

Adriane Gifford Project Manager

REVIEWED

By Mike Buchanan at 3:27 pm, Aug 17, 2023

April 10, 2020

Mr. Bradford Billings
Environmental Bureau
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: 2019 Annual Groundwater Monitoring Report

G.L. Erwin "A&B" Federal NCT-2 Tank Battery

Lea County, New Mexico

Case No. 1R254, OGRID No. 4323

Dear Mr. Billings:

Upstream Business Unit
Environmental Management Company
1500 Louisiana Street
Room 38108

Room 38108 Houston, Texas 77002 Tel 832-854-5620 agifford@chevron.com

Review of the 2019 Annual Groundwater Monitoring Report for G.L. Erwin Federal NCT-2 Tank Battery: **Content Satisfactory**

- 1. Continue to conduct groundwater monitoring and sampling.
- 2 Continue LNAPL Recovery efforts per report.
- 3. Submit the 2020, 2021 and 2022 annual groundwater reports by or before April each consecutive year.

Chevron Environmental Management Company (CEMC) submits herein to the New Mexico Oil Conservation Division (OCD) the 2019 Annual Groundwater Monitoring Report for the G.L. Erwin "A&B" Federal NCT-2 Tank Battery located in Lea County, New Mexico. This report was prepared by Arcadis U.S., Inc. (Arcadis), on behalf of CEMC, to document results of groundwater monitoring activities conducted at the above referenced site in the 2019 calendar year.

If you have any questions regarding this submittal, please contact me at (832) 854-5620 or Scott Foord of Arcadis at (713) 953-4853.

Respectfully,

Chevron Environmental Management Company on behalf of Chevron U.S.A. Inc.

Adriane Gifford Project Manager

Encl.

cc: Scott Foord, Arcadis



Chevron Environmental Management Company

2019 ANNUAL GROUNDWATER MONITORING REPORT

G.L. Erwin "A & B" NCT 2 Tank Battery
Section 35, Township 24 South, Range 37 East
Lea County, New Mexico

OGRID No. 4323 Case No. 1R254

April 2020

2019 ANNUAL GROUNDWATER MONITORING REPORT

G.L. Erwin "A & B" NCT 2 Tank Battery

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Our Ref.:

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Date:

April 2020

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1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis) has prepared this report for Chevron Environmental Management Company (CEMC), which summarizes semi-annual groundwater monitoring activities conducted in 2019 at the G.L. Erwin "A & B" NCT 2 Tank Battery (Site). Data presented in this report was collected during two semi-annual groundwater monitoring events conducted in June and November 2019.

The Site is located on Lea County Road J4, approximately three miles northeast of Jal, New Mexico, in the southwest quarter (SW/4) of the southeast quarter (SE/4), Section 35, Township 24 South, Range 37 East, Lea County, New Mexico. The Site's coordinates are latitude 32° 10′ 11.9″ N and longitude 103° 07′ 46.9″ W.

Land use in the vicinity of the Site included rangeland with indigenous grass, livestock ranching, and oil and gas production. The topography slopes gently southeast toward Monument Draw located approximately 1.5 miles east of the Site. A Site Location Map is presented as **Figure 1**. Additional Site background information is in **Appendix A**.

2 GROUNDWATER MONITORING RESULTS

Groundwater at the Site is monitored semi-annually from a network of 36 wells, which include 34 monitoring wells, 1 water well and 1 recovery well. A Site Details Map is presented as **Figure 2**. Arcadis performed semi-annual groundwater sampling events on June 19, 2019, and November 20-22, 2019. Field monitoring methodologies are included in **Appendix B**.

2.1 Groundwater Gauging Data

Groundwater and light non-aqueous phase liquid (LNAPL) measurements collected during semi-annual monitoring events conducted in 2019 indicate:

- Groundwater elevations ranged from
 - 3,063.24 feet above mean sea level (ft AMSL) (MW-32) to 3,111.03 ft AMSL (MW-28) during the June 2019 gauging event, and
 - o 3,063.25 ft AMSL (MW-32) to 3,110.94 ft AMSL (MW-28) during the November 2019 event.
- The groundwater elevations during the 2019 period appear to be consistent with historical levels, with groundwater flow generally to the south-southeast.
- Potentiometric elevation data for the sampling events are presented in Table 1. Groundwater potentiometric surface maps for June and November 2019 are presented on Figure 3;
- The calculated gradient was
 - 0.0155 feet/foot (ft/ft) for the June 2019 gauging event, and
 - o 0.0131 ft/ft for the November 2019 gauging event.
- LNAPL was not detected during either the June or the November 2019 monitoring events.

2.2 2019 Groundwater Analytical Results

28 of the 36 wells were sampled at the Site during the June 2019 sampling event. 33 of the 36 wells were sampled during the November 2019 sampling event. Consistent with historical results, monitoring wells MW-10, MW-11, MW-18, MW-27, MW-31, and MW-32, and water well WW-1 did not have sufficient water volume for sampling during the June 2019 event, and monitoring wells MW-18 and MW-27 did not have sufficient water volume for sampling during the November 2019 event. Recovery well RW-1 was not sampled in either event as the recovery system is currently not operational. Groundwater analytical results for chloride and total dissolved solids (TDS) were compared to the New Mexico Environment Department Water Quality Control Commission (NMWQCC) Groundwater Standards. A summary of the groundwater sample analytical results from the June and November 2019 events are presented in **Table 2**.

A cumulative summary table of groundwater analytical results and potentiometric elevation data obtained for the Site from 1998 through 2019 is presented in **Appendices C and E**, respectively. Copies of the certified analytical reports and chain-of-custody documentation from Eurofins TestAmerica, Inc. are provided in **Appendix D**.

Isoconcentration maps for chloride for the June and November 2019 sampling events are presented on **Figure 4**. The isoconcentration maps for TDS for the June and November 2019 sampling events are presented on **Figure 5**. The isoconcentration maps for sulfate for the June and November 2019 sampling events are presented on **Figure 6**. The groundwater analytical results are further summarized below.

2.2.1 Chloride

Chloride concentrations exceeded the NMWQCC standard of 250 milligrams per liter (mg/L) as follows:

- June Sampling Event
 - 24 of the 28 sampled wells (MW-1 through MW-6, MW-8, MW-12 through MW-17, MW-19, MW-20, MW- 22 through MW-26, MW-28 through MW-30 and the southwest water well).
 - Chloride concentrations exceeding the NMWQCC standard ranged from 335 mg/L at monitoring well MW-6 up to 10,700 mg/L at monitoring well MW-14.
- November Sampling Event
 - o 30 of the 33 wells sampled (MW-1 though MW-6, MW-8 through MW-17, MW-19, MW-20, MW-22 through MW-26, MW-28 through MW-32, WW-1, and the southwest water well).
 - Concentrations exceeding the NMWQCC standard ranged from 259 mg/L (WW-1) up to 13,400 mg/L (MW-14).

2.2.2 TDS

TDS concentrations exceeded the NMWQCC standard of 1,000 mg/L as follows:

- June Sampling Event
 - 25 of the 28 sampled wells (MW-1 through MW-6, MW-8, MW-12 through MW-17, MW-19 through MW-26, MW-28 through MW-30 and the southwest water well).
 - TDS concentrations exceeding the NMWQCC standard ranged from 1,030 mg/L (MW-21) up to 26,800 mg/L (MW-30).
- November Sampling Event
 - 31 of the 33 wells sampled (MW-1 though MW-6, MW-8 though MW-17, MW-19 through MW-26, MW-28 though MW-32, WW-1, and the southwest water well).
 - o Concentrations detected ranged from 1,040 mg/L (MW-21) up to 28,000 mg/L (MW-14).

2.2.3 Sulfate

Groundwater samples were not analyzed for sulfate during the June 2019 groundwater sampling event.

Sulfate concentrations exceeded the NMWQCC standard of 600 mg/L as follows:

- November Sampling Event
 - o 3 of 33 wells (MW-14, MW-19, and MW-30)

o Concentrations detected ranged from 627 mg/L (MW-30) up to 1,460 mg/L (MW-14).

2.2.4 Fluoride

Groundwater samples were not analyzed for fluoride during the June 2019 groundwater sampling event.

