:22:26 PM	R58284
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3390	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-06

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 10:42:00 AM

**Lab ID:** 1903305-003

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	470	50		mg/L	100	3/11/2019 11:49:25 AM	R58284
Nitrate+Nitrite as N	130	10	*	mg/L	50	3/13/2019 5:58:18 PM	R58362
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2810	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-08

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 10:17:00 AM

**Lab ID:** 1903305-004

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	96	5.0		mg/L	10	3/11/2019 12:01:50 PM	R58284
Nitrate+Nitrite as N	49	2.0	*	mg/L	10	3/13/2019 6:10:42 PM	R58362
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1310	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-10

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 12:52:00 PM

**Lab ID:** 1903305-005

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	370	50		mg/L	100	3/11/2019 1:03:54 PM	R58284
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/11/2019 4:59:39 PM	R58284
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1410	40.0	*D	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-11

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 12:21:00 PM

**Lab ID:** 1903305-006

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	260	50		mg/L	100	3/11/2019 1:28:43 PM	R58284
Nitrate+Nitrite as N	1.3	1.0		mg/L	5	3/11/2019 5:49:19 PM	R58284
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1160	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-12

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 12:37:00 PM

**Lab ID:** 1903305-007

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	300	50		mg/L	100	3/11/2019 1:53:33 PM	R58284
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/11/2019 6:01:43 PM	R58284
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1190	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903305

Date Reported: 3/21/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 42-13

**Project:** Dominguez 2

**Collection Date:** 3/6/2019 11:08:00 AM

**Lab ID:** 1903305-008

**Matrix:** AQUEOUS

**Received Date:** 3/7/2019 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	910	50		mg/L	100	3/11/2019 2:18:22 PM	R58284
Nitrate+Nitrite as N	54	4.0	*	mg/L	20	3/13/2019 6:23:07 PM	R58362
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3510	20.0	*	mg/L	1	3/15/2019 9:51:00 AM	43657
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/19/2019 1:30:00 PM	43719

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903305

21-Mar-19

**Client:** EA Engineering Alb  
**Project:** Dominguez 2

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58284</b>	RunNo: <b>58284</b>								
Prep Date:	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954875</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>ics</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58284</b>	RunNo: <b>58284</b>								
Prep Date:	Analysis Date: <b>3/11/2019</b>	SeqNo: <b>1954876</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	91.2	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	95.0	90	110			

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58362</b>	RunNo: <b>58362</b>								
Prep Date:	Analysis Date: <b>3/13/2019</b>	SeqNo: <b>1957753</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>ics</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58362</b>	RunNo: <b>58362</b>								
Prep Date:	Analysis Date: <b>3/13/2019</b>	SeqNo: <b>1957754</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.1	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903305

21-Mar-19

**Client:** EA Engineering Alb

**Project:** Dominguez 2

Sample ID: <b>MB-43657</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43657</b>	RunNo: <b>58389</b>								
Prep Date: <b>3/13/2019</b>	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1959330</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43657</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43657</b>	RunNo: <b>58389</b>								
Prep Date: <b>3/13/2019</b>	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1959331</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1050	20.0	1000	0	105	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903305

21-Mar-19

**Client:** EA Engineering Alb

**Project:** Dominguez 2

Sample ID: <b>MB-43719</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43719</b>	RunNo: <b>58477</b>								
Prep Date: <b>3/15/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1962495</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43719</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43719</b>	RunNo: <b>58477</b>								
Prep Date: <b>3/15/2019</b>	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1962496</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903305

RcptNo: 1

Received By: **Isaiah Ortiz** 3/7/2019 9:05:00 AM

Completed By: **Erin Melendrez** 3/7/2019 10:19:25 AM

Reviewed By: **LB** 3/7/19

LB: YB 3/7/19

*IOX*  
*uug*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 08  
 (≤2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: YB 3/7/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<u>Gina Mullen</u>	Date:	<u>3/7/19</u>   <u>3/6/19</u>
By Whom:	<u>Leah Beach</u>	Via:	<input type="checkbox"/> eMail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<u>Sample collection date discrepancy - bottle: 3/6 CUC. 3/5</u>		
Client Instructions:	<u>Samples collected on 3/6/19</u>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

Domniguez 2

Project #:

Project Manager:

Gina Mullen

Sampler: Justin Vasquez

On Ice:  Yes  No

Sample Temperature: 23°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3-5-19	942	W	42-02	2		1903305
	1139		42-03	2		-001
	1042		42-06	2		-002
	1017		42-08	2		-003
	1252		42-10	2		-004
	1221		42-11	2		-005
	1237		42-12	2		-006
	1108		42-13	2		-007
						-008

Date: 3-6-19 1500

Time: 1500

Relinquished by: *gjm*

Date: 3/7/19 0905

Time: 0905

Received by: *J.O. Becker*

Date: 3/7/19

Time: 0905

Remarks:

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	

## Analysis Request



[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 18, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Gonzalez Dairy

OrderNo.: 1902C42

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/28/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902C42

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 177-01

**Project:** Gonzalez Dairy

**Collection Date:** 2/27/2019 11:00:00 AM

**Lab ID:** 1902C42-001

**Matrix:** AQUEOUS

**Received Date:** 2/28/2019 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1600	50		mg/L	100	3/1/2019 1:52:58 AM	R58031
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 1:15:43 AM	R58031
Nitrogen, Nitrate (As N)	17	1.0	*	mg/L	10	3/1/2019 1:15:43 AM	R58031
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	4290	40.0	*D	mg/L	1	3/6/2019 3:13:00 PM	43509
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/6/2019 3:00:00 PM	43517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902C42

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 177-02

**Project:** Gonzalez Dairy

**Collection Date:** 2/27/2019 11:24:00 AM

**Lab ID:** 1902C42-002

**Matrix:** AQUEOUS

**Received Date:** 2/28/2019 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	580	50		mg/L	100	3/1/2019 2:17:46 AM	R58031
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 2:05:22 AM	R58031
Nitrogen, Nitrate (As N)	15	1.0	*	mg/L	10	3/1/2019 2:05:22 AM	R58031
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2380	100	*D	mg/L	1	3/6/2019 3:13:00 PM	43509
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/6/2019 3:00:00 PM	43517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902C42

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 177-03A

**Project:** Gonzalez Dairy

**Collection Date:** 2/27/2019 9:49:00 AM

**Lab ID:** 1902C42-003

**Matrix:** AQUEOUS

**Received Date:** 2/28/2019 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	680	50		mg/L	100	3/1/2019 2:42:35 AM	R58031
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 2:30:10 AM	R58031
Nitrogen, Nitrate (As N)	14	1.0	*	mg/L	10	3/1/2019 2:30:10 AM	R58031
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2770	100	*D	mg/L	1	3/6/2019 3:13:00 PM	43509
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/6/2019 3:00:00 PM	43517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902C42

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 177-04

**Project:** Gonzalez Dairy

**Collection Date:** 2/27/2019 10:25:00 AM

**Lab ID:** 1902C42-004

**Matrix:** AQUEOUS

**Received Date:** 2/28/2019 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	930	50		mg/L	100	3/1/2019 3:32:14 AM	R58031
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 3:19:50 AM	R58031
Nitrogen, Nitrate (As N)	16	1.0	*	mg/L	10	3/1/2019 3:19:50 AM	R58031
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3370	20.0	*	mg/L	1	3/6/2019 3:13:00 PM	43509
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/6/2019 3:00:00 PM	43517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902C42

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 177-05

**Project:** Gonzalez Dairy

**Collection Date:** 2/27/2019 12:18:00 PM

**Lab ID:** 1902C42-005

**Matrix:** AQUEOUS

**Received Date:** 2/28/2019 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1400	50		mg/L	100	3/1/2019 3:57:03 AM	R58031
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 3:44:38 AM	R58031
Nitrogen, Nitrate (As N)	24	1.0	*	mg/L	10	3/1/2019 3:44:38 AM	R58031
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	4090	20.0	*	mg/L	1	3/6/2019 3:13:00 PM	43509
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/6/2019 3:00:00 PM	43517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 5 of 9
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902C42

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 177-07

**Project:** Gonzalez Dairy

**Collection Date:** 2/27/2019 11:46:00 AM

**Lab ID:** 1902C42-006

**Matrix:** AQUEOUS

**Received Date:** 2/28/2019 9:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	860	50		mg/L	100	3/1/2019 4:21:52 AM	R58031
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 4:09:28 AM	R58031
Nitrogen, Nitrate (As N)	25	1.0	*	mg/L	10	3/1/2019 4:09:28 AM	R58031
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3110	20.0	*	mg/L	1	3/6/2019 3:13:00 PM	43509
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/6/2019 3:00:00 PM	43517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 6 of 9
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902C42

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Gonzalez Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58031</b>	RunNo: <b>58031</b>								
Prep Date:	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1944713</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58031</b>	RunNo: <b>58031</b>								
Prep Date:	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1944714</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	5.0	0.50	5.000	0	99.9	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	102	90	110			
Nitrogen, Nitrate (As N)	2.7	0.10	2.500	0	106	90	110			

Sample ID: <b>1902C42-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>177-01</b>	Batch ID: <b>R58031</b>	RunNo: <b>58031</b>								
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1944752</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	10	1.0	10.00	0.7158	96.8	82.4	108			
Nitrogen, Nitrate (As N)	45	1.0	25.00	17.36	111	79.1	116			

Sample ID: <b>1902C42-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>177-01</b>	Batch ID: <b>R58031</b>	RunNo: <b>58031</b>								
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1944753</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	11	1.0	10.00	0.7158	98.5	82.4	108	1.70	20	
Nitrogen, Nitrate (As N)	46	1.0	25.00	17.36	116	79.1	116	2.73	20	S

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902C42

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Gonzalez Dairy

Sample ID: <b>MB-43509</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43509</b>	RunNo: <b>58164</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950649</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43509</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43509</b>	RunNo: <b>58164</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950650</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1902C42-004ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>177-04</b>	Batch ID: <b>43509</b>	RunNo: <b>58164</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950656</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	3360	20.0						0.505	10	*

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902C42

18-Mar-19

**Client:** EA Engineering Alb

**Project:** Gonzalez Dairy

Sample ID: <b>MB-43517</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43517</b>	RunNo: <b>58189</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951683</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43517</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43517</b>	RunNo: <b>58189</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951684</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1902C42

RcptNo: 1

Received By: Thom Maybee 2/28/2019 9:45:00 AM

Completed By: Erin Melendrez 2/28/2019 11:52:05 AM

Reviewed By: *LB* *2/28/19*

*uug*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6  
 (<2 or >12 unless noted)

Adjusted? No

Checked by: Thom

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_

By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			



# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type) \_\_\_\_\_

Sampler: Justin Vasquez

On Ice:  Yes  No

Sample Temperature: 0.8°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
2-27-19	1100	W	177-01	2		1902042
	1224	W	177-02			-001
	949	W	177-03A			-002
	1025	W	177-04			-003
	1248	W	177-05			-004
	1146	W	177-07			-005
						-006

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Air Bubbles (Y or N)
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	
X	X	X	X	

## Analysis Request



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Project Manager:

Gina Mullen

Project #:

Gonzalez Dairy

Turn-Around Time:

Standard  Rush

Project Name:

Remarks:

Received by: Fed EX Date: 2/28/19 9:15

Received by: [Signature] Date: \_\_\_\_\_

Relinquished by: [Signature]

Relinquished by: \_\_\_\_\_

Date: 2-27-19 Time: 1400

Date: \_\_\_\_\_ Time: \_\_\_\_\_

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 29, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Dominguez

OrderNo.: 1903C75

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/27/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 09, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903C75

Date Reported: 5/29/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-00590-5-6

