AECOM
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May 9, 2019

Mr. Jim Gibb
Geoscientist Supervisor
New Mexico Environment Department
Petroleum Storage Tank Bureau
121 Tijeras Avenue, NE Suite 1000
Albuquerque, New Mexico 87102

RE: Chevron Isleta (FID #30681, RID #314) Phase 4 Activities, Post Injection Groundwater Sampling Letter Report , Deliverable 3999-4, Contract No.18-667-3200-0019

Dear Mr. Gibb:

AECOM Technical Services (AECOM) is providing this letter report to document the post-injection groundwater sampling performed at the Chevron Isleta State Lead Site (RID #314) located at 3401 Isleta Boulevard Southwest (Site) (Figure 1). The letter report is submitted in accordance with the New Mexico Environment Department Petroleum Storage Tank Bureau (NMED PSTB) "*Approval of Phase 4 Fixed-Price Workplan Change Order For Chevron Isleta Site*" dated May 30, 2019, deliverable ID 3999-4 for pre-injection and post-injection sampling and reporting. AECOM performed these services under Contract No.18-667-3200-0019 and AECOM approved work plan dated June 29, 2019.

Post-Injection Groundwater Monitoring

Injection of BOS 200® was completed at the Site on March 16, 2019. A post-injection report was submitted to the NMED PSTB documenting all the injection details, including injection spacing, volumes injected at each location, design mix, site photos and map of injection points (AECOM 2018).

Groundwater samples were collected on April 29, 2019; 44 days following BOS 200® injection to determine the effectiveness of the injection process at reducing concentrations of dissolved phase constituents in groundwater at the Site. Groundwater samples were collected from monitoring wells MW-8A, MW-11A, and MW-26 and analyzed for volatile organic compounds by US Environmental Protection Agency method 8260 including total naphthalenes and for total dissolved solids by SM 2540C. Attachment A contains the field documentation collected during the post-injection groundwater sampling at the Site.

Monitor Well Re-development, Groundwater Purging, and Sample Collection

Monitoring well MW-8A was re-developed prior to groundwater sample collection. The monitoring well with re-developed by first using a disposable bailer to surge the monitor well screen interval and pull in remaining BOS 200®. Following surging, 100 gallons of groundwater was pumped from the monitor well with a twister submersible pump until the groundwater was clear. Monitor wells MW-11A and MW-26 did not require re-development as the groundwater was not observed to be impacted with BOS 200®. The re-development log for MW-8A is located in Appendix A.

Prior to monitor well purging and sampling, fluid levels were measured with an electronic oil/water interface probe. The interface probe was decontaminated using alconox and tap water rinse prior to each use. The groundwater elevations and groundwater flow direction for the April 29, 2019 groundwater gauging are shown on Figure 1.

During purging, water quality measurements were collected for temperature, pH, specific conductance, oxidation reduction potential (ORP) and dissolved oxygen (DO). Following well purging, a groundwater sample was collected with a peristaltic pump and decanted into laboratory provided acid-preserved sample containers. Purge water was discharged to an impervious ground surface to evaporate within the Site boundaries. Groundwater samples were placed on ice and delivered to Hall Environmental Analytical Laboratory (HEAL) in Albuquerque, NM under chain of custody within the required holding times (Attachment A).

Post Injection Results

Post-injection groundwater samples were collected from monitor wells MW-8A, MW-11A, and MW-26. The post-injection concentration for dissolved benzene from monitor well MW-8A was 1.5 micrograms per liter (µg/L), below the New Mexico Water Quality Control Commission (NMWQCC) groundwater standard of 5 µg/L. The pre-injection dissolved benzene concentration collected from monitoring well MW-8A (January 9, 2019) was 12 µg/L. This indicates an order of magnitude reduction in dissolved benzene concentration from monitor well MW-8A in the 44 days since injection was completed. The post-injection groundwater concentration for the total napthalenes sample collected from MW-8A was non-detect and the pre-injection total napthalenes sample result for MW-8A was 61.4 µg/L (January 9, 2019). The post-injection concentration of total naphthalenes from monitor well MW-11A was 18.3 µg/L which is a reduction in concentration from the pre-injection sample result (37.9 µg/L) indicating the naphthalene concentration has decreased to below the NMWQCC standard (30 µg/L). All regulated petroleum compounds are below NMWQCC or Environment Improvement Board (EIB) groundwater standards in the post-injection groundwater samples. Table 1 presents the historical concentrations of petroleum constituents collected from monitoring wells MW-8A, MW-11A, and MW-26. The complete analytical laboratory report is included in Attachment B.