Fluoride concentrations detected exceeded the NMWQCC standard of 1.6 mg/L as follows:

- November Sampling Event
 - 21 of 33 wells (MW-3 through MW-8, MW-10, MW-14 through MW-17, MW-19, MW-21 through MW-23, MW-25, MW-28 through MW-30, WW-1, and the southwest water well).
 - o Concentrations detected ranged from 1.61 mg/L (WW-1) up to 25.1 mg/L (MW-14).

3 SUMMARY

In summary, the semi-annual monitoring activities conducted at the Site in June and November 2019 indicate the following:

- 34 monitoring wells, 1 water well, and 1 recovery well on-Site were gauged during both events;
- 27 monitoring wells and 1 water well were sampled during the June 2019 event, and 32 monitoring wells and 1 water well were sampled during the November 2019 event;
- Potentiometric surface conditions were consistent with historical results, with groundwater flow to the south-southeast.

Groundwater sample analytical results reported for the June 2019 and November 2019 sampling events indicate:

- Chloride exceeded the NMWQCC standard in
 - o 24 wells sampled during the June 2019 event, and
 - 30 wells sampled during the November 2019 event;
- TDS exceeded the NMWQCC standard in
 - o 25 wells sampled during the June 2019 event, and
 - 31 wells sampled during the November 2019 event;
- Sulfate exceeded the NMWQCC standard in
 - 3 wells sampled during the November 2019 event;
- Fluoride exceeded the NMWQCC standard in
 - 21 wells sampled during the November 2019.
- Chloride and TDS concentrations have remained relatively stable in 16 out of 32 wells (MW-1, MW-2, MW-4, MW-6, MW-9, MW-13, MW-15, MW-16, MW-17, MW-19, MW-20, MW-24, MW-26, MW-28, MW-31, and the Southwest Water Well).
- Chloride concentrations have exhibited a downward trend in wells MW-3, MW-5, MW-7, MW-8, MW-11, and MW-16.
- Chloride concentrations exhibited an upward trend in wells MW-10, MW-14, MW-21, MW-25, MW-29, and MW-30; however, have remained relatively consistent with historical data trends in wells MW-12, MW-22, MW-23, MW-28, MW-32, MW-W, and WW-1.
- TDS concentrations have exhibited a downward trend in well MW-7 and the West Water Well.
- TDS concentrations have exhibited an upward trend in wells MW-10, MW-12, MW-14, MW-21, MW-22, and WW- 1; however, have remained relatively consistent with historical data trends in wells MW-3, MW-5, MW-8, MW-11, MW-25, MW-28, MW-29, MW-30, and RW-1.

TABLES

Table 1
2019 Groundwater Potentiometric Elevation Data
Chevron Environmental Management Company
G.L. Erwin "A and B" Federal NCT-2 Tank Battery
Lea County, New Mexico



WELL ID	WELL ID TOC elev1 Well Diameter (inches) Screen Interval (bgs³)		DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)		
MW-01	3,164.14	2	55'-85'	6/11/19	81.76	61.54	3102.60	
	, , , , , , , , , , , , , , , , , , ,			11/21/19	80.70	60.73	3103.41	
MW-02	3,162.33	2	50'-70'	6/11/19 11/21/19	71.80 71.68	61.59 60.74	3100.74 3101.59	
		_		6/11/19	73.05	64.26	3102.23	
MW-03	3,166.49	2	50'-70'	11/21/19	73.30	64.46	3102.03	
MW-04	3,168.08	2	50'-70'	6/11/19	73.08	63.10	3104.98	
19199-04	3,100.00	2	30-70	11/21/19	73.03	63.25	3104.83	
MW-05	3,163.19	2	50'-70'	6/11/19	72.65	59.53	3103.66	
	3,773777			11/21/19	72.51	59.75	3103.44	
MW-06	3,166.60	2	59'-74'	6/11/19 11/21/19	76.79 76.72	67.17 67.44	3099.43 3099.16	
				6/11/19	71.69	66.75	3097.68	
MW-07	3,164.43	2	55'-70' 50'-70' 55'-70'	11/21/19	71.63	66.93	3097.50	
	_			6/11/19	73.41	67.71	3094.34	
MW-08	3,162.05	2		11/22/19	73.47	67.81	3094.24	
B414/ 00	3,169.70	2		6/11/19	68.44	62.87	3106.83	
MW-09	3,169.70	2		11/21/19	68.26	63.17	3106.53	
MW-10	3,173.45	2	54'-69'	6/11/19	72.06	69.83	3103.62	
14144-10	3,173.43	_	34-09	11/21/19	72.02	69.94	3103.51	
MW-11	3,170.66	2	58'-73'	6/11/19	75.59	74.85	3095.81	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			11/22/19	75.60	74.93	3095.73	
MW-12	3,154.93	2	59'-74'	6/11/19 11/22/19	77.58 77.49	72.61 72.66	3082.32 3082.27	
				6/11/19	70.39	66.70	3090.66	
MW-13	3,157.36	2	53'-68'	11/21/19	70.39	66.60	3090.76	
				6/11/19	90.02	71.75	3082.79	
MW-14	3,154.54	2	79.5'-89.5'	11/21/19	89.97	71.70	3082.84	
M\A/ 4.E	2.454.04	0	64.5'-84.5'	6/11/19	87.36	80.17	3074.77	
MW-15	3,154.94	2	64.5 -84.5	11/22/19	87.37	80.60	3074.34	
MW-16	3,159.66	2	59.5'-74.5'	6/11/19	74.41	68.05	3091.61	
11111110	0,100.00		00.0 74.0	11/22/19	74.41	68.25	3091.41	
MW-17	3,160.72	2	57'-77'	6/11/19	77.03	69.16	3091.56	
	<u> </u>			11/22/19	76.94 78.47	69.25 78.45	3091.47 3075.35	
MW-18	3,153.80	2	54.5'-74.5	6/11/19 11/21/19	78.47	78.45 78.44	3075.36	
				6/11/19	104.68	73.08	3077.18	
MW-19	3,150.26	2	82.5'-102.5'	11/21/19	104.55	73.01	3077.25	
MW 20	2 152 00	2	72 E' 02 E'	6/11/19	88.89	82.72	3071.27	
MW-20	3,153.99	۷	72.5'-92.5'	11/22/19	88.83	82.79	3071.20	
MW-21	3,147.45	2	67'-97'	6/11/19	96.29	73.30	3074.15	
	5,177.75		0, 0,	11/21/19	96.17	73.60	3073.85	
MW-22	3,172.45	2	46.5'-66.5'	6/11/19	67.93	63.66	3108.79	
				11/21/19	67.79	63.87	3108.58	
MW-23	3,155.99	2	70-100'	6/11/19 11/22/19	101.35 101.52	91.08 91.11	3064.91 3064.88	
				6/11/19	62.74	49.44	3098.17	
MW-24	3,147.61	2	30-60'	11/21/19	62.63	49.52	3098.09	

Table 1 - 2019 Guaging Data 1/2

Table 1
2019 Groundwater Potentiometric Elevation Data
Chevron Environmental Management Company
G.L. Erwin "A and B" Federal NCT-2 Tank Battery
Lea County, New Mexico



WELL ID	TOC elev1	Well Diameter (inches)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
MW-25	3,172.85	2	65-95'	6/11/19	95.50	78.40	3094.45
11111 20	0,172.00		00 00	11/22/19	94.30	78.50	3094.35
MW-26	3,174.63	2	55-75'	6/11/19	75.75	64.22	3110.41
11111 20	0,174.00	-	00 70	11/20/19	75.73	64.30	3110.33
MW-27	3,151.17	2	25-45'	6/11/19	48.57		DRY
10100-21	3,131.17		20 40	11/20/19	48.58		DRY
MW-28	3,175.60	2		6/11/19	74.14	64.57	3111.03
10100-20	3,173.00	2		11/20/19	72.90	64.66	3110.94
MW-29	3,169.46	2		6/11/19	78.62	66.70	3102.76
10100-25				11/21/19	78.60	66.83	3102.63
MW-30	3,152.15	2		6/11/19	73.95	68.44	3083.71
10100-30				11/21/19	73.70	68.54	3083.61
MW-31	3,173.79	2		6/11/19	83.75	80.21	3093.58
10100-31	3,173.73			11/22/19	82.75	80.33	3093.46
MW-32	3,149.08	2		6/11/19	87.85	85.84	3063.24
10100-32		2		11/21/19	87.00	85.83	3063.25
WW-1	3,172.12	2		6/11/19	180.72	69.69	3102.43
VV VV-1	3,172.12	2		11/22/19	187.80	69.78	3102.34
West MW	3,166.87	2		6/11/19	67.31	61.89	3104.98
AAG21 IAIAA	3,100.07			11/21/19	67.30	61.80	3105.07
Southwest MW	3,166.96	2		6/11/19	70.46	62.28	3104.68
Journwest MM	3,100.30	2		11/21/19	70.91	62.42	3104.54
RW-1	3,163.52	2	53'-73'	6/11/19	Not Gauged	61.46	3102.06
KVV-1	3,103.52		55-75	11/21/19		Not Gauged	

Notes:

- 1 Top of Casing
- 2 Mean Sea Level
- 3 Below ground surface
- 4 -NG Not Gauged due to presence of recovery pump

All depths were measured from the TOC

Professional Surveys were conducted by Piper Surveying Company in February and July 1998, October 2001 October 2003 and December 2004

Professional Surveys were conducted by West Company in November 2011, June 2012, and August 2017.