**Project:** Dominguez

**Collection Date:** 3/26/2019 11:18:00 AM

**Lab ID:** 1903C75-001

**Matrix:** AQUEOUS

**Received Date:** 3/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	420	50		mg/L	100	3/27/2019 8:15:20 PM	R58668
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/27/2019 8:02:56 PM	R58668
Nitrogen, Nitrate (As N)	2.0	1.0		mg/L	10	3/27/2019 8:02:56 PM	R58668
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1640	20.0	*	mg/L	1	4/2/2019 4:10:00 PM	44020
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	4/6/2019 1:30:00 PM	44164

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C75

29-May-19

Client: EA Engineering Alb

Project: Dominguez

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58668</b>	RunNo: <b>58668</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971506</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>ics</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58668</b>	RunNo: <b>58668</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971507</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.8	0.50	5.000	0	96.3	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.2	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

Sample ID: <b>LCS-d</b>	SampType: <b>LCSd</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS02</b>	Batch ID: <b>R58668</b>	RunNo: <b>58668</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971508</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chloride	4.9	0.50	5.000	0	97.8	90	110	1.58	20	
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	97.2	90	110	1.14	20	
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	103	90	110	1.65	20	

Sample ID: <b>1903C75-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LRG-00590-5-6</b>	Batch ID: <b>R58668</b>	RunNo: <b>58668</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971523</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	8.9	1.0	10.00	0	88.6	82.4	108			
Nitrogen, Nitrate (As N)	26	1.0	25.00	1.961	96.3	79.1	116			

Sample ID: <b>1903C75-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LRG-00590-5-6</b>	Batch ID: <b>R58668</b>	RunNo: <b>58668</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971524</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Nitrogen, Nitrite (As N)	9.2	1.0	10.00	0	92.3	82.4	108	4.12	20	
Nitrogen, Nitrate (As N)	27	1.0	25.00	1.961	101	79.1	116	3.96	20	

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C75

29-May-19

**Client:** EA Engineering Alb

**Project:** Dominguez

Sample ID: <b>MB-44020</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>44020</b>	RunNo: <b>58828</b>								
Prep Date: <b>4/1/2019</b>	Analysis Date: <b>4/2/2019</b>	SeqNo: <b>1977051</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-44020</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>44020</b>	RunNo: <b>58828</b>								
Prep Date: <b>4/1/2019</b>	Analysis Date: <b>4/2/2019</b>	SeqNo: <b>1977052</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1903C75-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LRG-00590-5-6</b>	Batch ID: <b>44020</b>	RunNo: <b>58828</b>								
Prep Date: <b>4/1/2019</b>	Analysis Date: <b>4/2/2019</b>	SeqNo: <b>1977059</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1630	20.0						0.672	10	*

**Qualifiers:**

- |                                                         |                                                   |
|---------------------------------------------------------|---------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits      |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                          |
| PQL Practical Quantitative Limit                        | RL Reporting Limit                                |
| S % Recovery outside of range due to dilution or matrix |                                                   |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C75

29-May-19

**Client:** EA Engineering Alb  
**Project:** Dominguez

Sample ID: <b>MB-44164</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>44164</b>	RunNo: <b>58953</b>								
Prep Date: <b>4/5/2019</b>	Analysis Date: <b>4/6/2019</b>	SeqNo: <b>1982658</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-44164</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>44164</b>	RunNo: <b>58953</b>								
Prep Date: <b>4/5/2019</b>	Analysis Date: <b>4/6/2019</b>	SeqNo: <b>1982659</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

Sample ID: <b>1903C75-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LRG-00590-5-6</b>	Batch ID: <b>44164</b>	RunNo: <b>58953</b>								
Prep Date: <b>4/5/2019</b>	Analysis Date: <b>4/6/2019</b>	SeqNo: <b>1982669</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	75	125			

Sample ID: <b>1903C75-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LRG-00590-5-6</b>	Batch ID: <b>44164</b>	RunNo: <b>58953</b>								
Prep Date: <b>4/5/2019</b>	Analysis Date: <b>4/6/2019</b>	SeqNo: <b>1982670</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	75	125	0	20	

**Qualifiers:**

- |                                                         |                                                   |
|---------------------------------------------------------|---------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits      |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                          |
| PQL Practical Quantitative Limit                        | RL Reporting Limit                                |
| S % Recovery outside of range due to dilution or matrix |                                                   |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1903C75

RcptNo: 1

Received By: Yazmine Garduno 3/27/2019 9:15:00 AM

Completed By: Erin Melendrez 3/27/2019 10:33:38 AM

Reviewed By: ENM 3/27/19

LB: DAD 3/27/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 1  
 (or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 3/27/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard     Level 4 (Full Validation)

Accreditation:

NELAP     Other

EDD (Type)

Project Manager:

**Gina Mullen**

Sampler: *Justin Vasquez*

On Ice:  Yes     No

Sample Temperature: *10°C*

Container Type and #    Preservative Type    HEAL No.  
*2*      
*1903075*  
*-001*

Date    Time    Matrix    Sample Request ID

3-26-14    1110    W    ~~LRG-956~~  
 LRG-00590-5-6  
 mg05/29/19

Date:    Time:    Relinquished by:

3-26-14    1700    *[Signature]*

Date:    Time:    Relinquished by:

Received by: *FED EX*    Date: *3/15/14*    Time: *9:15*  
*Justin Vasquez*    Date: *3/27/14*    Time: *[Blank]*

Remarks:

*Well ID revised, as per Regina Mullen. 5/29/19 mg*



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

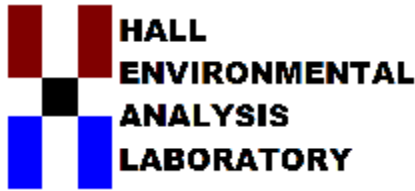
Tel. 505-345-3975    Fax 505-345-4107

Analysis Request

Analysis Request		Air Bubbles (Y or N)											
Method	Result	1	2	3	4	5	6	7	8	9	10	11	12
Nitrate/Nitrite EPA Method 300.0	X												
TKN SM 4500 NORG C	X												
Chloride EPA 300.0	X												
TDS SM 2540 C MOD	X												

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 19, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Gonzalez Dairy

OrderNo.: 1903024

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/1/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903024

Date Reported: 3/19/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-05351-5

**Project:** Gonzalez Dairy

**Collection Date:** 2/28/2019 8:24:00 AM

**Lab ID:** 1903024-001

**Matrix:** AQUEOUS

**Received Date:** 3/1/2019 8:53:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	460	50		mg/L	100	3/1/2019 6:23:52 PM	R58078
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/1/2019 6:11:00 PM	R58078
Nitrogen, Nitrate (As N)	3.4	1.0		mg/L	10	3/1/2019 6:11:00 PM	R58078
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1760	20.0	*	mg/L	1	3/8/2019 9:35:00 AM	43522
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/7/2019 2:00:00 PM	43543

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903024

19-Mar-19

**Client:** EA Engineering Alb  
**Project:** Gonzalez Dairy

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>
Client ID: <b>PBW</b>	Batch ID: <b>R58078</b>	RunNo: <b>58078</b>
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946868</b> Units: <b>mg/L</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>
Client ID: <b>LCSW</b>	Batch ID: <b>R58078</b>	RunNo: <b>58078</b>
Prep Date:	Analysis Date: <b>3/1/2019</b>	SeqNo: <b>1946869</b> Units: <b>mg/L</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	97.0	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	99.5	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	102	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903024

19-Mar-19

**Client:** EA Engineering Alb  
**Project:** Gonzalez Dairy

Sample ID: <b>MB-43522</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953005</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43522</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43522</b>	RunNo: <b>58224</b>								
Prep Date: <b>3/5/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953006</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1000	20.0	1000	0	100	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903024

19-Mar-19

**Client:** EA Engineering Alb

**Project:** Gonzalez Dairy

Sample ID: <b>MB-43543</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952830</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43543</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43543</b>	RunNo: <b>58218</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952831</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1903024

RcptNo: 1

Received By: Yazmine Garduno

3/1/2019 8:53:00 AM

*Yazmine Garduno*

Completed By: Victoria Zellar

3/1/2019 10:23:49 AM

*Victoria Zellar*

Reviewed By: *VZ 3/1/19*

*Labeled by  
DAD 3/1/19*

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH:	<u>1</u>
	<i>(2 or &gt;12 unless noted)</i>
Adjusted?	<u>NO</u>
Checked by:	<u>DAD 3/1/19</u>

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Project Manager:

Gina Mullen

Sampler: *Justin Vesquez*

On Ice:  Yes  No

Sample Temperature: *0°C*

Container Type and #

Preservative Type

HEAL No

*1903024*

Date: *2-28-19 024*

Matrix: *W*

Sample Request ID: *LR6-05351-5*

Turn-Around Time:

Standard  Rush

Project Name:

Gonzalez Dairy

Project #:

Analysis Request

Nitrate/Nitrite EPA Method 300.0

TKN SM 4500 NORG C

Chloride EPA 300.0

TDS SM 2540 C MOD

Air Bubbles (Y or N)

Received by: *Justin Vesquez*

Date: *2/28/19*

Time: *1700*

Relinquished by: *AMS*

Date: *2/28/19*

Time: *1700*

Remarks:



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 20, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Mountain View Dairy LLC

OrderNo.: 1902A65

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/26/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued March 12, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1902A65**

Date Reported: 5/20/2019

**CLIENT:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC  
**Lab ID:** 1902A65-001

**Client Sample ID:** LRG-00952  
**Collection Date:** 2/25/2019 11:55:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 2/26/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	760	50		mg/L	100	2/26/2019 2:45:33 PM	R57967
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/26/2019 2:32:41 PM	R57967
Nitrogen, Nitrate (As N)	3.6	1.0		mg/L	10	2/26/2019 2:32:41 PM	R57967
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2330	20.0	*	mg/L	1	3/3/2019 6:56:00 PM	43445
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A65

20-May-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R57967</b>	RunNo: <b>57967</b>								
Prep Date:	Analysis Date: <b>2/26/2019</b>	SeqNo: <b>1941276</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>ics</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R57967</b>	RunNo: <b>57967</b>								
Prep Date:	Analysis Date: <b>2/26/2019</b>	SeqNo: <b>1941277</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.8	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	94.9	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	98.7	90	110			

**Qualifiers:**

- |                                                         |                                                   |
|---------------------------------------------------------|---------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits      |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                          |
| PQL Practical Quantitative Limit                        | RL Reporting Limit                                |
| S % Recovery outside of range due to dilution or matrix |                                                   |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A65

20-May-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB-43445</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43445</b>	RunNo: <b>58064</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945938</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43445</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43445</b>	RunNo: <b>58064</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945939</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

**Qualifiers:**

- |                                                         |                                                   |
|---------------------------------------------------------|---------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits      |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                          |
| PQL Practical Quantitative Limit                        | RL Reporting Limit                                |
| S % Recovery outside of range due to dilution or matrix |                                                   |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A65

20-May-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB-43460</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947962</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43460</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947963</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                   |
|---------------------------------------------------------|---------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits      |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                          |
| PQL Practical Quantitative Limit                        | RL Reporting Limit                                |
| S % Recovery outside of range due to dilution or matrix |                                                   |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1902A65

RcptNo: 1

Received By: Leah Baca

2/28/2019 8:50:00 AM

*Leah Baca*

Completed By: Isaiah Ortiz

2/28/2019 9:06:22 AM

*I-Ortiz*

Reviewed By: DAD 2-26-19

*LB: TWM 2-26-19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? Courier

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH:	<i>12</i>
Adjusted? <i>16</i>	or >12 unless noted
Checked by:	<i>Twm</i>

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No.	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [gmullen@eaest.com](mailto:gmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

Mountain View Dairy

Project #:

Project Manager:

Gina Mullen

Sampler: Justin Vasquez

Office:  Yes  No

Sample Temperature: *0*

Container Type and #

2

Preservative Type

HEALING

1902465  
-001

Date Time Matrix Sample Request ID

2-25-19 11:55 W 952 957 DN

Date Time Relinquished by:

2-28-19 1400 *Judy*

Date Time Relinquished by:

*G. Mullen* 2/26/19 0850

Received by: *Carr* Date Time

Received by: *G. Mullen* Date Time

Remarks:

Updated Sample ID: 1905/20/19  
as per Regina.