Conclusions and Recommendations

The post-injection groundwater sample results indicate the BOS 200® was effective at lowering the concentrations of all petroleum constituents to below NMWQCC/EIB groundwater standards. AECOM recommends continued sampling of monitoring wells MW-8A, MW-11, MW-26 to obtain site closure in accordance with Section 20.5.119.1930, No Further Action (NFA) Determination. The post-injection sampling event performed on April 29, 2019 can be used as the first of the eight quarterly events for NFA determination for contaminants of concern less than NMWQCC/EIB groundwater standards.

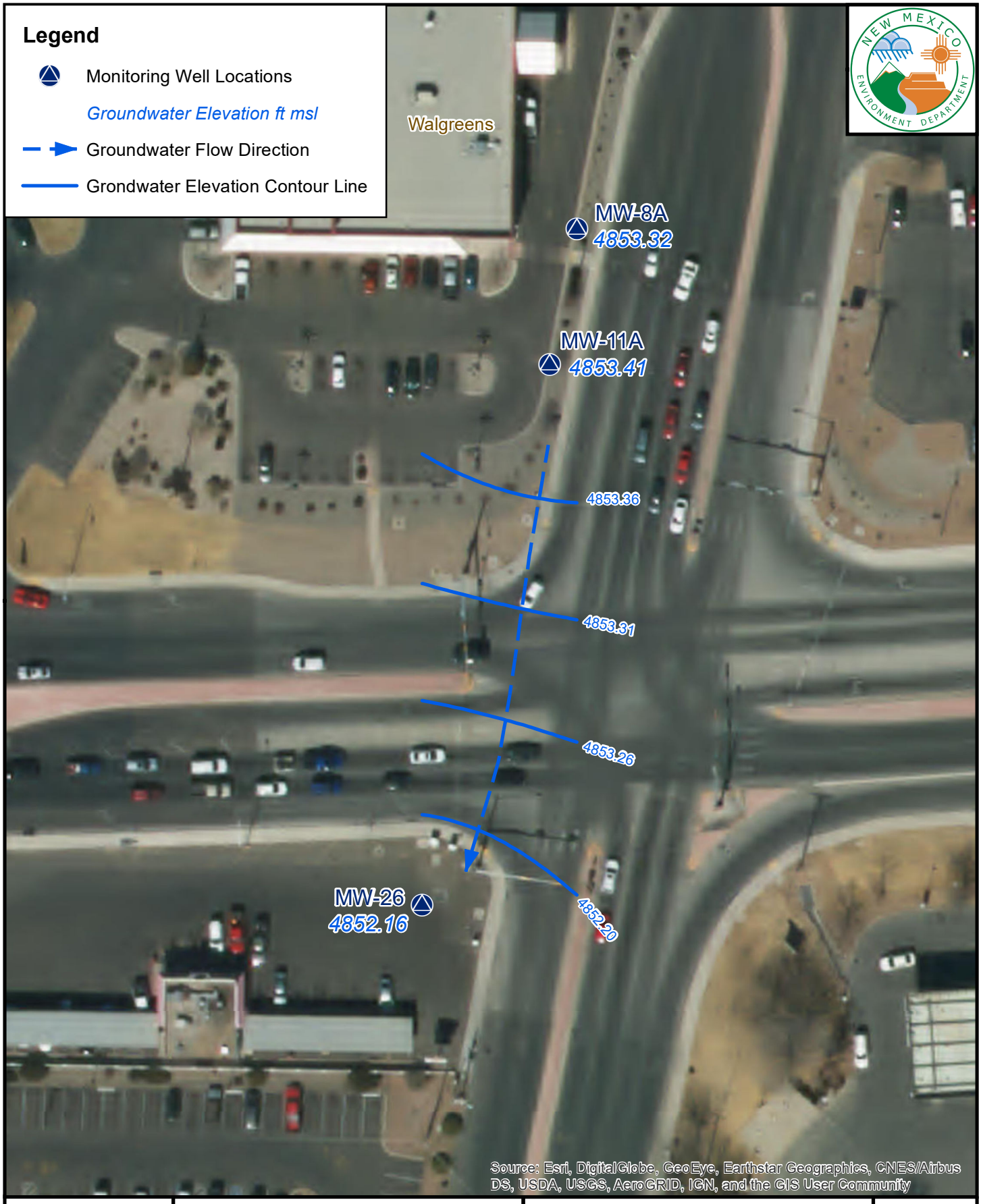
Should you have any question or need additional information please contact Dale Flores at (505) 855-7484 or by email at Dale.Flores@aecom.com.