Table 2
2019 Groundwater Analytical Results
Chevron Environmental Management Company
G.L. Erwin "A and B" Federal NCT-2 Tank Battery
SW/4, SE/4, Section 35, Township 24 South, Range 37 East
Lea County, New Mexico



Monitoring Well ID	Duplicate Sample I.D.	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)			250	1.6	600	1,000	NA	NA
MW-1		6/19/2019	412			1,340		
IVI VV- I		11/25/2019	470	1.42	89.50	1,200		
MW-2		6/19/2019	726			1,910		
IVI VV-Z		11/25/2019	525	1.17	210.00	1,210		
MW-3		6/19/2019	521			1,250		
IVI VV-3		11/25/2019	486	3.43	202.00	1,540		
MW-4		6/19/2019	2,550			6,390		
10100-4		11/24/2019	1,180	4.85	251.00	2,090		
MW-5		6/19/2019	464			1,360		
IVIVV-3		11/24/2019	289	1.77	193.00	1,120		
MW-6		6/19/2019	335			1,250		
WIVV-0		11/25/2019	487	3.55	186.00	1,500		
MW-7		6/19/2019	147			806		
		11/25/2019	221	1.67	134.00	780		
MW-8		6/19/2019	353			1,250		
MIVV-0		11/25/2019	350	3.17	168.00	1,310		
MW-9		6/19/2019	205			988		
		11/25/2019	274	1.29	156.00	1,040		
MW-10		6/19/2019				fficient Water in We		
		11/25/2019	3,040	7.50	336.00	7,510		
MW-11		6/19/2019				fficient Water in We		
		11/24/2019	816	1.46	269.00	6,390		
MW-12		6/19/2019	1,920			6,870		
		11/25/2019	1,950	<0.601	82.20	6,270		
MW-13		6/19/2019	817			3,000		
		11/25/2019	913	0.89	199.00	2,560		
MW-14		6/19/2019	10,700			26,500		
		11/25/2019	13,400	25.10	1,460.00	28,000		
MW-15		6/19/2019	626			1,050		
		11/25/2019	603	2.84	72.70	1,940		
MW-16		6/19/2019	365			1,060		
		11/25/2019	344	2.13	98.30	1,130		
MW-17		6/19/2019	367			1,050		
		11/25/2019	405	1.93	106.00	1,380		
MW-18		6/19/2019 11/25/2019				fficient Water in We		
					iot Sampied, insu	fficient Water in We		1
MW-19		6/19/2019	2,990	2.05	740.00	9,720		
		11/25/2019	3,510	2.95	740.00	8,780		
MW-20		6/19/2019 11/25/2019	1,180 1,120	<0.601	82.60	3,420 3.660		
			, -	<0.601	82.60			
MW-21		6/19/2019 11/25/2019	212 204	2.25	213.00	1,030 1,040		
				2.25	213.00			
MW-22	-	6/19/2019 11/25/2019	3,070 4,040	2.16	399.00	9,460 8,840		
	-	6/19/2019	359	2.16	399.00	1,330		
MW-23		11/25/2019	359	1.77	69.80	1,330		
		6/19/2019		1.77	69.80	6,500		
MW-24		11/25/2019	1,660 1,710	<0.601	242.00	5,510		
		6/19/2019	2,310	<0.601	242.00			
MW-25		11/24/2019	2,310 890	1.77	127.00	7,160 5,790		

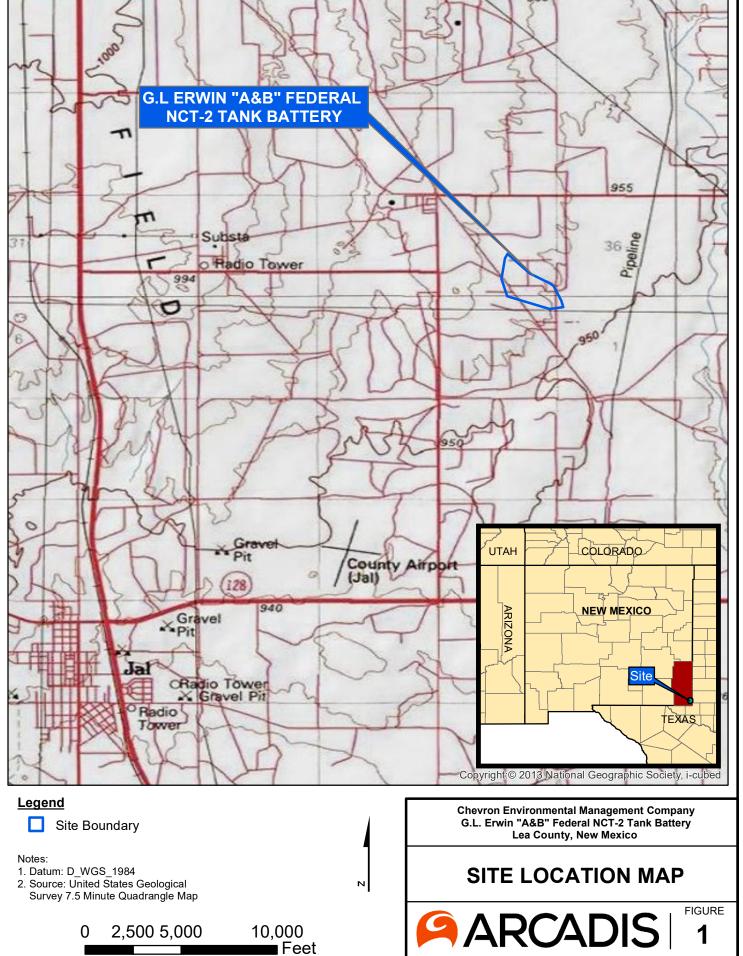
Table 2 2019 Groundwater Analytical Results **Chevron Environmental Management Company** G.L. Erwin "A and B" Federal NCT-2 Tank Battery SW/4, SE/4, Section 35, Township 24 South, Range 37 East Lea County, New Mexico