## Analysis Request

Analysis Request	Unit	Method	Remarks
Nitrate/Nitrite EPA Method 300.0	X		
TKN SM 4500 NORG C	X		
Chloride EPA 300.0	X		
TDS SM 2540 C MOD	X		
Sulfate EPA 300.0			
Phosphorus EPA 6010B			
Total Sulfur			
Air Bubbles (Y or N)			

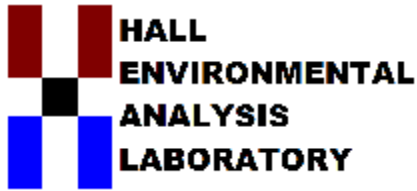


**HALL ENVIRONMENTAL ANALYSIS LABORATORY**  
www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly noted on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 18, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX:

RE: Mountain View Dairy

OrderNo.: 1902B25

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/27/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb  
**Project:** Mountain View Dairy  
**Lab ID:** 1902B25-001

**Client Sample ID:** LRG-00457 Pivot  
**Collection Date:** 2/26/2019 10:13:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1400	50		mg/L	100	2/27/2019 3:40:58 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 3:28:06 PM	R58009
Nitrogen, Nitrate (As N)	11	1.0	*	mg/L	10	2/27/2019 3:28:06 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3890	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-00457-S-Flood

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 10:22:00 AM

**Lab ID:** 1902B25-002

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 3:53:50 PM	R58009
Nitrogen, Nitrate (As N)	2.3	1.0		mg/L	10	2/27/2019 3:53:50 PM	R58009
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 2 of 9
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb  
**Project:** Mountain View Dairy  
**Lab ID:** 1902B25-003

**Client Sample ID:** 70-01  
**Collection Date:** 2/26/2019 12:58:00 PM  
**Matrix:** AQUEOUS  
**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	840	50		mg/L	100	2/27/2019 4:58:08 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 4:45:17 PM	R58009
Nitrogen, Nitrate (As N)	33	1.0	*	mg/L	10	2/27/2019 4:45:17 PM	R58009
Sulfate	670	50		mg/L	100	2/27/2019 4:58:08 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3390	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 70-02

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 11:14:00 AM

**Lab ID:** 1902B25-004

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	780	50		mg/L	100	2/27/2019 5:23:52 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 5:11:01 PM	R58009
Nitrogen, Nitrate (As N)	32	1.0	*	mg/L	10	2/27/2019 5:11:01 PM	R58009
Sulfate	500	5.0		mg/L	10	2/27/2019 5:11:01 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3030	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 70-03

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 9:51:00 AM

**Lab ID:** 1902B25-005

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	3000	100		mg/L	200	3/6/2019 12:19:22 AM	R58153
Nitrogen, Nitrite (As N)	1.2	1.0		mg/L	10	2/27/2019 5:36:44 PM	R58009
Nitrogen, Nitrate (As N)	51	1.0	*	mg/L	10	2/27/2019 5:36:44 PM	R58009
Sulfate	1300	50		mg/L	100	2/27/2019 5:49:37 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	7320	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

CLIENT: EA Engineering Alb

Client Sample ID: 70-04

Project: Mountain View Dairy

Collection Date: 2/26/2019 12:22:00 PM

Lab ID: 1902B25-006

Matrix: AQUEOUS

Received Date: 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	720	50		mg/L	100	2/27/2019 6:15:21 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 6:02:29 PM	R58009
Nitrogen, Nitrate (As N)	25	1.0	*	mg/L	10	2/27/2019 6:02:29 PM	R58009
Sulfate	570	50		mg/L	100	2/27/2019 6:15:21 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3020	100	*D	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B25

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58009</b>	RunNo: <b>58009</b>								
Prep Date:	Analysis Date: <b>2/27/2019</b>	SeqNo: <b>1942433</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58009</b>	RunNo: <b>58009</b>								
Prep Date:	Analysis Date: <b>2/27/2019</b>	SeqNo: <b>1942434</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.5	0.50	5.000	0	90.9	90	110			
Nitrogen, Nitrite (As N)	0.92	0.10	1.000	0	91.9	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	95.8	90	110			
Sulfate	9.6	0.50	10.00	0	95.5	90	110			

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950327</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950328</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.5	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B25

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy

Sample ID: <b>MB-43448</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43448</b>	RunNo: <b>58065</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945962</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43448</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43448</b>	RunNo: <b>58065</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945963</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B25

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy

Sample ID: <b>MB-43461</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43461</b>	RunNo: <b>58137</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1949479</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43461</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43461</b>	RunNo: <b>58137</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1949480</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |





Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1902B25

RcptNo: 1

Received By: Isaiah Ortiz 2/27/2019 8:50:00 AM

*I-Ox*

Completed By: Isaiah Ortiz 2/27/2019 9:27:29 AM

*I-Ox*

Reviewed By: EUM 2/27/19

*LB: DAD 2/27/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6  
 (or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 2/27/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: rmullen@east.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Date	Time	Matrix	Sample Request ID
2-26-19	10:13	W	LR6-00457 Pivot
	10:22		LR6-00457-S - Flux
	12:58		70-01
	11:14		70-02
	9:57		70-03
	12:22		70-04

Turn-Around Time:  
 Standard  Rush

Project Name: Mountain View Dairy

Project #:

Project Manager: Gina Mullen

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *0.0°C*

Container Type and #	Preservative Type	HEAL No.
2		1902825
2		- 001
2		- 002
2		- 003
2		- 004
2		- 005
2		- 006

Date: 2-26-19 Time: 1700

Reinquired by: *gjm*

Date: Time:

Reinquired by:

Received by:

*J-O FedEx* Date: 2/27/19 Time: 0550

Remarks:

*For sample - 2. per Justin  
Only analyze for TKM, No3  
of 2/28/19*



www.hallenvironmental.com

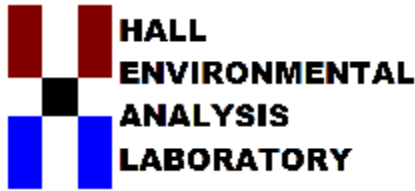
4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 06, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Organ Dairy

OrderNo.: 1902B28

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/27/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B28

Date Reported: 3/6/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** Organ Irrigation Well

**Project:** Organ Dairy

**Collection Date:** 2/26/2019 11:51:00 AM

**Lab ID:** 1902B28-001

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	2/27/2019 6:28:13 PM	R58009
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B28

06-Mar-19

**Client:** EA Engineering Alb

**Project:** Organ Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58009</b>	RunNo: <b>58009</b>								
Prep Date:	Analysis Date: <b>2/27/2019</b>	SeqNo: <b>1942433</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58009</b>	RunNo: <b>58009</b>								
Prep Date:	Analysis Date: <b>2/27/2019</b>	SeqNo: <b>1942434</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	95.8	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B28

06-Mar-19

**Client:** EA Engineering Alb

**Project:** Organ Dairy

Sample ID: <b>MB-43461</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43461</b>	RunNo: <b>58137</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1949479</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43461</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43461</b>	RunNo: <b>58137</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1949480</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1902B28

RcptNo: 1

Received By: **Isaiah Ortiz** 2/27/2019 8:50:00 AM *I-Ox*  
 Completed By: **Isaiah Ortiz** 2/27/2019 9:34:07 AM *I-Ox*  
 Reviewed By: *IO* 2/27/19

*LB: DAD 2/27/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: <u>1</u> (or >12 unless noted) Adjusted? <u>NO</u> Checked by: <u>DAD 2/27/19</u>
-----------------------------------------------------------------------------------------------------------------------------------

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: _____	Date: _____
By Whom: _____	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding: _____	
Client Instructions: _____	

16. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

Client: EA Engineering, Science, and Technology

4901 Hawkins NE - Albuquerque, NM 87109

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Tel. 505-345-3975 Fax 505-345-4107

Project Name: Organ Dairy

Project #: \_\_\_\_\_

Project Manager: Gina Mullen

Sampler: Tutter V-5400

On Ice:  Yes  No

Sample Temperature: 0.0 °C

Container Type and #

HEAL No.

Preservative Type

1902BZ8  
-001

Date

Time

Matrix

Sample Request ID

2-26-19

1151

W

Organ irrigation well

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type) \_\_\_\_\_

Date	Time	Matrix	Sample Request ID	Container Type and #	HEAL No.	Preservative Type	Received by:	Date	Time	Remarks:
2-26-19	1151	W	Organ irrigation well	2	1902BZ8 -001		T-O Fedex	2/27/19	0850	Only analyze for NO <sub>3</sub> +TKN, of 2/28 per jusky

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 09, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX:

RE: Dominguez 2

OrderNo.: 1903C78

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/27/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
 Lab Order 1903C78  
 Date Reported: 4/9/2019

**CLIENT:** EA Engineering Alb **Client Sample ID:** LRG-956  
**Project:** Dominguez 2 **Collection Date:** 3/26/2019 11:34:00 AM  
**Lab ID:** 1903C78-001 **Matrix:** AQUEOUS **Received Date:** 3/27/2019 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1200	50		mg/L	100	3/27/2019 10:26:58 PM	R58708
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/27/2019 10:14:07 PM	R58708
Nitrogen, Nitrate (As N)	13	1.0	*	mg/L	10	3/27/2019 10:14:07 PM	R58708
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3700	20.0	*	mg/L	1	4/2/2019 4:10:00 PM	44020
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	4/6/2019 1:30:00 PM	44164

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix
	W	Sample container temperature is out of limit as specified at testcode		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C78

09-Apr-19

Client: EA Engineering Alb

Project: Dominguez 2

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58708</b>	RunNo: <b>58708</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971983</b>							Units: <b>mg/L</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58708</b>	RunNo: <b>58708</b>								
Prep Date:	Analysis Date: <b>3/27/2019</b>	SeqNo: <b>1971984</b>							Units: <b>mg/L</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.8	90	110			
Nitrogen, Nitrite (As N)	0.92	0.10	1.000	0	92.1	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.2	90	110			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C78

09-Apr-19

**Client:** EA Engineering Alb

**Project:** Dominguez 2

Sample ID: <b>MB-44020</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>44020</b>	RunNo: <b>58828</b>								
Prep Date: <b>4/1/2019</b>	Analysis Date: <b>4/2/2019</b>	SeqNo: <b>1977051</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-44020</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>44020</b>	RunNo: <b>58828</b>								
Prep Date: <b>4/1/2019</b>	Analysis Date: <b>4/2/2019</b>	SeqNo: <b>1977052</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1903C78-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LRG-956</b>	Batch ID: <b>44020</b>	RunNo: <b>58828</b>								
Prep Date: <b>4/1/2019</b>	Analysis Date: <b>4/2/2019</b>	SeqNo: <b>1977061</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	3680	20.0						0.542	10	*

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903C78

09-Apr-19

**Client:** EA Engineering Alb

**Project:** Dominguez 2

Sample ID: <b>MB-44164</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>44164</b>	RunNo: <b>58953</b>								
Prep Date: <b>4/5/2019</b>	Analysis Date: <b>4/6/2019</b>	SeqNo: <b>1982658</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-44164</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>44164</b>	RunNo: <b>58953</b>								
Prep Date: <b>4/5/2019</b>	Analysis Date: <b>4/6/2019</b>	SeqNo: <b>1982659</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

**Sample Log-In Check List**

Client Name: **EA Engineering Alb**

Work Order Number: **1903C78**

RcptNo: 1

Received By: **Yazmine Garduno** 3/27/2019 9:15:00 AM

Completed By: **Erin Melendrez** 3/27/2019 10:37:09 AM

Reviewed By: **ENM** 3/27/19  
**LB: DAD 3/27/19**

*Yazmine Garduno*  
*Erin Melendrez*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 1  
 (2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 3/27/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Domniguez 2**

Project #:

Project Manager:

**Gina Mullen**

Sampler: *Justin Vesequez*

On Ice:  Yes  No

Sample Temperature: *1.8c*

Date Time Matrix Sample Request ID

*3-26-19 11:31 W LRG-956*

Container Type and #

*2*

Preservative Type

*-001*

HEAL No.