Yours sincerely,

Dale Flores PMP, PG
Project Manager

cc: Lorena Goerger (NMED)

FIGURE 1



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6501 Americas Pkwy NE
Suite 900
Albuquerque, NM 87110

Source: MRCOG 2014 Digital Orthoimagery
http://www.bernco.gov/gis-program/
1 inch = 60 feet
0 30 60 120
Feet

WATER TABLE MAP
CHEVRON ISLETA
3401 ISLETA BOULEVARD SW
ALBUQUERQUE, NM

FIGURE 1
Gauging Date
4/29/2019

TABLE 1

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	Ethylene Dibromide	Ethylene Dichloride	Methyl Tert Butyl Ether	Total Naphthalenes	TDS (mg/L)
NMWQCC/EIB Standards (µg/L)		5	1000	700	620	0.05	5	100	30	1000
MW-8A	8/29/2012	64	95	2100	7800	<10	<10	<10	1300	
	1/11/2013	22	14	340	1200	<1.0	<1.0	<1.0	250	
	7/15/2013	40	12	260	890	<10	<10	<10	100	
	1/15/2014	19	<10	230	1000	<10	<10	<10	76	
	4/14/2014	65	<10	190	810	<10	<10	<10	87	
	1/30/2015	10	0.81	40	120	<0.50	<0.50	<0.50	21	
	4/29/2015	100	14	110	200	<1.0	<1.0	<1.0	195	
	7/20/2015	85	7.0	53	120	<1.0	<1.0	<1.0	185	
	10/30/2015	60	3.8	53	83	<1.0	<1.0	<1.0	86	
	10/26/2017	21	4.3	32	30	<1.0	<1.0	<1.0	122	
	4/14/2018	18	4.1	35	26	<1.0	<1.0	<1.0	93	
Pre-Injection	1/9/2019	12	3.4	15	13	<1.0	<1.0	<1.0	61.4	569
Post-Injection	4/29/2019	1.5	<1.0	3.3	3.2	<1.0	<1.0	<1.0	<10.0	594
MW-11A	8/29/2012	26	<10	230	40	<10	<10	<10	1060	
	1/11/2013	2.5	<1.0	9.7	<1.5	<1.0	<1.0	<1.0	126	
	7/15/2013	13	<1.0	9.3	<1.5	<1.0	<1.0	<1.0	81	
	1/15/2014	4.3	<1.0	7.2	<1.5	<1.0	<1.0	<1.0	58	
	4/14/2014	1.6	<1.0	13	3.3	<1.0	<1.0	<1.0	40.5	
	1/30/2015	5.4	<0.50	4.7	<1.5	<0.50	<0.50	<0.50	43	
	4/29/2015	13	1.3	27	15	<1.0	<1.0	<1.0	86	
	7/20/2015	6.6	1.1	7.1	3.9	<1.0	<1.0	<1.0	106	
	10/30/2015	2.9	<1.0	3.4	<1.5	<1.0	<1.0	<1.0	45.7	
	10/26/2017	<1.0	<1.0	5.4	<1.5	<1.0	<1.0	<1.0	120	
	4/17/2018	<1.0	<1.0	3.6	<1.5	<1.0	<1.0	<1.0	54.7	
Pre-Injection	1/9/2019	<1.0	<1.0	4.6	<1.0	<1.0	<1.0	<1.0	37.9	519
Post-Injection	4/29/2019	<1.0	<1.0	1.7	<1.5	<1.0	<1.0	<1.0	18.3	530
MW-26	10/8/1999	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	12/10/1999	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	12/18/2000	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	2/20/2001	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	5/30/2001	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	8/20/2001	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	12/6/2001	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	3/8/2002	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	5/30/2002	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	9/9/2002	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	8/26/2003	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	1/29/2004	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	4/16/2004	NS	NS	NS	NS	NS	NS	NS	NS	
	5/10/2007	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	11/12/2007	BDL	BDL	BDL	BDL	NA	NA	BDL	BDL	
	9/16/2011	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	
	8/29/2012	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	
	1/11/2013	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	
	7/15/2013	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	
	1/15/2014	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	
	4/14/2014	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	
	1/30/2015	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<2..5	
	4/29/2015	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10.0	
	7/20/2015	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10.0	
	10/30/2015	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10.0	
	10/26/2017	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10.0	
	4/17/2018	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10.0	
Pre-Injection	1/9/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10.0	524
Post-Injection	4/29/2019	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	513

mg/L	milligram(s) per liter
µg/L	microgram(s) per liter
NMWQCC/EIB	NM Water Quality Control Commission/Enviornmental Improvement Board
NS	Not sampled
BDL	below detection limit
TDS	total dissolved solids