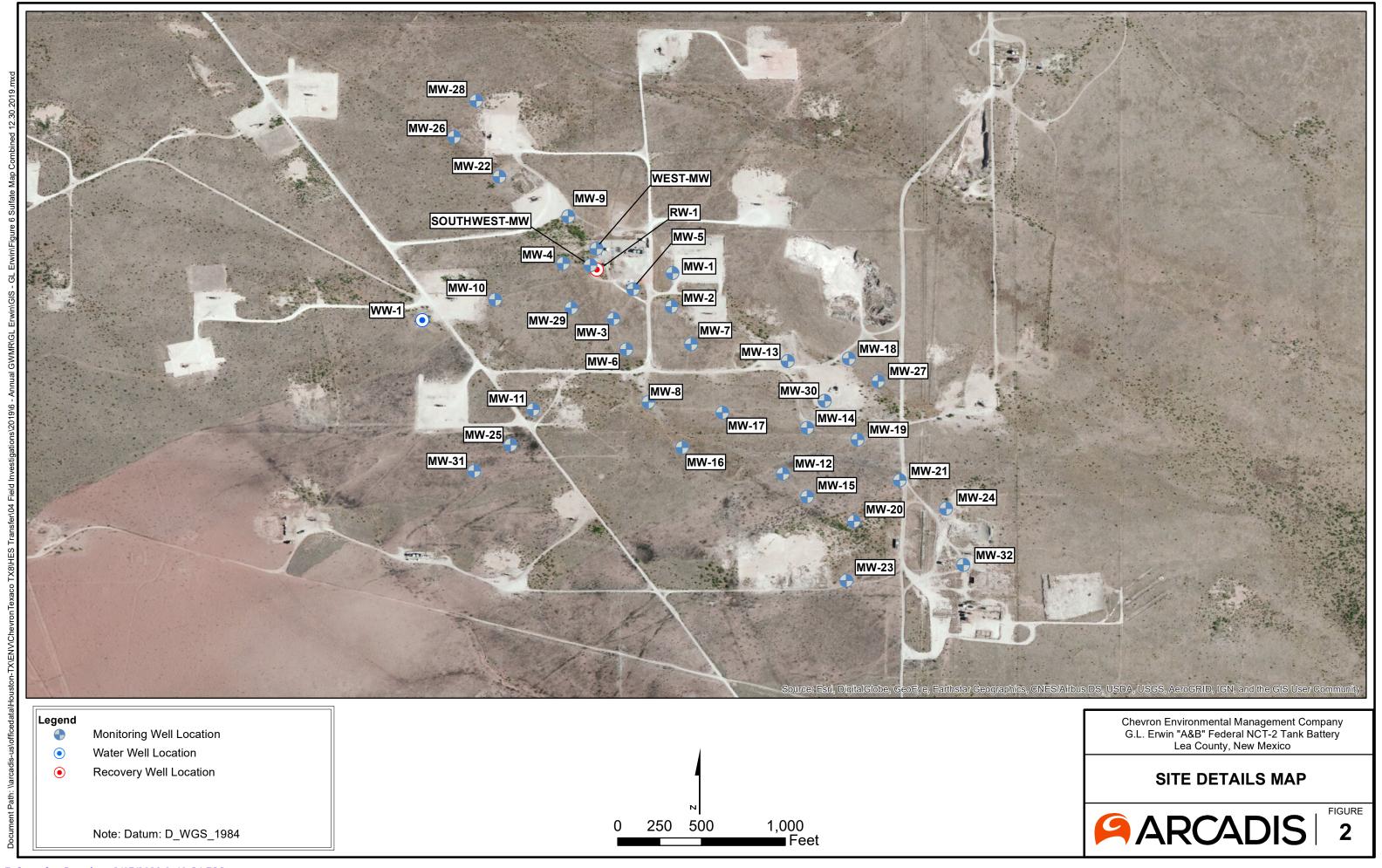


Monitoring Well ID	Duplicate Sample I.D.	Sample Date	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)			
NMWQCC Standard (mg/L)			250	1.6	600	1,000	NA	NA			
MW-26		6/19/2019	685			1,980					
IVI VV-20		11/25/2019	789	0.79	218.00	1,840					
MW-27		6/19/2019		N	ot Sampled, Insuf	ficient Water in We	ell				
WIVV-27		11/25/2019		Not Sampled, Insufficient Water in Well							
		6/19/2019	4,820			14,000					
MW-28	Dup-1	6/19/2019	9,750			22,000					
		11/25/2019	4,720	4.66	419.00	12,000					
		6/19/2019	2,770			8,320					
MW-29	Dup-2	6/19/2019	2,520			6,160					
		11/25/2019	1,120	5.58	164.00	4,920					
		6/19/2019	10,500			26,800					
MW-30	Dup-1	11/25/2019	9,540	3.01	627.00	18,700					
		11/25/2019	10,600	17.40	657.00	16,900					
MW-31		6/19/2019	Not Sampled, Insufficient Water in Well								
WW-51		11/24/2019	543	1.55	139.00	1,600					
MW-32		6/19/2019		N	ot Sampled, Insuf	ficient Water in We	ell				
11111 02		11/25/2019	1,440	< 0.601	191.00	4,340					
		6/19/2019			Not Sampled,	No Hydrosleve					
WW-1	Dup-2	11/26/2019	263	1.61	143.00	1,050					
		11/26/2019	259	1.58	142.00	1,140					
West		6/19/2019	117			726					
11631		11/24/2019	124	1.30	153.00	728					
Southwest		6/19/2019	919			2,460					
Countiwest		11/24/2019	772	2.22	260.00	2,050					
RW-1		6/19/2019			Not S	ampled					
1744-1		11/25/2019			Not S	ampled					

- 1. mg/L: Milligrams per liter
- Concentration below test method detection limit
 No data available
- 4. NS: Not Sampled
- 5. RW: Recovery well
- 6. WW: Water well
- 7. Detected concentrations exceeding the NMWQCC standard are bolded and colored
- 8. DUP: Duplicate Sample
- 9. J: Estimated Concentration
- 10. B: This Qualifier indicates that the analyte is an estimated value between the RL and the MDL
- 11. All analyses prior to 10/14/02 conducted by Trace Analysis, Inc., Lubbock, TX
- Analyses from 10/14/02 conducted by Environmental Lab of Texas, Odessa, TX
 Analyses from 5/30/03 through 08/2005 conducted by Trace Analysis Inc., Lubbock, TX
- 14. Analyses from 02/2006 through 08/2007, conducted by Pace Analytical, St. Rose, LA and Greenbay, WI Laboratories
- 15. Analyses from 02/2008 through 08/2009, conducted by Test America, Houston, TX
- 16. Analyses from 02/2010 through 10/2013, conducted by ALS Environmental, Houston, TX
- 17. Analyses from 04/2014 to present conducted by Xenco Laboratories, Odessa, TX
- 18. U: Not detected above the associated reporting limit
- 19. NA: Not applicable