*1903C78*

Nitrate/Nitrite EPA Method 300.0 X  
TKN SM 4500 NORG C X  
Chloride EPA 300.0 X  
TDS SM 2540 C MOD X

Air Bubbles (Y or N)

## Analysis Request

Received by: *[Signature]* Date: *3/27/19* Time: *9:15*

Received by: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date: *3-26-19*

Relinquished by: *[Signature]*

Time: *12:00*

Date: \_\_\_\_\_

Relinquished by: \_\_\_\_\_

Time: \_\_\_\_\_

Remarks:



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 01, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX

RE: Del Oro

OrderNo.: 1903733

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
 Lab Order 1903733  
 Date Reported: 4/1/2019

**CLIENT:** EA Engineering

**Client Sample ID:** Lagoon

**Project:** Del Oro

**Collection Date:** 3/14/2019 9:32:00 AM

**Lab ID:** 1903733-001

**Matrix:** AQUEOUS

**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	840	50		mg/L	100	3/15/2019 11:04:27 PM	R58427
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/15/2019 10:52:03 PM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/15/2019 10:52:03 PM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	6460	200	*D	mg/L	1	3/21/2019 4:01:00 PM	43789
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	920	10	D	mg/L	1	3/25/2019 3:30:00 PM	43845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903733

Date Reported: 4/1/2019

**CLIENT:** EA Engineering

**Client Sample ID:** 692-05

**Project:** Del Oro

**Collection Date:** 3/14/2019 9:20:00 AM

**Lab ID:** 1903733-002

**Matrix:** AQUEOUS

**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	410	50		mg/L	100	3/15/2019 11:29:17 PM	R58427
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/15/2019 11:16:52 PM	R58427
Nitrogen, Nitrate (As N)	12	1.0	*	mg/L	10	3/15/2019 11:16:52 PM	R58427
Sulfate	260	5.0		mg/L	10	3/15/2019 11:16:52 PM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	1540	40.0	*D	mg/L	1	3/21/2019 4:01:00 PM	43789
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/25/2019 3:30:00 PM	43845

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Sulfur	111		10.0	10	03/23/2019 11:22	<u>WG1253517</u>

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

WG1253517

Metals (ICP) by Method 200.7

Method Blank (MB)

(MB) R3394117-1 03/22/19 05:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RD1 mg/l
Sulfur	U	0.220	1.00	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3394117-2 03/22/19 05:17 • (LCSD) R3394117-3 03/22/19 05:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	10.2	10.2	102	102	85.0-115		0.764		20

L1080635-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-01 03/22/19 05:23 • (MS) R3394117-5 03/22/19 05:28 • (MSD) R3394117-6 03/22/19 05:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.82	13.0	12.8	102	99.4	1	70.0-130		1.95		20

L1080635-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-02 03/22/19 05:33 • (MS) R3394117-7 03/22/19 05:36 • (MSD) R3394117-8 03/22/19 05:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.86	13.3	13.3	104	104	1	70.0-130		0.0969		20

QUALITY CONTROL SUMMARY

L1080042-01

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 GI
8 AI
9 Sc

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L1080042

DATE/TIME: 03/25/19 09:17



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Ai
- 9 Sc

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903733

01-Apr-19

Client: EA Engineering

Project: Del Oro

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			
Sulfate	9.9	0.50	10.00	0	99.4	90	110			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903733

01-Apr-19

Client: EA Engineering

Project: Del Oro

Sample ID: <b>MB-43789</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43789</b>	RunNo: <b>58541</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965593</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43789</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43789</b>	RunNo: <b>58541</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965594</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903733

01-Apr-19

**Client:** EA Engineering

**Project:** Del Oro

Sample ID: <b>MB-43845</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43845</b>	RunNo: <b>58637</b>								
Prep Date: <b>3/22/2019</b>	Analysis Date: <b>3/25/2019</b>	SeqNo: <b>1969131</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43845</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43845</b>	RunNo: <b>58637</b>								
Prep Date: <b>3/22/2019</b>	Analysis Date: <b>3/25/2019</b>	SeqNo: <b>1969132</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- W Sample container temperature is out of limit as specified at testcode



**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903733

RcptNo: 1

Received By: Victoria Zellar

3/15/2019 8:40:00 AM

*Victoria Zellar*

Completed By: Yazmine Garduno

3/15/2019 9:41:14 AM

*Yazmine Garduno*

Reviewed By: ENM

3/15/19

LB: DAD 3/15/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: 3  
 (± or >12 unless noted)  
 Adjusted? YES  
 Checked by: DAD 3/15/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks: For wet chem Analysis added approx. 1 mL H<sub>2</sub>SO<sub>4</sub> to sample 001A (20FZ) for acceptable pH. For metals analysis added approx. 2 mL HNO<sub>3</sub> to sample 001B for acceptable pH. Held 24 hrs. prior to Analysis.

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:

Standard  Rush

Project Name:

**Del Oro**

Project #:

Project Manager:

**Gina Mullen**

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *4°C*

Container Type and #

Preservative Type

HEAL No.

*3-14-15 932 W lajeon*

*3 -DOT YG 001*

*1903733*

*3-14-15 920 W 692-65*

*2 -DOT 311B14 002*

Date: Time:

*3-14-17 1330*

Relinquished by:

*[Signature]*

Received by:

*Justin Vasquez*

Relinquished by:

*FEDEX*

Date:

*3/15/19 0940*

Remarks:

*vz 3/15/19*

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Total Sulfur	Air Bubbles (Y or N)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 13, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX:

RE: Sunset Dairy

OrderNo.: 1903205

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/6/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903205

Date Reported: 3/13/2019

**CLIENT:** EA Engineering

**Client Sample ID:** LRG-3348-5-3-South Twin

**Project:** Sunset Dairy

**Collection Date:** 3/5/2019 9:56:00 AM

**Lab ID:** 1903205-001

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 8:15:36 PM	R58184
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2019 8:15:36 PM	R58184
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/12/2019 2:00:00 PM	43614

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 1 of 5
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903205

Date Reported: 3/13/2019

**CLIENT:** EA Engineering

**Client Sample ID:** LRG-3348-5-2-North Twin

**Project:** Sunset Dairy

**Collection Date:** 3/5/2019 10:01:00 AM

**Lab ID:** 1903205-002

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 9:07:08 PM	R58184
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2019 9:07:08 PM	R58184
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/12/2019 2:00:00 PM	43614

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1903205**

Date Reported: 3/13/2019

**CLIENT:** EA Engineering

**Client Sample ID:** LRG-3348-940-POD2

**Project:** Sunset Dairy

**Collection Date:** 3/5/2019 10:06:00 AM

**Lab ID:** 1903205-003

**Matrix:** AQUEOUS

**Received Date:** 3/6/2019 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2019 9:32:51 PM	R58184
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2019 9:32:51 PM	R58184
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/12/2019 2:00:00 PM	43614

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903205

13-Mar-19

Client: EA Engineering

Project: Sunset Dairy

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58184</b>	RunNo: <b>58184</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951427</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58184</b>	RunNo: <b>58184</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951428</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	100	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	104	90	110			

**NOTES:**

\* A cleanup step was performed on the extract before analysis.

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903205

13-Mar-19

**Client:** EA Engineering  
**Project:** Sunset Dairy

Sample ID: <b>MB-43614</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43614</b>	RunNo: <b>58308</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955564</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43614</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43614</b>	RunNo: <b>58308</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955565</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

Sample ID: <b>1903205-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LRG-3348-5-3-South</b>	Batch ID: <b>43614</b>	RunNo: <b>58308</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955578</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125			

Sample ID: <b>1903205-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LRG-3348-5-3-South</b>	Batch ID: <b>43614</b>	RunNo: <b>58308</b>								
Prep Date: <b>3/11/2019</b>	Analysis Date: <b>3/12/2019</b>	SeqNo: <b>1955579</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125	0	20	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903205

RcptNo: 1

Received By: Isaiah Ortiz 3/6/2019 9:00:00 AM

I-OX

Completed By: Isaiah Ortiz 3/6/2019 9:44:52 AM

I-OX

Reviewed By: IO  
 LB: VVZ 3/6/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 3  
 (<2 or >12 unless noted)  
 Adjusted? No  
 Checked by: VVZ 3/6/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Sunset Dairy**

Project #:

Project Manager:

**Gina Mullen**

Sampler:

On Ice:  Yes  No

Sample Temperature: *0.1°C*

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
3-5-19	956	W	LR6-3346-S-3-South twin	2		1903Z05 -001
↓	1001	W	LR6-3346-S-2-North twin	2		-002
↓	1006	W	LR6-3346-940-POD2	2		-003

Date: *3-5-19* Time: *1630*

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: *[Signature]*

Relinquished by: \_\_\_\_\_

Received by: *T-O FedEx*

Received by: \_\_\_\_\_

Date: *3-6-19*

Date: *0900*

Time: \_\_\_\_\_

Time: \_\_\_\_\_

Remarks:

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORGC	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
X	X						
X	X						
X	X						

## Analysis Request

4901 Hawkins NE - Albuquerque, NM 87109  
Tel. 505-345-3975 Fax 505-345-4107



If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 09, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX:

RE: Mountain View Dairy LLC

OrderNo.: 1903735

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903735

Date Reported: 4/9/2019

**CLIENT:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC  
**Lab ID:** 1903735-001

**Client Sample ID:** Lagoon  
**Collection Date:** 3/14/2019 11:22:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1600	50		mg/L	100	3/15/2019 11:54:06 PM	R58427
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/15/2019 11:41:42 PM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/15/2019 11:41:42 PM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	8570	200	*D	mg/L	1	3/21/2019 4:01:00 PM	43789
<b>EPA METHOD 365.1: TOTAL PHOSPHOROUS</b>							Analyst: <b>CJS</b>
Phosphorus, Total (As P)	110	2.5	D	mg/L	5	3/21/2019 12:16:00 PM	43794
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	1000	10	D	mg/L	1	4/4/2019 2:30:00 PM	44076

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



Collected date/time: 03/14/19 11:22

L1080041

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Sulfur	97.7		1.00	1	03/23/2019 22:33	<u>WG1250445</u>

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

WG1250445

Metals (ICP) by Method 200.7

QUALITY CONTROL SUMMARY

L1080041-01

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3394597-1 03/23/19 21:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Sulfur	U	0.220	1.00	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3394597-2 03/23/19 21:19 • (LCSD) R3394597-3 03/23/19 21:22

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Sulfur	10.0	10.9	10.9	109	109	85.0-115	0.737		0.737	20

L1079392-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1079392-01 03/23/19 21:24 • (MS) R3394597-5 03/23/19 21:30 • (MSD) R3394597-6 03/23/19 21:32

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Sulfur	10.0	6.26	16.9	17.8	106	115	1	70.0-130	5.28		5.28	20