ATTACHMENT A

Field Notes

Gauging Forms

Purge Logs

Chain of Custody

AECOM

JOB TITLE Chevron Isleta

PROJECT/JOB NO. 60577971 ~~CALCULATION NO.~~

Personnel ~~COMPUTED BY~~ T. Grulke DATE 4-29-19

VERIFIED BY DATE

SCALE SHEET NO. OF

Weather: Overcast, breezy, 64°F

0800 Arrive at office. Print paperwork, load equipment, call in bottle order to HEAL.

0900 Depart office to HEAL

0930 Arrive at HEAL, pick up bottles. Depart to site.

1000 Arrive at site. Conduct HTS tailgate and check in w/ manager at Walgreens.

1015 ~~0930~~ TG Horiba Calibration - Serial #: EAWD95M9

	Temp	PH	ORP	cond	Turb	DO
Pre-cal	22.29	4.17	310	4.56	0.0	7.94
Post-cal	22.30	4.00	310	4.49	0.0	9.66

1020 Begin Purge on MW-26. See Purge log for details.

1045 Move to MW-11A. Set up and begin re-development.

NOTE: Redevelopment not necessary at MW-11A, water returned normal (not black) after two bails. Begin purge. See Purge log for details.

1200 Move to MW-8A. Set up and begin re-development, water returned black with a lot of solids for first 5 gallons purged w/ bailer. After 5 gallons, switched to "twister" pump. Water stayed black for first 30 gallons purged. After first 30 gallons, water turned dark grey w/ much less solids. Water gradually cleared until 80 gallons purged. 80-100 gallons, the water was mostly clear with a grey tinge. Collected sample after purging 100 gallons, see purge log.

1345 Decon equipment and clean up site.

1355 Depart site, will return tracked equipment to office and drop off samples at HEAL. End of field day.

4-29-19

4x4 = 1 in

Monitor Well Gauging Form

AECOM

6501 Americas Pkwy
Albuquerque, NM 87110
Tel: 505.855.7500
Fax: 505.855.7555

Site: Chevron Isleta
Date: 4-29-19

Monitor Well	Depth to Product	Depth to Water	Total Depth	Time
MW-8A	—	7.21	14.60	1150
MW-11A	—	6.26	14.98	1056
MW-26	—	6.25	13.18	1007

Notes:

4-29-19

AECOM

6501 Americas Pkwy
Albuquerque, NM 87110
Tel: 505.855.7500
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Groundwater Sample Field Data Form

Well Identification MW-8A

Page 1 of 1

Project Name:	Chevron Isleta	**Sampled By:**	T.Grulke
Project Number:	60577971	**Sample ID:**	MW-8A
Location:	Albuquerque, NM	**Sample Date:**	4/29/2019
Date:	29-Apr-19	**Sample Time:**	1325

Equipment

Purging Method/Equipment	Peristaltic Pump/Bailer
Sampling Equipment	Peristaltic Pump/Bailer
Filtering Equipment	-

Field Parameters

Initial Water Temp. (C)	
Initial pH:	
Initial Conductance (mS/cm):	

Purging Information

Casing ID (in)	2.0	Length of Static Water Column (ft)	7.39
Unit Casing Volume (gal/ft)	0.16	Casing Water Volume (gal)	1.18
Depth to Water (ft below TOC)	7.21	Total Purge Volume	7100
Total Depth (ft below TOC)	14.60	Number of Purge Volumes	3

Volume Purged (gal)	Temp (C)	pH	Conductance (mS/cm)	Orp millivolts	DO (mg/L)	Time	Water Description
7100	18.63	7.07	0.876	-140	0.10	1325	
							Development ↓
1200							Begin bailing - water is dark black "coffee" texture black solids
1215							5 gallons bailed, water is the same. Switch to "Twister" pump
1220							5 gallons retrieved w/ twister pump. water is the same
1240							30 gallons retrieved, water has gradually turned to dark grey. Much less ~~wat~~ solids retrieved, even w/ surging.
1310							80 gallons retrieved, water has become mostly clear.
1325							From 40-100 gallons water has stayed the same clear w/ a light grey tinge. Collect Sample

Total Volumes Removed (gallons): _____ **Time:** _____ **Purged Dry (Y/N):** _____

Casing Volume

Casing I.D. (in.)	Unit Casing Volume Gal/Lin. Ft.)
1.0	0.04
1.5	0.09
2.0	0.16
2.2	0.20
3.0	0.37
4.0	0.65
4.3	0.75
5.0	1.00
6.0	1.55
7.0	2.00
8.0	2.60

Additional Remarks

Used a Bailer and "Twister" pump to redevelop well. water was black for first 30 gallons, changed to grey w/ slight HC odor after 30. Grey became more or less clear ~100 gallons NO HC Sheen. Slight odor.