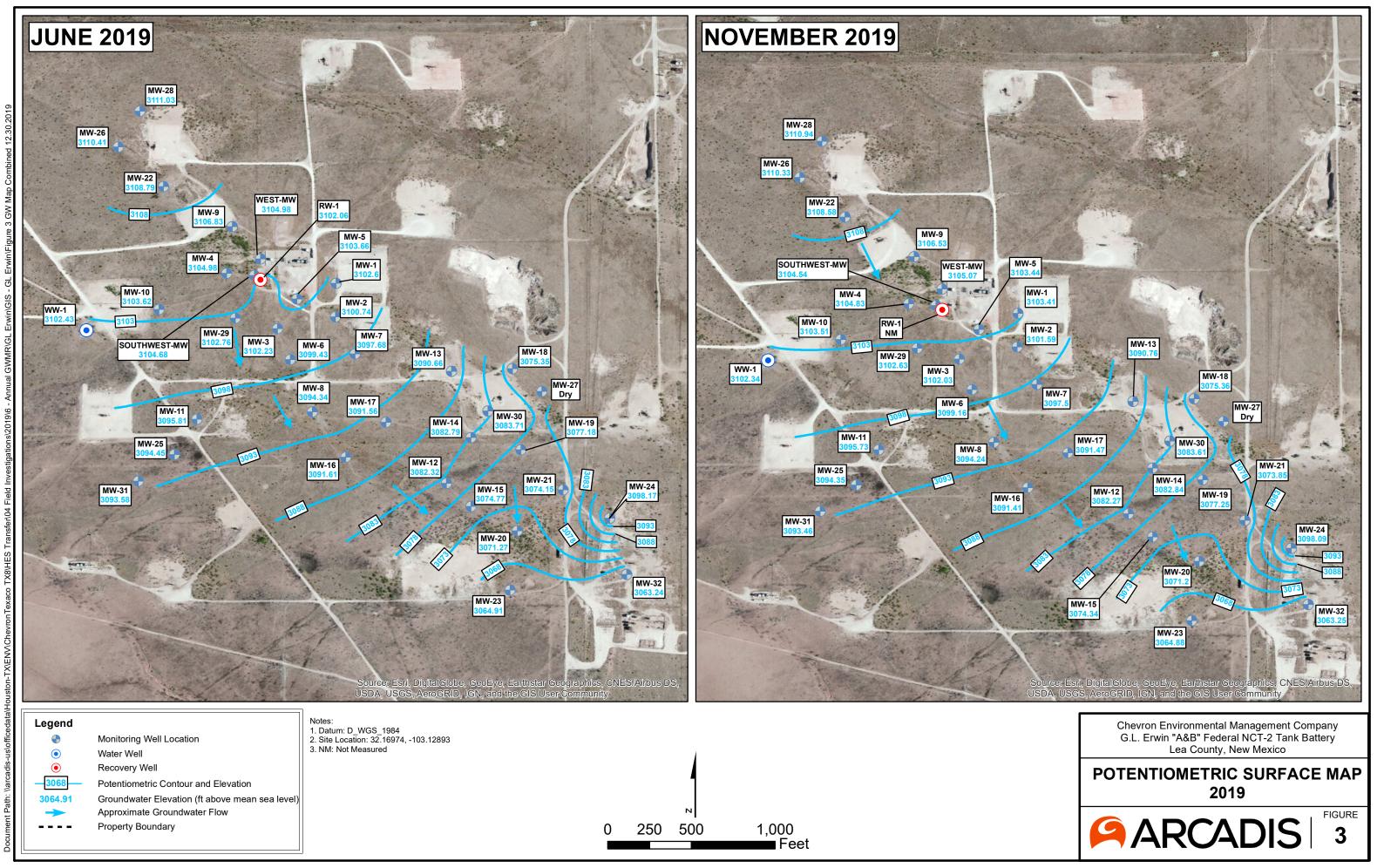
FIGURES

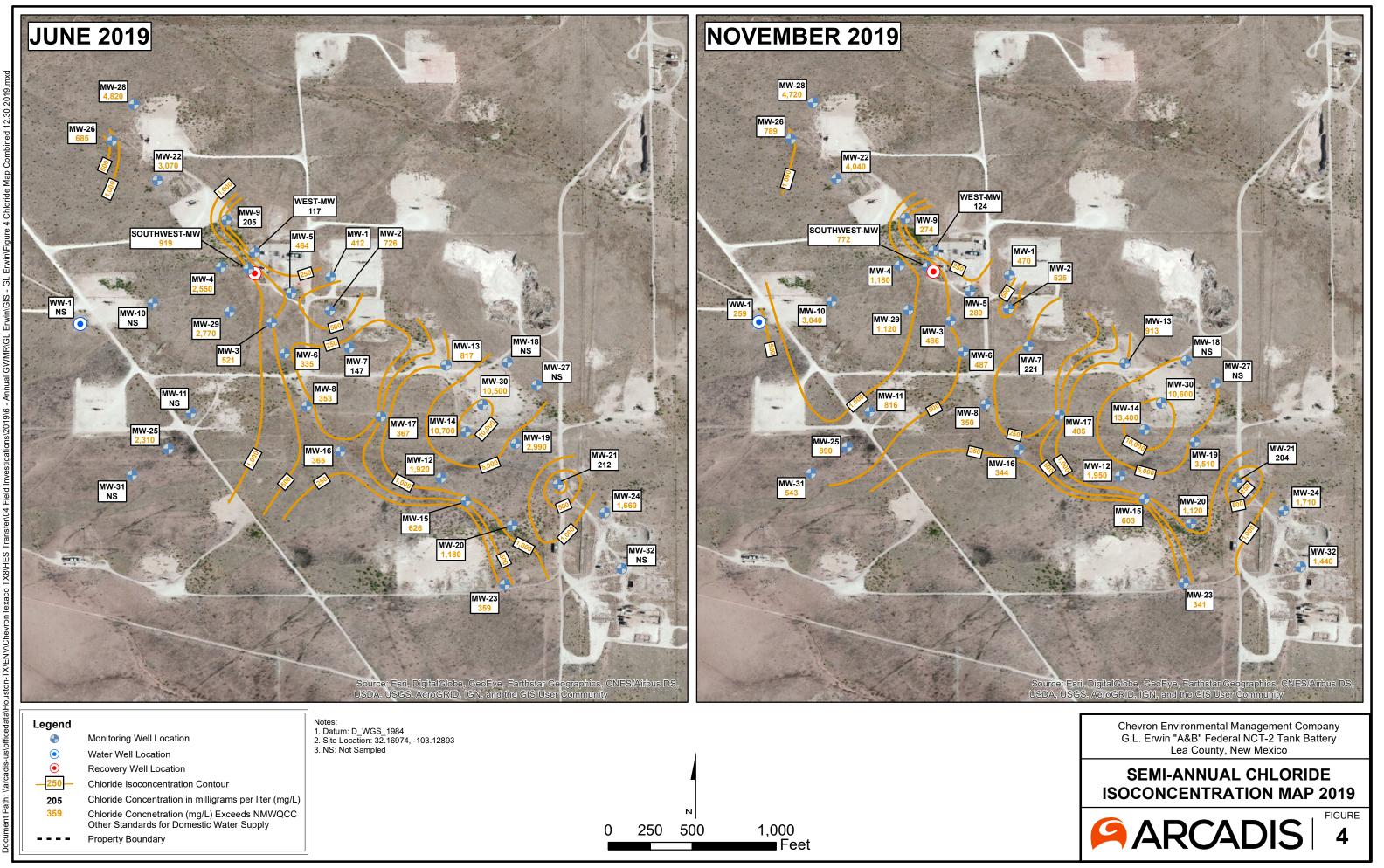


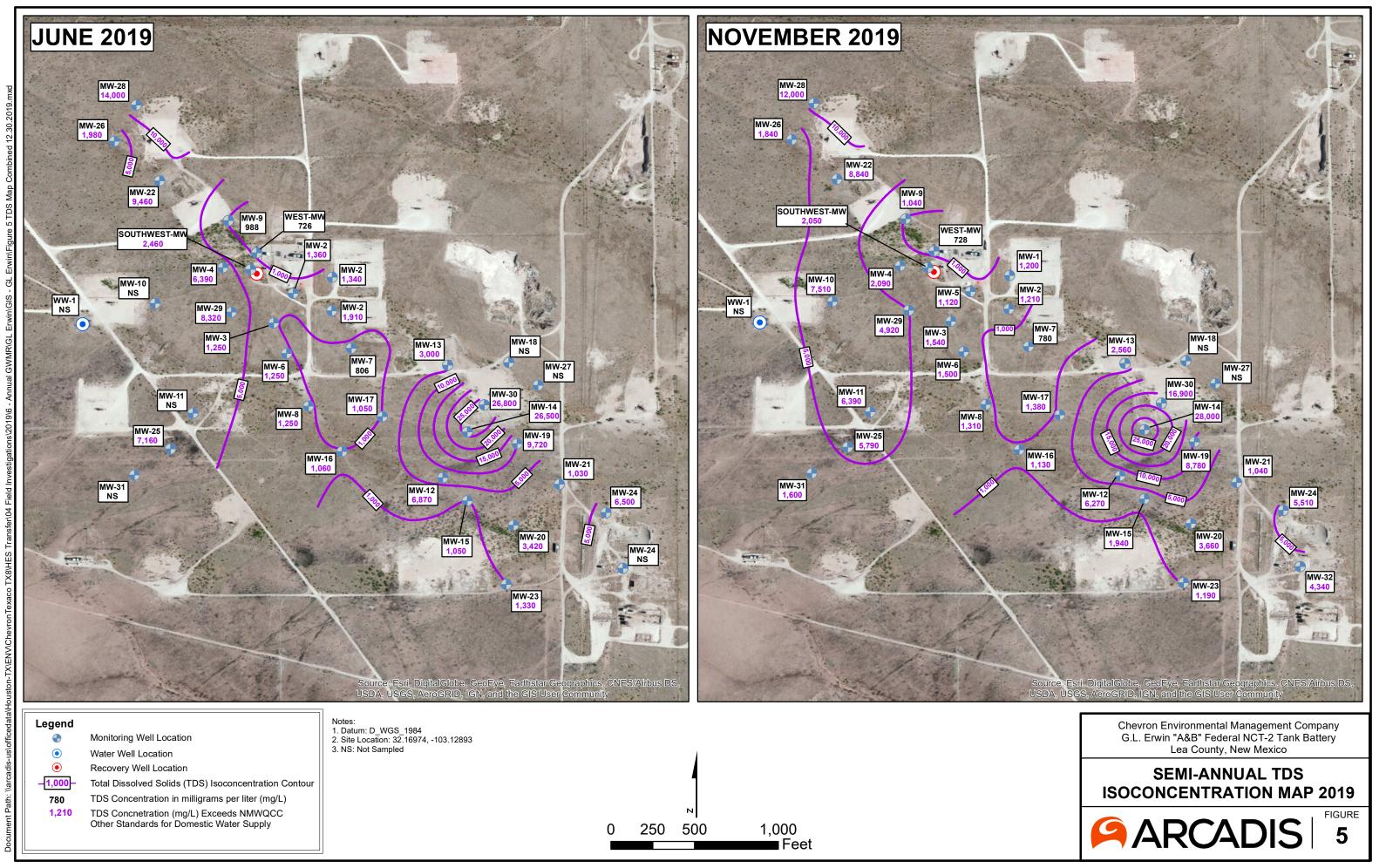


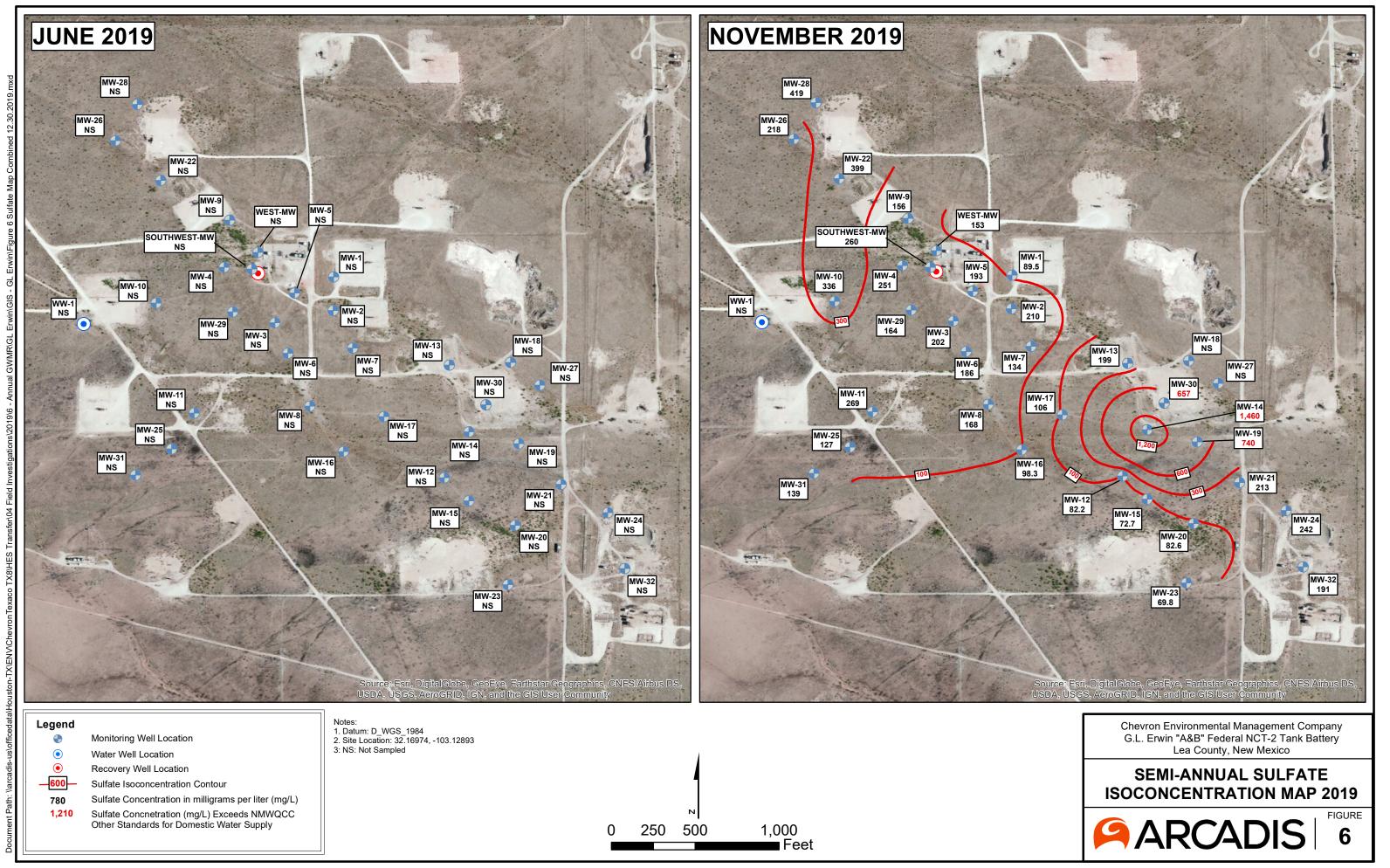
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APPENDIX A

Site Background



REGULATORY BACKGROUND

Site assessment activities were initiated in in September 1993 when Environmental Spill Control, Inc. (ESCI), of Hobbs, New Mexico, performed a subsurface investigation in and around an unlined earthen produced water emergency pit, which was located adjacent to the west edge of the Site. During the investigation, 16 boreholes, ranging from 30 to 100 feet below ground surface (ft bgs), were installed to evaluate soil and groundwater at the Site. Analytical results indicated hydrocarbon impacts to soil and chloride impacts to groundwater. In September 1994, ESCI excavated the former pit to approximately 62 ft bgs and removed approximately 40,000 cubic yards of hydrocarbon-impacted soil. The excavation was lined from a depth of 62.5 feet to 55.0 feet with a mixture of clean sand and clay and was backfilled with clean soil to the surface. ESCI submitted the pit closure report to Texaco Exploration and Production, Inc. (Texaco) in October 1994.

In February 1995, Texaco submitted a work plan to the New Mexico Oil Conservation Division (NMOCD) to assess affected groundwater at the Site. On March 28, 1995, the work plan was conditionally approved by the NMOCD. Two monitoring wells (west and southwest) were installed and sampled in 1997. Analytical results showed that groundwater chloride concentrations were at or above the New Mexico Water Quality Control Commission (NMWQCC) Standards. In January 1998, Highlander Environmental Corp. (Highlander) performed an