L1080017-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080017-01 03/23/19 21:35 • (MS) R3394597-7 03/23/19 21:38 • (MSD) R3394597-8 03/23/19 21:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Sulfur	10.0	3.93	15.0	15.0	111	111	1	70.0-130	0.0767		0.0767	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 GI
8 Al
9 Sc

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

SDG: L1080041

DATE/TIME: 03/25/19 09:16



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Ai

<sup>9</sup> Sc

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903735

09-Apr-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903735

09-Apr-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB-43794</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43794</b>	RunNo: <b>58536</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965454</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.010								

Sample ID: <b>LCS-43794</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43794</b>	RunNo: <b>58536</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965455</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.24	0.010	0.2500	0	97.8	90	110			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit	PQL Practical Quantitative Limit
RL Reporting Detection Limit	W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903735

09-Apr-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB-43789</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43789</b>	RunNo: <b>58541</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965593</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43789</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43789</b>	RunNo: <b>58541</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965594</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit	PQL Practical Quantitative Limit
RL Reporting Detection Limit	W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903735

09-Apr-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy LLC

Sample ID: <b>MB-44076</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>44076</b>	RunNo: <b>58937</b>								
Prep Date: <b>4/3/2019</b>	Analysis Date: <b>4/4/2019</b>	SeqNo: <b>1981917</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-44076</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>44076</b>	RunNo: <b>58937</b>								
Prep Date: <b>4/3/2019</b>	Analysis Date: <b>4/4/2019</b>	SeqNo: <b>1981918</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	101	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- W Sample container temperature is out of limit as specified at testcode

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903735

RcptNo: 1

Received By: Victoria Zellar

3/15/2019 8:40:00 AM

*Victoria Zellar*

Completed By: Yazmine Garduno

3/15/2019 10:04:26 AM

*Yazmine Garduno*

Reviewed By: *LB*

*3/15/19*

*LB: DAD 3/15/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  *DAD 3/15/19* NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No
- (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No
- (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2  
 (2 or >12 unless noted)  
 Adjusted? YES  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks: *For wet chem Analysis added approx 1.mL. H2SO4 to sample 001A(2of2) For acceptable pH. For metals Analysis added approx 2mL. HNO3 to sample 001B for acceptable pH. Held 24 hrs. prior to Analysis. DAD 3/15/19*

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard       Level 4 (Full Validation)

Accreditation:

NELAP       Other

EDD (Type)

Turn-Around Time:

Standard       Rush

Project Name:

**Mountain View Dairy**

Project #:

Project Manager:

**Gina Mullen**

Sampler: *Justin Vazquez*

On Ice:  Yes       No

Sample Temperature: *4.8°C*

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
<i>3-14-19</i>	<i>1122</i>	<i>w</i>	<i>Lagoon</i>	<i>3</i>		<i>1905735</i> <i>-001</i>

Date: *3-14-19* Time: *1330*

Relinquished by: *gmy*

Date: *3-15-19* Time: *0840*

Received by: *Justin Vazquez* Date: *3/15/19* Time: *0840*



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Analysis Request	Remarks
Nitrate/Nitrite EPA Method 300.0	X
TKN SM 4500 NORG C	X
Chloride EPA 300.0	X
TDS SM 2540 C MOD	X
Sulfate EPA 300.0	
Phosphorus EPA 6010B	X
Total Sulfur	X
Air Bubbles (Y or N)	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 01, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Bright Star Dairy

OrderNo.: 1903736

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

<b>CLIENT:</b> EA Engineering Alb	<b>Client Sample ID:</b> Lagoon
<b>Project:</b> Bright Star Dairy	<b>Collection Date:</b> 3/14/2019 10:56:00 AM
<b>Lab ID:</b> 1903736-001	<b>Matrix:</b> AQUEOUS
	<b>Received Date:</b> 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2700	100		mg/L	200	3/20/2019 4:11:57 AM	R58466
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/16/2019 12:31:21 AM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/16/2019 12:31:21 AM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	11200	200	*	mg/L	1	3/21/2019 4:55:00 PM	43790
<b>EPA METHOD 365.1: TOTAL PHOSPHOROUS</b>							Analyst: <b>JRR</b>
Phosphorus, Total (As P)	85	1.0	D	mg/L	2	3/20/2019 10:04:00 AM	43781
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	940	10	D	mg/L	1	3/26/2019 4:00:00 PM	43869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Sulfur	122		10.0	10	03/23/2019 11:25	<u>WG1253517</u>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



# WG1253517

Metals (ICP) by Method 200.7

Method Blank (MB)

(MB) R3394117-1 03/22/19 05:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfur	U	0.220	1.00	

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3394117-2 03/22/19 05:17 • (LCSD) R3394117-3 03/22/19 05:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	10.2	10.2	102	102	85.0-115		0.764	20	

## L1080635-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-01 03/22/19 05:23 • (MS) R3394117-5 03/22/19 05:28 • (MSD) R3394117-6 03/22/19 05:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.82	13.0	12.8	1	70.0-130		1.95	20	

## L1080635-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-02 03/22/19 05:33 • (MS) R3394117-7 03/22/19 05:36 • (MSD) R3394117-8 03/22/19 05:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.86	13.3	13.3	1	70.0-130		0.0969	20	

# QUALITY CONTROL SUMMARY

L1080043-01

ONE LAB. NATIONWIDE.

Cp
<sup>2</sup>Tc
<sup>3</sup>Ss
<sup>4</sup>Cn
<sup>5</sup>Sr
<sup>6</sup>Qc
<sup>7</sup>GI
<sup>8</sup>Al
<sup>9</sup>Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

**Client:** EA Engineering Alb  
**Project:** Bright Star Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58466</b>	RunNo: <b>58466</b>								
Prep Date:	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963098</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58466</b>	RunNo: <b>58466</b>								
Prep Date:	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963099</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.9	90	110			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit	PQL Practical Quantitative Limit
RL Reporting Detection Limit	W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

Client: EA Engineering Alb

Project: Bright Star Dairy

Sample ID: <b>MB-43781</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964074</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.010								

Sample ID: <b>LCS-43781</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964075</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.26	0.010	0.2500	0	105	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

Client: EA Engineering Alb

Project: Bright Star Dairy

Sample ID: <b>MB-43790</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965618</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43790</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965619</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

Client: EA Engineering Alb

Project: Bright Star Dairy

Sample ID: <b>MB-43869</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970219</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43869</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970220</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903736

RcptNo: 1

Received By: Victoria Zellar

3/15/2019 8:40:00 AM

*Victoria Zellar*

Completed By: Yazmine Garduno

3/15/2019 10:14:32 AM

*Yazmine Garduno*

Reviewed By: *B*

*3/15/19*

LB: DAD 3/15/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  *DAD 3/15/19* NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: 2  
 (2 or >12 unless noted)  
 Adjusted? YES  
 Checked by: DAD 3/15/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks: *For wet chem. Analysis added approx. 3mL. H2SO4. For metals Analysis added approx. 3 mL. HNO3 to sample 001B for acceptable pH. Held 24hrs. prior to Analysis.*

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

### Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

**Bright Star Dairy**

Project #:

Project Manager:

**Gina Mullen**

Sampler: *Jessica Vazquez*

On Ice:  Yes  No

Sample Temperature: *4.8°C*

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
<i>3/14</i>	<i>1056</i>	<i>W</i>	<i>14292</i>	<i>3</i>		<i>1903734</i>
<i>Y6 3/15/14</i>						<i>-001</i>

3

-001

HEAL No.

*1903734*

*-001*

Date: *3/14/14*

Time: *1330*

Relinquished by: *JMZ*

Received by:

PEDEX Date

Time

*0840*

Remarks:

Date

Time

Date

*3/15/14*

*1315*

Received by:

Date

Time

Date: *3/14/14*

Time: *1330*

Relinquished by: *JMZ*

Received by:

PEDEX Date

Time

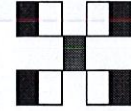
*0840*

Remarks:

Date

Time

Date



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Analysis Request	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
Nitrate/Nitrite EPA Method 300	X	X	X		X	X	





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 01, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Bright Star Dairy

OrderNo.: 1903736

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**Analytical Report**  
 Lab Order **1903736**  
 Date Reported: **4/1/2019**

**CLIENT:** EA Engineering Alb  
**Project:** Bright Star Dairy  
**Lab ID:** 1903736-001

**Client Sample ID:** Lagoon  
**Collection Date:** 3/14/2019 10:56:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	2700	100		mg/L	200	3/20/2019 4:11:57 AM	R58466
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/16/2019 12:31:21 AM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/16/2019 12:31:21 AM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	11200	200	*	mg/L	1	3/21/2019 4:55:00 PM	43790
<b>EPA METHOD 365.1: TOTAL PHOSPHOROUS</b>							Analyst: <b>JRR</b>
Phosphorus, Total (As P)	85	1.0	D	mg/L	2	3/20/2019 10:04:00 AM	43781
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	940	10	D	mg/L	1	3/26/2019 4:00:00 PM	43869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



Collected date/time: 03/14/19 10:56

L1080043

Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Sulfur	122		10.0	10	03/23/2019 11:25	<u>WG1253517</u>

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

# WG1253517

Metals (ICP) by Method 200.7

Method Blank (MB)

(MB) R3394117-1 03/22/19 05:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfur	U	0.220	1.00	

## Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3394117-2 03/22/19 05:17 • (LCSD) R3394117-3 03/22/19 05:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	10.2	10.2	102	102	85.0-115		0.764	20	

## L1080635-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-01 03/22/19 05:23 • (MS) R3394117-5 03/22/19 05:28 • (MSD) R3394117-6 03/22/19 05:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.82	13.0	12.8	1	70.0-130		1.95	20	

## L1080635-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-02 03/22/19 05:33 • (MS) R3394117-7 03/22/19 05:36 • (MSD) R3394117-8 03/22/19 05:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.86	13.3	13.3	1	70.0-130		0.0969	20	

# QUALITY CONTROL SUMMARY

L1080043-01

ONE LAB. NATIONWIDE.