4-29-19

AECOM

6501 Americas Pkwy
Albuquerque, NM 87110
Tel: 505.855.7500
Fax: 505.855.7555

Groundwater Sample Field Data Form

Well Identification MW-11A

Page 1 of 1

Project Name:	Chevron Isleta	**Sampled By:**	T.Grulke
Project Number:	60577971	**Sample ID:**	MW-11A
Location:	Albuquerque, NM	**Sample Date:**	4/29/2019
Date:	29-Apr-19	**Sample Time:**	1120

Equipment

Purging Method/Equipment	Peristaltic Pump/Bailer
Sampling Equipment	Peristaltic Pump/Bailer
Filtering Equipment	-

Field Parameters

Initial Water Temp. (C)	
Initial pH	
Initial Conductance (mS/cm)	

Purging Information

Casing ID (in)	2.0	Length of Static Water Column (ft)	8.7
Unit Casing Volume (gal/ft)	0.16	Casing Water Volume (gal)	1.4
Depth to Water (ft below TOC)	6.28	Total Purge Volume	4.25
Total Depth (ft below TOC)	14.98	Number of Purge Volumes	3

Volume Purged (gal)	Temp (C)	pH	Conductance (mS/cm)	Orp millivolts	DO (mg/L)	Time	Water Description
0	19.63	7.70	0.767	-69	4.57	1107	
1	18.42	7.09	0.782	-100	0.46	1110	
2	18.40	7.53	0.750	-166	0.0	1113	
3	18.40	7.51	0.749	-173	0.0	1116	
4.25	18.39	7.51	0.760	-182	0.0	1120	Note: Turb remained ~10 NTU for duration of Purge

Total Volumes Removed (gallons): 4.25 **Time:** 1120 **Purged Dry (Y/N):** N

Casing Volume

Casing I.D. (in.)	Unit Casing Volume Gal/Lin. Ft.)
1.0	0.04
1.5	0.09
2.0	0.16
2.2	0.20
3.0	0.37
4.0	0.65
4.3	0.75
5.0	1.00
6.0	1.55
7.0	2.00
8.0	2.60

Additional Remarks

Bailed/used twister Pump to retrieve ~5 gallons of water. Black particles were only retrieved on first two bails. Afterwards, water was clear and slightly brown. No HC odor or sheen.

TG 4-29-19

AECOM

6501 Americas Pkwy
Albuquerque, NM 87110
Tel: 505.855.7500
Fax: 505.855.7555

Groundwater Sample Field Data Form

Well Identification MW-28

Page 1 of 1

Project Name:	Chevron Isleta	**Sampled By:**	T.Grulke
Project Number:	60577971	**Sample ID:**	MW-28
Location:	Albuquerque, NM	**Sample Date:**	4/29/2019
Date:	29-Apr-19	**Sample Time:**	1032

Equipment

Purging Method/Equipment	Peristaltic Pump/Bailer
Sampling Equipment	Peristaltic Pump/Bailer
Filtering Equipment	-

Field Parameters

Initial Water Temp. (C)	
Initial pH:	
Initial Conductance (mS/cm):	

Purging Information

Casing ID (in)	2.0	Length of Static Water Column (ft)	6.93
Unit Casing Volume (gal/ft)	0.16	Casing Water Volume (gal)	1.11
Depth to Water (ft below TOC)	6.25	Total Purge Volume	3.5
Total Depth (ft below TOC)	13.18	Number of Purge Volumes	3

Volume Purged (gal)	Temp (C)	pH	Conductance (mS/cm)	Orp millivolts	DO (mg/L)	Time	Water Description
0	19.36	7.02	0.764	126	2.83	1021	
1	12.86	7.09	0.736	125	0.0	1024	
2	17.80	2.18	0.728	122	0.0	1027	
3.5	17.75	7.22	0.724	117	0.0	1032	

Total Volumes Removed (gallons): 3.5 **Time:** 1032 **Purged Dry (Y/N):** N

Casing Volume

Casing I.D. (in.)	Unit Casing Volume Gal/Lin. Ft.)
1.0	0.04
1.5	0.09
2.0	0.16
2.2	0.20
3.0	0.37
4.0	0.65
4.3	0.75
5.0	1.00
6.0	1.55
7.0	2.00
8.0	2.60