electromagnetic (EM-34) terrain conductivity survey. Additionally, Highlander installed eight monitoring wells (MW-1 through MW-8) from February 1998 to January 1999 to further evaluate the extent of affected groundwater. From September 2001 through November 2004, 12 additional monitoring wells (MW-9 through MW-20) were installed under the direction of Larson and Associates, Inc. (LA). In 2004, Texaco submitted a corrective action plan to the New Mexico Office of the State Engineer (NMOSE) to recover groundwater from the recovery well (RW-1). On September 9, 2004, the NMOSE issued Permit CP 00886 to divert underground waters from recovery well RW-1. An allocation of 6.5 acre-feet (ac-ft.) per annum was granted by the NMOSE in the permit. In September 2006, a total fluids groundwater recovery system was installed at RW-1 under GHD's (formerly Conestoga-Rovers & Associates) supervision. At the request of the NMOCD, two groundwater monitoring wells (MW-21 and MW-22) were installed on November 19, 2007, to further evaluate the extent of affected groundwater. Additional monitoring wells (MW-23 and MW-24) were installed to the southeast of the Site on October 10 through 11, 2011, and three monitoring wells (MW-25, MW-26, and MW-27) were installed on April 2 through 3, 2012. In July 2017, five additional monitoring wells (MW-28, MW-29, MW-30, MW-31, and MW-32) were installed to provide additional

Semi-annual groundwater monitoring activities and annual reporting to the NMOCD for this Site have been performed by GHD since 2005. Additionally, GHD conducted bi-weekly operation and maintenance (O&M) activities on the groundwater recovery system at the Site from 2007 to 2016.

REGULATORY FRAMEWORK

delineation for the groundwater impacts at the Site.