Cp
<sup>2</sup>Tc
<sup>3</sup>Ss
<sup>4</sup>Cn
<sup>5</sup>Sr
<sup>6</sup>Qc
<sup>7</sup>GI
<sup>8</sup>Al
<sup>9</sup>Sc

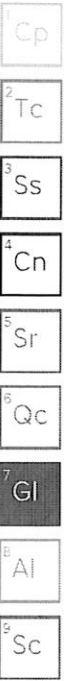


Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description



The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

**Client:** EA Engineering Alb  
**Project:** Bright Star Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58466</b>	RunNo: <b>58466</b>								
Prep Date:	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963098</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58466</b>	RunNo: <b>58466</b>								
Prep Date:	Analysis Date: <b>3/19/2019</b>	SeqNo: <b>1963099</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.6	0.50	5.000	0	92.9	90	110			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit	PQL Practical Quantitative Limit
RL Reporting Detection Limit	W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

Client: EA Engineering Alb

Project: Bright Star Dairy

Sample ID: <b>MB-43781</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964074</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.010								

Sample ID: <b>LCS-43781</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964075</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.26	0.010	0.2500	0	105	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

Client: EA Engineering Alb

Project: Bright Star Dairy

Sample ID: <b>MB-43790</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965618</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43790</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965619</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903736

01-Apr-19

Client: EA Engineering Alb

Project: Bright Star Dairy

Sample ID: <b>MB-43869</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970219</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43869</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970220</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903736

RcptNo: 1

Received By: Victoria Zellar

3/15/2019 8:40:00 AM

*Victoria Zellar*

Completed By: Yazmine Garduno

3/15/2019 10:14:32 AM

*Yazmine Garduno*

Reviewed By: *B*

*3/15/19*

LB: DAD 3/15/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  *DAD 3/15/19* NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: 2  
 (2 or >12 unless noted)  
 Adjusted? YES  
 Checked by: DAD 3/15/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks: *For wet chem. Analysis added approx. 3mL. H2SO4. For metals Analysis added approx. 3 mL. HNO3 to sample 001B for acceptable pH. Held 24hrs. prior to Analysis.*

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 01, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX

RE: Sunset Dairy

OrderNo.: 1903739

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**Analytical Report**  
 Lab Order **1903739**  
 Date Reported: **4/1/2019**

**CLIENT:** EA Engineering

**Client Sample ID:** Lagoon

**Project:** Sunset Dairy

**Collection Date:** 3/14/2019 10:26:00 AM

**Lab ID:** 1903739-001

**Matrix:** AQUEOUS

**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1100	50		mg/L	100	3/16/2019 1:08:35 AM	R58427
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/16/2019 12:56:10 AM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/16/2019 12:56:10 AM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	5940	200	*	mg/L	1	3/21/2019 4:55:00 PM	43790
<b>EPA METHOD 365.1: TOTAL PHOSPHOROUS</b>							Analyst: <b>JRR</b>
Phosphorus, Total (As P)	120	2.5	D	mg/L	5	3/20/2019 10:10:00 AM	43781
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	760	10	D	mg/L	1	3/26/2019 4:00:00 PM	43869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode



Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Sulfur	81.5		10.0	10	03/23/2019 11:28	<u>WG1253517</u>

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

**WG1253517**

Metals (ICP) by Method 200.7

Method Blank (MB)

(MB) R3394117-1 03/22/19 05:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfur	U	0.220	1.00	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3394117-2 03/22/19 05:17 • (LCSD) R3394117-3 03/22/19 05:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	10.2	10.2	102	102	85.0-115		0.764		20

L1080635-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-01 03/22/19 05:23 • (MS) R3394117-5 03/22/19 05:28 • (MSD) R3394117-6 03/22/19 05:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.82	13.0	12.8	102	99.4	1	70.0-130		1.95		20

L1080635-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-02 03/22/19 05:33 • (MS) R3394117-7 03/22/19 05:36 • (MSD) R3394117-8 03/22/19 05:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.86	13.3	13.3	104	104	1	70.0-130		0.0969		20

ACCOUNT:

Hall Environmental Analysis Laboratory

PROJECT:

SDG:

L1080046

DATE/TIME:

03/25/19 09:17

**QUALITY CONTROL SUMMARY**

L1080046-01

ONE LAB. NATIONWIDE.



Cp
<sup>2</sup>Tc
<sup>3</sup>Ss
<sup>4</sup>Cn
<sup>5</sup>Sr
<sup>6</sup>Qc
<sup>7</sup>GI
<sup>8</sup>AI
<sup>9</sup>Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903739

01-Apr-19

Client: EA Engineering

Project: Sunset Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903739

01-Apr-19

Client: EA Engineering

Project: Sunset Dairy

Sample ID: <b>MB-43781</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964074</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.010								

Sample ID: <b>LCS-43781</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964075</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.26	0.010	0.2500	0	105	90	110			

### Qualifiers:

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ND Not Detected at the Reporting Limit  
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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903739

01-Apr-19

Client: EA Engineering

Project: Sunset Dairy

Sample ID: <b>MB-43790</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965618</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43790</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965619</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903739

01-Apr-19

**Client:** EA Engineering  
**Project:** Sunset Dairy

Sample ID: <b>MB-43869</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970219</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43869</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970220</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- W Sample container temperature is out of limit as specified at testcode

**Sample Log-In Check List**

Client Name: **EA Engineering Alb** Work Order Number: **1903739** RcptNo: **1**

Received By: **Victoria Zellar** 3/15/2019 8:40:00 AM *Victoria Zellar*  
 Completed By: **Yazmine Garduno** 3/15/2019 10:26:31 AM *Yazmine Garduno*  
 Reviewed By: *LB* 3/15/19

LB DAD 3/15/19  
**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  *DAD 3/15/19* NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2  
 (2 or >12 unless noted)  
 Adjusted? YES  
 Checked by: DAD 3/15/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks: Added approx 1.mL. H<sub>2</sub>SO<sub>4</sub> to sample 001A (ZOFZ) for preferred pH. For Metals Analysis added approx 1.5mL. HNO<sub>3</sub> to sample 001B for acceptable pH. Held 24 hrs. prior to Analysis. DAD 3/15/19  
 17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

Sunset Dairy

Project #:

Project Manager:

Gina Mullen

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: *4.8°C*

Container Type and #

*3*

Preservative Type

HEAL No.

*1903739*

*-001*

Sample Request ID

*W Laguna*

Date: *3-14-19* Time: *1026*

Relinquished by: *gjm*

Date: *3-14-19* Time: *1330*

Relinquished by: *Justin Vasquez*

Date: *3-15-19* Time: *0840*

Received by: *Justin Vasquez*

Date: *3-15-19* Time: *0840*

Received by: *Justin Vasquez*

Date: *3-15-19* Time: *0840*

Remarks:

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	X	TKN SM 4500 NORG C	X	Chloride EPA 300.0	X	TDS SM 2540 C MOD	X	Sulfate EPA 300.0	X	Phosphorus EPA 6010B	X	Total Sulfur	X	Air Bubbles (Y or N)
----------------------------------	---	--------------------	---	--------------------	---	-------------------	---	-------------------	---	----------------------	---	--------------	---	----------------------

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 01, 2019

Regina Mullen

EA Engineering

320 Gold Ave SW Suite 1210

Albuquerque, NM 87102

TEL:

FAX

RE: Big Sky

OrderNo.: 1903741

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**Analytical Report**  
 Lab Order **1903741**  
 Date Reported: **4/1/2019**

**CLIENT:** EA Engineering

**Client Sample ID:** Lagoon

**Project:** Big Sky

**Collection Date:** 3/14/2019 9:59:00 AM

**Lab ID:** 1903741-001

**Matrix:** AQUEOUS

**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	880	50		mg/L	100	3/16/2019 1:33:24 AM	R58427
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/16/2019 1:21:00 AM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/16/2019 1:21:00 AM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	5460	200	*	mg/L	1	3/21/2019 4:55:00 PM	43790
<b>EPA METHOD 365.1: TOTAL PHOSPHOROUS</b>							Analyst: <b>JRR</b>
Phosphorus, Total (As P)	160	2.5	D	mg/L	5	3/20/2019 10:12:00 AM	43781
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	790	10	D	mg/L	1	3/26/2019 4:00:00 PM	43869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
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Metals (ICP) by Method 200.7

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Sulfur	67.6		10.0	10	03/23/2019 11:30	WG1253517

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

WG1253517

Metals (ICP) by Method 200.7

Method Blank (MB)

(MB) R3394117-1 03/22/19 05:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Sulfur	U	0.220	1.00	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3394117-2 03/22/19 05:17 • (LCSD) R3394117-3 03/22/19 05:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	10.2	10.2	102	102	85.0-115		0.764		20

L1080635-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-01 03/22/19 05:23 • (MS) R3394117-5 03/22/19 05:28 • (MSD) R3394117-6 03/22/19 05:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.82	13.0	12.8	102	99.4	1	70.0-130		1.95		20

L1080635-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1080635-02 03/22/19 05:33 • (MS) R3394117-7 03/22/19 05:36 • (MSD) R3394117-8 03/22/19 05:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfur	10.0	2.86	13.3	13.3	104	104	1	70.0-130		0.0969		20

ACCOUNT:  
Hall Environmental Analysis Laboratory

PROJECT:

SDG:  
L1080048

DATE/TIME:  
03/25/19 09:17

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.



1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Cc
7	Gl
8	Al
9	Sc



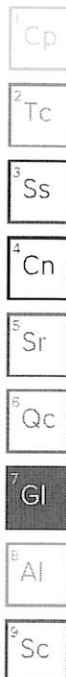
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Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903741

01-Apr-19

Client: EA Engineering

Project: Big Sky

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b>							Units: <b>mg/L</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b>							Units: <b>mg/L</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Nitrogen, Nitrite (As N)	0.96	0.10	1.000	0	96.4	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903741

01-Apr-19

**Client:** EA Engineering  
**Project:** Big Sky

Sample ID: <b>MB-43781</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964074</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.010								

Sample ID: <b>LCS-43781</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964075</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.26	0.010	0.2500	0	105	90	110			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903741

01-Apr-19

Client: EA Engineering

Project: Big Sky

Sample ID: <b>MB-43790</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965618</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43790</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965619</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903741

01-Apr-19

Client: EA Engineering

Project: Big Sky

Sample ID: <b>MB-43869</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970219</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43869</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970220</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

**Sample Log-In Check List**

Client Name: **EA Engineering Alb** Work Order Number: **1903741** RcptNo: **1**

Received By: **Victoria Zellar** 3/15/2019 8:40:00 AM *Victoria Zellar*  
 Completed By: **Yazmine Garduno** 3/15/2019 10:36:22 AM *Yazmine Garduno*  
 Reviewed By: *LB* 3/15/19  
LB: DAD 3/15/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  *DAD 3/15/19* NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2  
 (2 or >12 unless noted)  
 Adjusted? YES  
 Checked by: DAD 3/15/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks: Added approx 1mL H<sub>2</sub>SO<sub>4</sub> to sample 001A(20FZ) for acceptable pH. For metals Analysis added approx. 1.5mL HNO<sub>3</sub> to sample 001B for acceptable pH. Held 24 hrs. prior to Analysis.

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

DAD 3/15/19



# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@eaest.com](mailto:rmullen@eaest.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

Big Sky

Project #:

Project Manager:

Gina Mullen

Sampler: *Tush Vesquez*

On Ice:  Yes  No

Sample Temperature: *4.8°C*

Container Type and #

3

Preservative Type

-001

HEAL No.

1903741

Sample Request ID

1499 w lagoon

Date

3-14-19

Time

9:59

Matrix

w

Date:

3-14-19

Time:

13:50

Relinquished by:

*[Signature]*

Date:

3-15-19

Time:

08:40

Received by:

*[Signature]*

Date

3/15/19

Remarks:

*[Signature]*

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel: 505-345-3975 Fax 505-345-4107

### Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
X	X	X	X		X	X	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 01, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Organ Dairy

OrderNo.: 1903742

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**Analytical Report**  
 Lab Order **1903742**  
 Date Reported: **4/1/2019**

**CLIENT:** EA Engineering Alb

**Client Sample ID:** Lagoon

**Project:** Organ Dairy

**Collection Date:** 3/14/2019 11:44:00 AM

**Lab ID:** 1903742-001

**Matrix:** AQUEOUS

**Received Date:** 3/15/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1400	50		mg/L	100	3/16/2019 1:58:13 AM	R58427
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/16/2019 1:45:48 AM	R58427
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	5280	200	*	mg/L	1	3/21/2019 4:55:00 PM	43790
<b>EPA METHOD 365.1: TOTAL PHOSPHOROUS</b>							Analyst: <b>JRR</b>
Phosphorus, Total (As P)	47	0.50	D	mg/L	1	3/20/2019 10:00:00 AM	43781
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	470	10	D	mg/L	1	3/26/2019 4:00:00 PM	43869

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
	RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903742

01-Apr-19

Client: EA Engineering Alb

Project: Organ Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960653</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrate (As N)	ND	0.10								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58427</b>	RunNo: <b>58427</b>								
Prep Date:	Analysis Date: <b>3/15/2019</b>	SeqNo: <b>1960654</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903742

01-Apr-19

Client: EA Engineering Alb

Project: Organ Dairy

Sample ID: <b>MB-43781</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964074</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.010								