Additional Remarks

Clear/Colorless
No HC odor
No HC sheen

4-29-19

Chain-of-Custody Record

Client: AECOM

Mailing Address: 6501 Americas PKWY STE 900 Albuquerque NM 87110

Phone #: 505-488-7500

email or Fax#: dale.flores@aecom.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name: Chevron Ethyl

Project #: 60577971

Project Manager: Dale Flores

Sampler: Tanner Holt

On Ice: ☒ Yes ☐ No

# of Coolers: 1 (-0.1°C)

Cooler Temp(Including CF): 1.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TDS
4/29/19	1125	GW	MW-8A	4-1	HCl									X			X
4/29/19	1120	GW	MW-11A	4-1	HCl									X			X
4/29/19	1015	GW	MW-26	4-1	HCl									X			X
	—	—	Trip Blank	3-VOA	HCl									X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/29/19	1502			COO	4/29/19	1502
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

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.

ATTACHMENT B

POST-INJECTION ANALYTICAL LABORATORY REPORT

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 09, 2019

Dale Flores
AECOM ABQ
6501 Americas Parkway NE Suite 900
Albuquerque, NM 87110
TEL:
FAX

RE: Chevron Isleta OrderNo.: 1904D74

Dear Dale Flores:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/29/2019 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 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: MW-8A
Project: Chevron Isleta
Collection Date: 4/29/2019 1:25:00 PM
Lab ID: 1904D74-001 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	594	40.0	*D	mg/L	1	5/6/2019 6:28:00 PM	44723
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	1.5	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Toluene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Ethylbenzene	3.3	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2,4-Trimethylbenzene	1.0	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Naphthalene	ND	2.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Acetone	ND	10		µg/L	1	5/2/2019 1:24:00 AM	R59565
Bromobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Bromoform	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Bromomethane	ND	3.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
2-Butanone	ND	10		µg/L	1	5/2/2019 1:24:00 AM	R59565
Carbon disulfide	ND	10		µg/L	1	5/2/2019 1:24:00 AM	R59565
Carbon Tetrachloride	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Chlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Chloroethane	ND	2.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Chloroform	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Chloromethane	ND	3.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
2-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
4-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
cis-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Dibromochloromethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Dibromomethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1-Dichloroethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1-Dichloroethene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: MW-8A
Project: Chevron Isleta
Collection Date: 4/29/2019 1:25:00 PM
Lab ID: 1904D74-001 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
2,2-Dichloropropane	ND	2.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Hexachlorobutadiene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
2-Hexanone	ND	10		µg/L	1	5/2/2019 1:24:00 AM	R59565
Isopropylbenzene	1.1	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
4-Isopropyltoluene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
4-Methyl-2-pentanone	ND	10		µg/L	1	5/2/2019 1:24:00 AM	R59565
Methylene Chloride	ND	3.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
n-Butylbenzene	ND	3.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
n-Propylbenzene	1.1	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
sec-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Styrene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
tert-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
trans-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Trichlorofluoromethane	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Vinyl chloride	ND	1.0		µg/L	1	5/2/2019 1:24:00 AM	R59565
Xylenes, Total	3.2	1.5		µg/L	1	5/2/2019 1:24:00 AM	R59565
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	5/2/2019 1:24:00 AM	R59565
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	5/2/2019 1:24:00 AM	R59565
Surr: Dibromofluoromethane	93.9	70-130		%Rec	1	5/2/2019 1:24:00 AM	R59565
Surr: Toluene-d8	102	70-130		%Rec	1	5/2/2019 1:24:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: MW-11A
Project: Chevron Isleta
Collection Date: 4/29/2019 11:20:00 AM
Lab ID: 1904D74-002 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	530	20.0	*	mg/L	1	5/6/2019 6:28:00 PM	44723
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Toluene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Ethylbenzene	1.7	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Naphthalene	11	2.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1-Methylnaphthalene	7.3	4.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Acetone	ND	10		µg/L	1	5/2/2019 1:48:00 AM	R59565
Bromobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Bromoform	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Bromomethane	ND	3.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
2-Butanone	ND	10		µg/L	1	5/2/2019 1:48:00 AM	R59565
Carbon disulfide	ND	10		µg/L	1	5/2/2019 1:48:00 AM	R59565
Carbon Tetrachloride	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Chlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Chloroethane	ND	2.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Chloroform	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Chloromethane	ND	3.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
2-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
4-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
cis-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Dibromochloromethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Dibromomethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1-Dichloroethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1-Dichloroethene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: MW-11A
Project: Chevron Isleta
Collection Date: 4/29/2019 11:20:00 AM
Lab ID: 1904D74-002 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
2,2-Dichloropropane	ND	2.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Hexachlorobutadiene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
2-Hexanone	ND	10		µg/L	1	5/2/2019 1:48:00 AM	R59565
Isopropylbenzene	8.6	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
4-Isopropyltoluene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
4-Methyl-2-pentanone	ND	10		µg/L	1	5/2/2019 1:48:00 AM	R59565
Methylene Chloride	ND	3.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
n-Butylbenzene	ND	3.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
n-Propylbenzene	18	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