The NMOCD of the New Mexico Energy, Minerals, and Natural Resources Department has regulatory jurisdiction over corrective actions conducted at the Site. Corrective actions have been completed in accordance with guidance outline by the NMOCD Guidelines for Remediation of

Appendix A_Final_2019

Leaks, Spills, and Releases (August 13, 1993). These guidelines require remediation of four constituents in groundwater to the NMWQCC human health standards set forth in New Mexico Administrative Code 20.6.2.3103B as follows:

Analyte	NMWQCC Standard for Groundwater (mg/L)
Chloride	250
Total Dissolved Solids (TDS)	1,000
Fluoride	1.6
Sulfate	600

Note: mg/L = milligrams per liter

The original analyte list included carbonate alkalinity, bicarbonate alkalinity, total alkalinity, nitrate-N, calcium, magnesium, potassium, sodium, chloride, TDS, fluoride, and sulfate. In a letter to the NMOCD, dated December 15, 2014, GHD, on behalf of CEMC, requested a reduction in the list of analytical parameters and a reduction in the wells included in the monitoring program. In a subsequent email, dated May 19, 2015, the NMOCD approved the reduction of the list of analyses to chloride, TDS, fluoride, and sulfate only (all constituents associated with produced water). No wells were eliminated from the monitoring program.

The New Mexico Office of the State Engineer (NMOSE) governs water usage in the State of New Mexico. An application for a permit to appropriate groundwater was submitted to the NMOSE and was approved in September 2004. Usage of groundwater for remediation purposes was granted by the NMOSE under well permit CP 00886 for a total of 6.5 ac-ft. per annum from recovery well RW-1. In accordance with the permit, quarterly NMOSE Meter Reading Forms for January, June, September, and December 2019 were submitted to the NMOSE. Due to an environmental consulting firm transition from GHD to Arcadis, GHD collected and submitted the meter reading form for January and Arcadis collected and submitted the meter reading forms for June, September and December 2019. The recovery system has been shut down since April 15, 2016, so the forms reported no discharge for each quarter of 2018. Copies of the forms are provided in the 2018 Annual Groundwater Monitoring Report dated January 3, 2019.

REMEDIATION SYSTEM OPERATION

A total fluids groundwater recovery system was installed at RW-1 in September 2006 and operated from 2006 to 2016.

Due to low recovery rates and no noticeable decrease in the chloride concentration levels, the recovery system was determined to be ineffective. Additionally, the system continued to have operational issues and was shut down in April 2016. In a meeting between Chevron and the NMOCD on October 26, 2016, the NMOCD concurred with CEMC's decision to discontinue operation of the groundwater recovery system. Records show that approximately 1,226,000 gallons of groundwater were recovered by the system since operations began in 2006. The estimated cumulative recovery volumes, including the average yearly and cumulative pumping rates, through April 2016 are provided below:

Year	Gallons Recovered	Average Gallons per Minute
2006-2007	15,288	0.03
2008	167,832	0.32
2009	121, 296	0.23
2010	195,237	0.37
2011	Not in operation	
2012	92,394	0.18
2013	185,366	0.35
2014	207,649	0.40
2015	240,729	0.46
2016 (through 4/4/16)	53,172	0.39
Cumulative Totals	1,225,791	0.28

GEOLOGY/HYDROGEOLOGY ASSESSMENT

Site Setting

The Site is located on Lea County Road J4, approximately three miles northeast of Jal, New Mexico, in the southwest quarter (SW/4) of the southeast quarter (SE/4), Section 35, Township 24 South, Range 37 East, Lea County, New Mexico. The Site's coordinates are latitude 32° 10' 11.9" N and longitude 103° 07' 46.9" W. The Site is situated at an elevation of approximately 3,165 feet above mean sea level (ft AMSL).

Land use in the vicinity of the Site included rangeland with indigenous grass, livestock ranching, and oil and gas production. The topography slopes gently southeast toward Monument Draw located approximately 1.5 miles east of the Site.

Regional Geologic Conditions

The region is characterized by a surface cover of up to 200 feet of unconsolidated to semi-lithified sediments of the Ogallala Formation consisting of sand, clay, and fluvial gravel. The upper portion of the Ogallala Formation has been heavily cemented by caliche. The Tertiary-aged sediments are underlain by the Triassic-aged Dockum Group shale ("red beds").

Site Geology

The Site is underlain by the unconsolidated and lithified sediments (silt and fine-grained sand with caliche layers) of the Ogallala formation consisting of Tertiary-aged sediments of sand, clay, and fluvial gravel. The gravel was not found in several borings drilled in the southern portion of the Site. The Tertiary-aged sediments are underlain by the Triassic-aged Dockum Group shale ("red beds").

Hydrogeologic Conditions

Regional groundwater flow in the Ogallala Aquifer is controlled by the slope of the land surface to the south with localized eastward flow into the valley of Monument Draw. The aquifer typically behaves as an unconfined aquifer. Monument Draw is an intermittent stream that contains water only after heavy rains (Texas Water Development Board [TWDB], 2008)1. The Dockum Group Shale is considered the underlying aquitard for the Ogallala Aquifer.

Site Hydrogeology

Groundwater beneath the Site is found within the lower Ogallala deposits. The depth to groundwater at the Site ranges from approximately 49 to 91ft bgs, based on the groundwater monitoring event conducted in June/November 2019. The saturated thickness of the unconfined aquifer ranges from approximately 13 to 118 ft. The saturated thickness varies in conjunction with the elevation of the top of the Dockum shale. The thickest saturated portion of the Ogallala is to the southwest where the bedrock surface of the Dockum is the lowest.

At the Site, the local groundwater flow direction trends to the south-southeast with an average horizontal hydraulic gradient of approximately 0.0143 feet per foot (ft/ft), as presented in the attached figures. The south-southeast groundwater flow direction observed at the Site is consistent with the regional groundwater flow direction to the southeast in the Ogallala Aquifer. The deflection to the east at the eastern property boundary is likely related to the break of the slope of the land towards the Monument Draw to the east.

APPENDIX B

Field Methodology and Documentation



FIELD METHODOLOGY

Prior to sampling, static fluid water levels were measured with an electronic interface probe to the nearest hundredth of a foot and recorded. In addition, a conductivity probe was used to record the conductivity levels every 2 feet in each well to evaluate the vertical distribution of chloride-affected groundwater. After recording conductivity levels, discrete samples were collected at the interval of highest conductivity using a HydrasleeveTM. Geochemical water quality parameters (pH, temperature, and conductivity) were recorded at the sampling depth. All non-disposable groundwater sampling equipment was thoroughly decontaminated between measurements to prevent possible cross-contamination between wells. Laboratory-supplied sample containers were filled directly from the HydrasleeveTM.

Groundwater samples were placed on ice in insulated coolers and chilled to a temperature of approximately 4°C (40°F). The coolers were sealed for shipment with proper chain-of-custody documentation and shipped to Eurofins TestAmerica, located in Houston, Texas, for analysis of chloride, fluoride and sulfate by Environmental Protection Agency (EPA) Method 300.0, and total dissolved solids (TDS) by SM 2540C.

arcadis.com 1



Gauging Form
HES Transfer Site Name: G.L. Erwin
Lea County, New Mexico

Monitoring Well	Date Gauged	DTW (ft btoc)	Total Depth (ft btoc)	Notes
MW-1	0111119	w1.54	81.76	
MW-2	010/11/19	41,59	71.80	
MW-3	06/11/19	64.26	77.05	
MW-4	06/11/19	w3.10	73.08	wher in country.
MW-5	04/11/19	59,53	72.05	The state of the s
MW-6	 			
MW-7	06/11/19	VT.11	76.79	
MW-8	OV/11/14	WW.75	71.69	
MW-9	06/11/19	47.71 62.67	73.41 68.44	
MW-10	00/11/19		<u> </u>	no othing, clip, weight.
MW-11	06/11/19	14.85	12:06	no oring, llip, weight.
MW-12	06/11/19	72.61	75.59	in our of teach madit.
MW-13	06/11/19	106.70	70.39	
MW-14	06/11/19			
MW-15	06/11/19	41.75	90.02	
MW-16	06/11/19	W8.05	74.41	
MW-17	06/11/19	49.16	77.03	
MW-18	06/11/19	78.45	18.47	no string, clip, weight.
MW-19	06/11/19	13.08	104.08	
MW-20	04/11/19	82.72	86.89	
MW-21	06/11/19	73.30	94.29	
MW-22	04/11/19	43.66	64.93	
MW-23	06/11/19	91.08	101.35	
MW-24	06/11/14	49.44	62.74	
MW-25	06/11/19	18,40	95,50	
MW-26	ochlig	64.22	75.75	
MW-27	06/11/19		48,57	welldry.
MW-28	66/11/19	64.57	74.14	
MW-29	06/11/19	UL. 70	18.62	
MW-30	00/11/19	७८. ५५	13.95	
MW-31	06/11/19	80.21	83. H 5	
MW-32	06/11/19	85.84	21.85	no otting, clip, weight,
WW-1	06/11/19	69.69	180.72	his Mydrowleeve
West MW	06/11/19	101, 99 101 - 1818	10-410B	
Southwest MW		41.28	70,46	
RW-1	00/11/19	का. पष		pump in well, unable loget TD.