Sample ID: <b>LCS-43781</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 365.1: Total Phosphorous</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43781</b>	RunNo: <b>58514</b>								
Prep Date: <b>3/19/2019</b>	Analysis Date: <b>3/20/2019</b>	SeqNo: <b>1964075</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.26	0.010	0.2500	0	105	90	110			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903742

01-Apr-19

Client: EA Engineering Alb

Project: Organ Dairy

Sample ID: <b>MB-43790</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965618</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43790</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43790</b>	RunNo: <b>58542</b>								
Prep Date: <b>3/20/2019</b>	Analysis Date: <b>3/21/2019</b>	SeqNo: <b>1965619</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903742

01-Apr-19

Client: EA Engineering Alb

Project: Organ Dairy

Sample ID: <b>MB-43869</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970219</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43869</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43869</b>	RunNo: <b>58666</b>								
Prep Date: <b>3/25/2019</b>	Analysis Date: <b>3/26/2019</b>	SeqNo: <b>1970220</b> Units: <b>mg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
W Sample container temperature is out of limit as specified at testcode

**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1903742

RcptNo: 1

Received By: Victoria Zellar

3/15/2019 8:40:00 AM

*Victoria Zellar*

Completed By: Yazmine Garduno

3/15/2019 10:46:24 AM

*Yazmine Garduno*

Reviewed By: *LB*

3/15/19

*LB: DAD 3/15/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: 1  
 (≤2 or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 3/15/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<u>Gina Mullen</u>	Date:	<u>3/15/19</u>
By Whom:	<u>Leah Bacc</u>	Via:	<input type="checkbox"/> eMail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<u>Extra Nitric Preserved Bottle</u>		
Client Instructions:	<u>Dispose</u>		

16. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			



# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: **505-715-4279**

email or Fax#: rmullen@eaest.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time: Standard

Standard  Rush

Project Name:

**Organ Dairy**

Project #:

Project Manager:

**Gina Mullen**

Sampler: Justina Wagner

On Ice:  Yes  No

Sample Temperature: 4°C

Container Type and #

3

Preservative Type

-001

HEAL No.

1903742

Date: 3-14-19 Time: 1930

Date: 3-15-19 Time: 0840

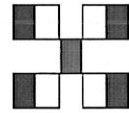
Received by: Justina Wagner

Received by: Gina Mullen

Date: 3/15/19

Date: 3/15/19

Remarks:



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

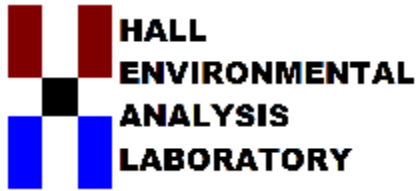
www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate	Phosphorus EPA 6010B	Air Bubbles (Y or N)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 18, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX:

RE: Mountain View Dairy

OrderNo.: 1902B25

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/27/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb  
**Project:** Mountain View Dairy  
**Lab ID:** 1902B25-001

**Client Sample ID:** LRG-00457 Pivot  
**Collection Date:** 2/26/2019 10:13:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1400	50		mg/L	100	2/27/2019 3:40:58 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 3:28:06 PM	R58009
Nitrogen, Nitrate (As N)	11	1.0	*	mg/L	10	2/27/2019 3:28:06 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3890	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-00457-S-Flood

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 10:22:00 AM

**Lab ID:** 1902B25-002

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 3:53:50 PM	R58009
Nitrogen, Nitrate (As N)	2.3	1.0		mg/L	10	2/27/2019 3:53:50 PM	R58009
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 70-01

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 12:58:00 PM

**Lab ID:** 1902B25-003

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	840	50		mg/L	100	2/27/2019 4:58:08 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 4:45:17 PM	R58009
Nitrogen, Nitrate (As N)	33	1.0	*	mg/L	10	2/27/2019 4:45:17 PM	R58009
Sulfate	670	50		mg/L	100	2/27/2019 4:58:08 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3390	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb  
**Project:** Mountain View Dairy  
**Lab ID:** 1902B25-004

**Client Sample ID:** 70-02  
**Collection Date:** 2/26/2019 11:14:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	780	50		mg/L	100	2/27/2019 5:23:52 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 5:11:01 PM	R58009
Nitrogen, Nitrate (As N)	32	1.0	*	mg/L	10	2/27/2019 5:11:01 PM	R58009
Sulfate	500	5.0		mg/L	10	2/27/2019 5:11:01 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3030	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 70-03

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 9:51:00 AM

**Lab ID:** 1902B25-005

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	3000	100		mg/L	200	3/6/2019 12:19:22 AM	R58153
Nitrogen, Nitrite (As N)	1.2	1.0		mg/L	10	2/27/2019 5:36:44 PM	R58009
Nitrogen, Nitrate (As N)	51	1.0	*	mg/L	10	2/27/2019 5:36:44 PM	R58009
Sulfate	1300	50		mg/L	100	2/27/2019 5:49:37 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	7320	20.0	*	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902B25

Date Reported: 3/18/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 70-04

**Project:** Mountain View Dairy

**Collection Date:** 2/26/2019 12:22:00 PM

**Lab ID:** 1902B25-006

**Matrix:** AQUEOUS

**Received Date:** 2/27/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	720	50		mg/L	100	2/27/2019 6:15:21 PM	R58009
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	2/27/2019 6:02:29 PM	R58009
Nitrogen, Nitrate (As N)	25	1.0	*	mg/L	10	2/27/2019 6:02:29 PM	R58009
Sulfate	570	50		mg/L	100	2/27/2019 6:15:21 PM	R58009
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3020	100	*D	mg/L	1	3/3/2019 7:24:00 PM	43448
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/5/2019 11:00:00 AM	43461

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B25

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58009</b>	RunNo: <b>58009</b>								
Prep Date:	Analysis Date: <b>2/27/2019</b>	SeqNo: <b>1942433</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58009</b>	RunNo: <b>58009</b>								
Prep Date:	Analysis Date: <b>2/27/2019</b>	SeqNo: <b>1942434</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.5	0.50	5.000	0	90.9	90	110			
Nitrogen, Nitrite (As N)	0.92	0.10	1.000	0	91.9	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	95.8	90	110			
Sulfate	9.6	0.50	10.00	0	95.5	90	110			

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950327</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: <b>LCS</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58153</b>	RunNo: <b>58153</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1950328</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.5	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B25

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy

Sample ID: <b>MB-43448</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43448</b>	RunNo: <b>58065</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945962</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43448</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43448</b>	RunNo: <b>58065</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/3/2019</b>	SeqNo: <b>1945963</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902B25

18-Mar-19

**Client:** EA Engineering Alb  
**Project:** Mountain View Dairy

Sample ID: <b>MB-43461</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43461</b>	RunNo: <b>58137</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1949479</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43461</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43461</b>	RunNo: <b>58137</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/5/2019</b>	SeqNo: <b>1949480</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: EA Engineering Alb

Work Order Number: 1902B25

RcptNo: 1

Received By: Isaiah Ortiz 2/27/2019 8:50:00 AM

*I-Ox*

Completed By: Isaiah Ortiz 2/27/2019 9:27:29 AM

*I-Ox*

Reviewed By: EUM 2/27/19

*LB: DAD 2/27/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6  
 (or >12 unless noted)  
 Adjusted? NO  
 Checked by: DAD 2/27/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: rmullen@east.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Project Manager:

Gina Mullen

Sampler: *Justin Vasquez*

On Ice:  Yes  No

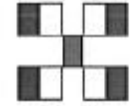
Sample Temperature: *0.0°C*

Date	Time	Matrix	Sample Request ID
2-26-19	10:13	W	LR6-00457 Pivot
	10:22		LR6-00457-S - Flux1
	12:58		70-01
	11:14		70-02
	9:57		70-03
	12:22		70-04

Container Type and #	Preservative Type	HEAL No.
2		1902825
2		-001
2		-002
2		-003
2		-004
2		-005
2		-006

Turn-Around Time:  
 Standard  Rush  
 Project Name: Mountain View Dairy

Project #:  
 Project Manager:  
 Sampler:  
 On Ice:  
 Sample Temperature:



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

	Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			
	X	X	X	X	X			

Remarks:

*For sample - 2. per Justin  
 Only analyze for TKN, NO3  
 of 2/28/19*

Received by:	Date	Time
<i>J-O Fedex</i>	2/27/19	0850
Received by:	Date	Time

Date:	Time:	Reinquished by:
2-26-19	1700	<i>Just</i>
Date:	Time:	Reinquished by:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 07, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX:

RE: Organ Dairy

OrderNo.: 1902A23

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/23/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** LRG-4585

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 12:46:00 PM

**Lab ID:** 1902A23-001

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	1200	50		mg/L	100	2/28/2019 11:27:32 AM	R58039
Nitrate+Nitrite as N	10	1.0	*	mg/L	5	2/28/2019 2:40:31 PM	R58039
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3190	20.0	*	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 126-04

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 11:25:00 AM

**Lab ID:** 1902A23-002

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	650	50		mg/L	100	2/28/2019 11:53:15 AM	R58039
Sulfate	450	50		mg/L	100	2/28/2019 11:53:15 AM	R58039
Nitrate+Nitrite as N	24	1.0	*	mg/L	5	2/28/2019 2:53:22 PM	R58039
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2370	40.0	*D	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 126-05

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 12:07:00 PM

**Lab ID:** 1902A23-003

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	950	50		mg/L	100	2/28/2019 12:18:59 PM	R58039
Sulfate	750	50		mg/L	100	2/28/2019 12:18:59 PM	R58039
Nitrate+Nitrite as N	18	1.0	*	mg/L	5	2/28/2019 3:06:14 PM	R58039
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3810	40.0	*D	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 126-07

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 11:05:00 AM

**Lab ID:** 1902A23-004

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	790	50		mg/L	100	2/28/2019 12:44:43 PM	R58039
Sulfate	650	50		mg/L	100	2/28/2019 12:44:43 PM	R58039
Nitrate+Nitrite as N	30	1.0	*	mg/L	5	2/28/2019 3:57:41 PM	R58039
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3030	40.0	*D	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 126-09

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 10:26:00 AM

**Lab ID:** 1902A23-005

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	200	50		mg/L	100	2/28/2019 1:36:12 PM	R58039
Sulfate	140	5.0		mg/L	10	2/28/2019 1:23:19 PM	R58039
Nitrate+Nitrite as N	ND	1.0		mg/L	5	2/28/2019 4:10:33 PM	R58039
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	888	40.0	*D	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 126-12

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 12:30:00 PM

**Lab ID:** 1902A23-006

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	370	50		mg/L	100	2/28/2019 2:01:56 PM	R58039
Sulfate	560	50		mg/L	100	2/28/2019 2:01:56 PM	R58039
Nitrate+Nitrite as N	8.2	1.0		mg/L	5	2/28/2019 4:23:26 PM	R58039
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	2270	40.0	*D	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	1.3	1.0		mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1902A23

Date Reported: 3/7/2019

**CLIENT:** EA Engineering Alb

**Client Sample ID:** 126-13

**Project:** Organ Dairy

**Collection Date:** 2/22/2019 10:51:00 AM

**Lab ID:** 1902A23-007

**Matrix:** AQUEOUS

**Received Date:** 2/23/2019 12:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	990	50		mg/L	100	2/28/2019 2:27:39 PM	R58039
Sulfate	770	50		mg/L	100	2/28/2019 2:27:39 PM	R58039
Nitrate+Nitrite as N	39	2.0	*	mg/L	10	3/4/2019 5:33:51 PM	R58107
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	3620	100	*D	mg/L	1	2/28/2019 4:35:00 PM	43374
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/4/2019 5:00:00 PM	43460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A23