sec-Butylbenzene	1.6	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Styrene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
tert-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
trans-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Trichlorofluoromethane	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Vinyl chloride	ND	1.0		µg/L	1	5/2/2019 1:48:00 AM	R59565
Xylenes, Total	ND	1.5		µg/L	1	5/2/2019 1:48:00 AM	R59565
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%Rec	1	5/2/2019 1:48:00 AM	R59565
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	5/2/2019 1:48:00 AM	R59565
Surr: Dibromofluoromethane	94.5	70-130		%Rec	1	5/2/2019 1:48:00 AM	R59565
Surr: Toluene-d8	101	70-130		%Rec	1	5/2/2019 1:48:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: MW-26
Project: Chevron Isleta
Collection Date: 4/29/2019 10:32:00 AM
Lab ID: 1904D74-003 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	513	20.0	*	mg/L	1	5/6/2019 6:28:00 PM	44723
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Toluene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Ethylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Naphthalene	ND	2.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Acetone	ND	10		µg/L	1	5/2/2019 2:13:00 AM	R59565
Bromobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Bromoform	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Bromomethane	ND	3.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
2-Butanone	ND	10		µg/L	1	5/2/2019 2:13:00 AM	R59565
Carbon disulfide	ND	10		µg/L	1	5/2/2019 2:13:00 AM	R59565
Carbon Tetrachloride	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Chlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Chloroethane	ND	2.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Chloroform	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Chloromethane	ND	3.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
2-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
4-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
cis-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Dibromochloromethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Dibromomethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1-Dichloroethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1-Dichloroethene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: MW-26
Project: Chevron Isleta
Collection Date: 4/29/2019 10:32:00 AM
Lab ID: 1904D74-003 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
2,2-Dichloropropane	ND	2.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Hexachlorobutadiene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
2-Hexanone	ND	10		µg/L	1	5/2/2019 2:13:00 AM	R59565
Isopropylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
4-Isopropyltoluene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
4-Methyl-2-pentanone	ND	10		µg/L	1	5/2/2019 2:13:00 AM	R59565
Methylene Chloride	ND	3.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
n-Butylbenzene	ND	3.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
n-Propylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
sec-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Styrene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
tert-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
trans-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Trichlorofluoromethane	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Vinyl chloride	ND	1.0		µg/L	1	5/2/2019 2:13:00 AM	R59565
Xylenes, Total	ND	1.5		µg/L	1	5/2/2019 2:13:00 AM	R59565
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	5/2/2019 2:13:00 AM	R59565
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	5/2/2019 2:13:00 AM	R59565
Surr: Dibromofluoromethane	96.7	70-130		%Rec	1	5/2/2019 2:13:00 AM	R59565
Surr: Toluene-d8	99.8	70-130		%Rec	1	5/2/2019 2:13:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: Trip Blank
Project: Chevron Isleta
Collection Date:
Lab ID: 1904D74-004 **Matrix:** AQUEOUS **Received Date:** 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Toluene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Ethylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Naphthalene	ND	2.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Acetone	ND	10		µg/L	1	5/2/2019 2:36:00 AM	R59565
Bromobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Bromoform	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Bromomethane	ND	3.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
2-Butanone	ND	10		µg/L	1	5/2/2019 2:36:00 AM	R59565
Carbon disulfide	ND	10		µg/L	1	5/2/2019 2:36:00 AM	R59565
Carbon Tetrachloride	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Chlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Chloroethane	ND	2.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Chloroform	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Chloromethane	ND	3.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
2-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
4-Chlorotoluene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
cis-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Dibromochloromethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Dibromomethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,1-Dichloroethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,1-Dichloroethene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,3-Dichloropropane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
2,2-Dichloropropane	ND	2.0		µg/L	1	5/2/2019 2:36:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AECOM ABQ
Client Sample ID: Trip Blank
Project: Chevron Isleta
Collection Date:
Lab ID: 1904D74-004
Matrix: AQUEOUS
Received Date: 4/29/2019 3:02:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Hexachlorobutadiene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
2-Hexanone	ND	10		µg/L	1	5/2/2019 2:36:00 AM	R59565
Isopropylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
4-Isopropyltoluene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
4-Methyl-2-pentanone	ND	10		µg/L	1	5/2/2019 2:36:00 AM	R59565
Methylene Chloride	ND	3.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
n-Butylbenzene	ND	3.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
n-Propylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
sec-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Styrene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
tert-Butylbenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
trans-1,2-DCE	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Trichlorofluoromethane	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Vinyl chloride	ND	1.0		µg/L	1	5/2/2019 2:36:00 AM	R59565
Xylenes, Total	ND	1.5		µg/L	1	5/2/2019 2:36:00 AM	R59565
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	5/2/2019 2:36:00 AM	R59565
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	5/2/2019 2:36:00 AM	R59565
Surr: Dibromofluoromethane	97.5	70-130		%Rec	1	5/2/2019 2:36:00 AM	R59565
Surr: Toluene-d8	106	70-130		%Rec	1	5/2/2019 2:36:00 AM	R59565