07-Mar-19

**Client:** EA Engineering Alb  
**Project:** Organ Dairy

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58039</b>	RunNo: <b>58039</b>								
Prep Date:	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1944952</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58039</b>	RunNo: <b>58039</b>								
Prep Date:	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1944953</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.9	90	110			
Sulfate	10	0.50	10.00	0	101	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.7	90	110			

Sample ID: <b>MB</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58107</b>	RunNo: <b>58107</b>								
Prep Date:	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1948425</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58107</b>	RunNo: <b>58107</b>								
Prep Date:	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1948426</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0	102	90	110			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A23

07-Mar-19

**Client:** EA Engineering Alb  
**Project:** Organ Dairy

Sample ID: <b>MB-43374</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43374</b>	RunNo: <b>58019</b>								
Prep Date: <b>2/27/2019</b>	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1942827</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43374</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43374</b>	RunNo: <b>58019</b>								
Prep Date: <b>2/27/2019</b>	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1942828</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Sample ID: <b>1902A23-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LRG-4585</b>	Batch ID: <b>43374</b>	RunNo: <b>58019</b>								
Prep Date: <b>2/27/2019</b>	Analysis Date: <b>2/28/2019</b>	SeqNo: <b>1942844</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	3150	20.0						1.39	10	*

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902A23

07-Mar-19

**Client:** EA Engineering Alb

**Project:** Organ Dairy

Sample ID: <b>MB-43460</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947962</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43460</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43460</b>	RunNo: <b>58101</b>								
Prep Date: <b>3/1/2019</b>	Analysis Date: <b>3/4/2019</b>	SeqNo: <b>1947963</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	104	80	120			

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



**Sample Log-In Check List**

Client Name: EA Engineering Alb

Work Order Number: 1902A23

RcptNo: 1

Received By: Erin Melendrez 2/23/2019 12:40:00 PM *EM*

Completed By: Erin Melendrez 2/23/2019 1:08:01 PM *EM*

Reviewed By: DAD 2/25/19  
 LB: JO 2/25/19

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH:	7
Adjusted? (<2 or >12 unless noted)	NO
Checked by:	JO 2/25/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp.°C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: rmullen@east.com

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Sampler: Justin Vazquez

On Ice:  Yes  No

Sample Temperature: 1.8°C - 0.7(0.7) = 1.6°C

Project Manager:

Gina Mullen

Project #:

Organ Dairy

Turn-Around Time: Standard

Standard  Rush

Project Name:



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

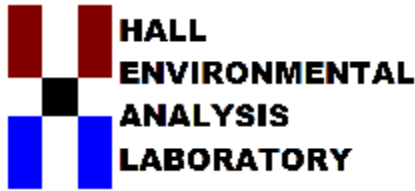
## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No	Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate	Phosphorus EPA 6010B	Air Bubbles (Y or N)
2-22-19	12:46	W	126-4585	2		1907A23	X	X	X	X			
	11:25	W	126-04			-001	X	X	X	X	X		
	12:07		126-05			-002	X	X	X	X	X		
	11:05		126-07			-003	X	X	X	X	X		
	10:26		126-09			-004	X	X	X	X	X		
	12:20		126-12			-005	X	X	X	X	X		
	10:51		126-13			-006	X	X	X	X	X		
						-007	X	X	X	X	X		

Remarks:

Received by: [Signature] Date: 2/23/19 Time: 12:40  
 Received by: [Signature] Date: 2/23/19 Time: 12:31

Date: 2-22-19 Time: 11:39  
 Relinquished by: [Signature]  
 Date: 2-22-19 Time: 11:39  
 Relinquished by: [Signature]



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

March 12, 2019

Regina Mullen

EA Engineering Alb  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL:  
FAX

RE: Sunset Dairy Desertland

OrderNo.: 1903067

Dear Regina Mullen:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/2/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903067

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland  
**Lab ID:** 1903067-001

**Client Sample ID:** 257-01  
**Collection Date:** 3/1/2019 11:29:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	900	50		mg/L	100	3/6/2019 4:36:55 PM	R58184
Sulfate	680	50		mg/L	100	3/6/2019 4:36:55 PM	R58184
Nitrate+Nitrite as N	42	2.0	*	mg/L	10	3/7/2019 11:47:06 PM	A58208
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	3620	40.0	*D	mg/L	1	3/8/2019 2:13:00 PM	43568
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	5.0	D	mg/L	1	3/10/2019 3:30:00 PM	43590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 8
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903067

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland  
**Lab ID:** 1903067-002

**Client Sample ID:** 257-02  
**Collection Date:** 3/1/2019 11:01:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	690	50		mg/L	100	3/6/2019 5:02:39 PM	R58184
Sulfate	450	50		mg/L	100	3/6/2019 5:02:39 PM	R58184
Nitrate+Nitrite as N	8.7	1.0		mg/L	5	3/6/2019 10:11:27 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2570	20.0	*	mg/L	1	3/8/2019 2:13:00 PM	43568
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/10/2019 3:30:00 PM	43590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 2 of 8
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903067

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland  
**Lab ID:** 1903067-003

**Client Sample ID:** 257-03  
**Collection Date:** 3/1/2019 11:55:00 AM  
**Matrix:** AQUEOUS  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	710	50		mg/L	100	3/6/2019 5:28:23 PM	R58184
Sulfate	470	50		mg/L	100	3/6/2019 5:28:23 PM	R58184
Nitrate+Nitrite as N	12	1.0	*	mg/L	5	3/6/2019 10:24:19 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	2670	40.0	*D	mg/L	1	3/8/2019 2:13:00 PM	43568
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	2.0	D	mg/L	1	3/10/2019 3:30:00 PM	43590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 3 of 8
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	PQL Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903067

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland  
**Lab ID:** 1903067-004

**Matrix:** AQUEOUS

**Client Sample ID:** Sunset-LRG-3348-As  
**Collection Date:** 3/1/2019 10:37:00 AM  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	420	50		mg/L	100	3/6/2019 5:54:07 PM	R58184
Nitrate+Nitrite as N	1.3	1.0		mg/L	5	3/6/2019 10:37:10 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1620	20.0	*	mg/L	1	3/8/2019 2:13:00 PM	43568
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/10/2019 3:30:00 PM	43590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903067

Date Reported: 3/12/2019

**CLIENT:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland  
**Lab ID:** 1903067-005

**Matrix:** AQUEOUS

**Client Sample ID:** Desertland-LRG-3348-B  
**Collection Date:** 3/1/2019 10:24:00 AM  
**Received Date:** 3/2/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	340	50		mg/L	100	3/6/2019 6:45:35 PM	R58184
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/6/2019 10:50:02 PM	R58184
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>CJS</b>
Total Dissolved Solids	1360	20.0	*	mg/L	1	3/8/2019 2:13:00 PM	43568
<b>SM 4500 NORG C: TKN</b>							Analyst: <b>OG</b>
Nitrogen, Kjeldahl, Total	ND	1.0		mg/L	1	3/10/2019 3:30:00 PM	43590

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903067

12-Mar-19

**Client:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R58184</b>	RunNo: <b>58184</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951427</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>ics</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R58184</b>	RunNo: <b>58184</b>								
Prep Date:	Analysis Date: <b>3/6/2019</b>	SeqNo: <b>1951428</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.1	90	110			
Sulfate	10	0.50	10.00	0	102	90	110			
Nitrate+Nitrite as N	3.6	0.20	3.500	0	103	90	110			

Sample ID: <b>MB</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBW</b>	Batch ID: <b>A58208</b>	RunNo: <b>58208</b>								
Prep Date:	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952281</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: <b>LCS</b>	SampType: <b>ics</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>A58208</b>	RunNo: <b>58208</b>								
Prep Date:	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952282</b>			Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.3	90	110			

**NOTES:**

\* A cleanup step was performed on the extract before analysis.

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903067

12-Mar-19

**Client:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland

Sample ID: <b>MB-43568</b>	SampType: <b>MBLK</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43568</b>	RunNo: <b>58225</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953048</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: <b>LCS-43568</b>	SampType: <b>LCS</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43568</b>	RunNo: <b>58225</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953049</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	995	20.0	1000	0	99.5	80	120			

Sample ID: <b>1903067-004ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>SM2540C MOD: Total Dissolved Solids</b>								
Client ID: <b>Sunset-LRG-3348-A</b>	Batch ID: <b>43568</b>	RunNo: <b>58225</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/8/2019</b>	SeqNo: <b>1953057</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1620	20.0						0.123	10	*

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903067

12-Mar-19

**Client:** EA Engineering Alb  
**Project:** Sunset Dairy Desertland

Sample ID: <b>MB-43590</b>	SampType: <b>MBLK</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>PBW</b>	Batch ID: <b>43590</b>	RunNo: <b>58241</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/10/2019</b>	SeqNo: <b>1953306</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1.0								

Sample ID: <b>LCS-43590</b>	SampType: <b>LCS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>43590</b>	RunNo: <b>58241</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/10/2019</b>	SeqNo: <b>1953307</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	80	120			

Sample ID: <b>1903067-004AMS</b>	SampType: <b>MS</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>Sunset-LRG-3348-A</b>	Batch ID: <b>43590</b>	RunNo: <b>58241</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/10/2019</b>	SeqNo: <b>1953313</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125			

Sample ID: <b>1903067-004AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>SM 4500 Norg C: TKN</b>								
Client ID: <b>Sunset-LRG-3348-A</b>	Batch ID: <b>43590</b>	RunNo: <b>58241</b>								
Prep Date: <b>3/8/2019</b>	Analysis Date: <b>3/10/2019</b>	SeqNo: <b>1953314</b>	Units: <b>mg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	1.0	10.00	0	102	75	125	0	20	

**Qualifiers:**

- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: **EA Engineering Alb**

Work Order Number: **1903067**

RcptNo: 1

Received By: **Desiree Dominguez** 3/2/2019 9:30:00 AM *DD*

Completed By: **Desiree Dominguez** 3/2/2019 10:05:56 AM *DD*

Reviewed By: *ID* 3/3/19

*LB: DAD 3/2/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? FedEx

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels?  
 (Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met?  
 (If no, notify customer for authorization.) Yes  No

# of preserved bottles checked for pH: 5  
 (2 or >12 unless noted)  
 Adjusted? No  
 Checked by: DAD 3/2/19

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Not Present			

# Chain-of-Custody Record

Client: EA Engineering, Science, and Technology

Mailing Address: 320 Gold Ave SW Suite 1300 Albuquerque, NM, 87102

Phone #: 505-715-4279

email or Fax#: [rmullen@east.com](mailto:rmullen@east.com)

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation:

NELAP  Other

EDD (Type)

Turn-Around Time:

Standard  Rush

Project Name:

Sunset Dairy / Desertland

Project #:

Project Manager:

Gina Mullen

Sampler: *Justin Vasquez*

On Ice:  Yes  No

Sample Temperature: 8-0.4 = 1.4°C

Date Time Matrix Sample Request ID

3-1-19 1129

W

257-01

2

1101

↓

857-02

2

1155

↓

257-03

2

1037

↓

Sunset-LRG-3348-A5

2

1024

↓

Desertland-LR6-3348-B

2

Container Type and #

2

2

2

2

2

Preservative Type

-001

-002

-003

-004

-005

HEAL No.

1903067

Date: Time: Relinquished by:

3-1-19 1730

*guy*

Received by:

*DB*

Date: Time: Fed Ex 3/2/19 9:30

Date: Time: Relinquished by:

Received by:

Date: Time

Remarks:

## Analysis Request

Nitrate/Nitrite EPA Method 300.0	TKN SM 4500 NORG C	Chloride EPA 300.0	TDS SM 2540 C MOD	Sulfate EPA 300.0	Phosphorus EPA 6010B	Total Sulfur	Air Bubbles (Y or N)
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.