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1904D74**
09-May-19

Client: AECOM ABQ
Project: Chevron Isleta

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R59565** RunNo: **59565**
Prep Date: Analysis Date: **5/1/2019** SeqNo: **2008250** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	86.2	70	130			
Toluene	18	1.0	20.00	0	90.8	70	130			
Chlorobenzene	20	1.0	20.00	0	98.1	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	83.0	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	83.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **rb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R59565** RunNo: **59565**
Prep Date: Analysis Date: **5/1/2019** SeqNo: **2008377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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 Quanitative 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#: **1904D74**
09-May-19

Client: AECOM ABQ
Project: Chevron Isleta

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R59565**	RunNo: **59565**
Prep Date:	Analysis Date: **5/1/2019**	SeqNo: **2008377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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 Quanitative 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#: **1904D74**

09-May-19

Client: AECOM ABQ

Project: Chevron Isleta

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R59565**	RunNo: **59565**
Prep Date:	Analysis Date: **5/1/2019**	SeqNo: **2008377** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.9	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

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 Quanitative 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#: **1904D74**

09-May-19

Client: AECOM ABQ

Project: Chevron Isleta

Sample ID: **MB-44723** SampType: **MBLK** TestCode: **SM2540C MOD: Total Dissolved Solids**

Client ID: **PBW** Batch ID: **44723** RunNo: **59663**

Prep Date: **5/5/2019** Analysis Date: **5/6/2019** SeqNo: **2011329** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: **LCS-44723** SampType: **LCS** TestCode: **SM2540C MOD: Total Dissolved Solids**

Client ID: **LCSW** Batch ID: **44723** RunNo: **59663**

Prep Date: **5/5/2019** Analysis Date: **5/6/2019** SeqNo: **2011330** Units: **mg/L**

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: **1904D74-002BDUP** SampType: **DUP** TestCode: **SM2540C MOD: Total Dissolved Solids**

Client ID: **MW-11A** Batch ID: **44723** RunNo: **59663**

Prep Date: **5/5/2019** Analysis Date: **5/6/2019** SeqNo: **2011336** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	520	20.0						1.90	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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **AECOM ABQ** Work Order Number: **1904D74** RcptNo: **1**

Received By: **Isaiah Ortiz** **4/29/2019 3:02:00 PM** I-OX

Completed By: **Yazmine Garduno** **4/29/2019 3:12:50 PM** Yazmine Garduno

Reviewed By: YG 4/29/19

LB: JJC 4-29-19

Chain of Custody

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

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 ☑ NJS/19	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 or >12 unless noted)

Adjusted? _____

Checked by: JJC 4-29-19

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	1.3	Good	Yes			

Chain-of-Custody Record

Client: AECOM

Mailing Address: 6501 Americas Pkwy STE 900 Albuquerque, NM 87110

Phone #: 505-855-7500

email or Fax#: dale.flores@aecom.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Chevron Isleta

Project #: 60577971

Project Manager: Dale Flores

Sampler: Tanner Grulke

On Ice: ☒ Yes ☐ No

# of Coolers: 1 (-0.1°C)

Cooler Temp(including CF): 1.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1904D74	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	TDS
4-29-19	1325	GW	MW-8A	4-3 VOA, 1 500mL	HCl	-001								X			X
4-29-19	1120	GW	MW-11A	4-3 VOA, 1 500mL	HCl	-002								X			X
4-29-19	1032	GW	MW-26	4-3 VOA, 1 500mL	HCl	-003								X			X
4-29-19	—		TRIP Blank	3 VOA	HCl	-004								X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4-29-19	1502			COO	4/29/19	1502
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Analysis Request

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.