Site Name/ Location Chevron Fuller Project Number <u>B0047270.0007</u>
Well Identification MW-1 Inspection Date 40/11/19 Inspector LR
Measured Well Depth 81, 110 Measuring Point TOC Depth to water 11.54
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? 8 Y N N/A Y N N/A Y N N/A N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all lewipment prevent.

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification MW-2 Inspection Date UR 111/14 Inspector UR
Measured Well Depth 71.60 Measuring Point 700 Depth to water 11.59
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present

Site Name/ Location Chevron Fuller Project Number <u>B0047270.0007</u>
Well Identification MW-3 Inspection Date W/11/19 Inspector LB
Measured Well Depth 17:05 Measuring Point TOL Depth to water 44:24
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A Y N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: CUI LAUIPMENT PRESENT.

Site Name/ Location Chevron Fuller Project Number B0047270.0007			
Well Identification MW-4 Inspection Date de / 11/14 Inspector LB			
Measured Well Depth 13.08 Measuring Point 100 Depth to water 0	D3 (1	D	
VISUAL INSPECTION	020		
1) Is protective sleeve/cover in place and secure?	Y Y Y Y	N N N	N/A N/A N/A
 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? 	Y Y Y (N N N	N/A N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Y	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Y	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N (N/A	1)
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N	ı (N	I/A	
Does the bailer contain excessive amounts of silt or rust?	N (N/A	L .
Does water appear discolored or have an unusual odor or appearance? Y	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	N	N/A	
NOTES AND OBSERVATIONS: all equipment prisent, water in autoide	ot L	Δσi	ng.
		===	

Site Name/ Location Chevron Fuller Project Number <u>B0047270.0007</u>
Well Identification nw - 5 Inspection Date out 11/14 Inspector LB
Measured Well Depth 11.45 Measuring Point toc Depth to water 59.53
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A Y N N/A Y N N/A N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: au equipment present.
*

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw - + Inspection Date 06/11/19 Inspector LB
Measured Well Depth 71.69 Measuring Point Depth to water 64.75
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N (N/A)
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all eauipment present.

Site Name/ Location - Chevron Fuller Project NumberB0047270.0007
Well Identification MW - 8 Inspection Date OW / 11/19 Inspector LB
Measured Well Depth 13 141 Measuring Point TDC Depth to water 61 11
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional?
NOTES AND OBSERVATIONS: all equipment prevent.

Site Name/ Location Chevron Fuller Project Number B0047270.0007	
Well Identification <u>MW-9</u> Inspection Date <u>Ull / 19</u> Inspector <u>LB</u>	
Measured Well Depth wester Measuring Point TOL Depth to water wester	
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure?	A A A A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	¥.
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	1
Does bailer/pump travel freely to and from bottom of well? Y N N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N N/A	
Does water appear discolored or have an unusual odor or appearance? Y N/A	
Is the lock on the well cover/cap clean and fully functional? Y N N/A	
NOTES AND OBSERVATIONS: All equipment prevent	
	_
	_
	-0
	e: -:)

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification MW - 1D Inspection Date 11/19 Inspector Us
Measured Well Depth 7 2, bu Measuring Point TDC Depth to water 69,83
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Now N/A Y Now N/A Now N/A Now N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: ho utring, clip, weight.

Site Name/ Location Chevron Fuller Project Number	B0047270.0007
Well Identification Mw - 11 Inspection Date U/11/1	Inspector_US
Measured Well Depth 35.59 Measuring Point TOC	Depth to water 74,85
VISUAL INSPECTION	
 Is protective sleeve/cover in place and secure?	Y N N/A
PHYSICAL INSPECTION	N
Does water-level indicator/measuring device travel freely down wel (Enter depth to water in the space provided above.)	Il casing? N N/A
Does water-level indicator/measuring device travel to bottom of wel (Total depth may be found on drilling logs, well completion diagrams, or previous we inspection forms. Enter total depth in the space provided above.)	
Does bailer/pump travel freely to and from bottom of well?	Y N N/A
Upon removal from well, does bailer show evidence of damage (got cuts, scrapes) suggestive of well damage from foreign object the well?	
Does the bailer contain excessive amounts of silt or rust?	Y N N/A
Does water appear discolored or have an unusual odor or appearance	e? Y N N/A
Is the lock on the well cover/cap clean and fully functional?	Y N N/A
NOTES AND OBSERVATIONS: no string lip, or weight	

Site Name/ Location Chevron Fuller Project Number B0047270.0007	
Well Identification MW - 12 Inspection Date ou / 11/19 Inspector LB	
Measured Well Depth 17.58 Measuring Point Toc Depth to water 1	2,61
VISUAL INSPECTION	`
1) Is protective sleeve/cover in place and secure?	7 N N/A 7 N N/A 7 N N/A 7 N N/A 8 N N/A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N N/A
Does bailer/pump travel freely to and from bottom of well? Y	N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N	N/A
Does the bailer contain excessive amounts of silt or rust?	N N/A
Does water appear discolored or have an unusual odor or appearance? Y	N/A
Is the lock on the well cover/cap clean and fully functional?	N/A
NOTES AND OBSERVATIONS: all equipment present.	

Site N	ame/Location	Chevron Fuller	Project Nun	nber <u>B00</u>	47270.0007			
Well I	dentification	MW - 13	_Inspection Date_ou	111/19	Inspector_LR			
Meası	red Well Depth	10.39	Measuring Point To		Depth to water_	LOLY-4	0	
			VISUAL INSPECTI	ON		\cap		
 A Is Is Is Is 	re hinges, latche concrete pad in well name or ot well cap in plac measuring poin	es, or locks function satisfactory conditions in the satisfactory conditions and in good conditions arked or readily	nd secure? nal and in good condition? marked clearly on or ne dition? y recognized? ns of damage or deterio	on?ar the well?		Y Y Y Y Y	N N N N N N	N/A N/A N/A N/A N/A N/A
			PHYSICAL INSPECT	TION				
Does v	water-level indic (Enter depth to water	cator/measuring de in the space provided abo	vice travel freely down	well casing	; ?	Y	N	N/A
Does	(Total depth may be		vice travel to bottom of Il completion diagrams, or previon ce provided above.)			Y	N	N/A
Does l	oailer/pump trav	el freely to and fro	om bottom of well?		Y	N	N/A	
Upon		•	ow evidence of damage damage from foreign ob	-	Y	N (N	I/A	
Does t	he bailer contair	n excessive amoun	ts of silt or rust?		Y	N	N/A	
Does v	vater appear dis	colored or have an	unusual odor or appear	rance?	Y	N	N/A	1
Is the	ock on the well	cover/cap clean ar	nd fully functional?		Y	N	N/A	k
	S AND RVATIONS:0	an equipm	ent present.				_	

Site Name/ Location	Chevron Fuller	Project Numbe	er_ B0047270.0007	
Well Identification m	V - 14	_Inspection Date_06 / 11	/19 Inspector	LB
Measured Well Depth_	90.02	Measuring Point TOL	Depth to water	T1.75
		VISUAL INSPECTION	1	
 2) Are hinges, latches 3) Is concrete pad in s 4) Is well name or oth 5) Is well cap in place 6) Is measuring point 	s, or locks function satisfactory condition the identification and in good con marked or readil	nd secure?	the well?	Y N N/A Y N N/A Y N N/A Y N N/A Y N N/A
		PHYSICAL INSPECTIO	N	
	ator/measuring denter the space provided about	evice travel freely down we	ell casing?	Y N N/A
(Total depth may be for		evice travel to bottom of we ell completion diagrams, or previous v ace provided above.)		Y N N/A
Does bailer/pump trave	el freely to and fro	om bottom of well?		Y N N/A
		ow evidence of damage (go damage from foreign objec		N N/A
Does the bailer contain	excessive amour	nts of silt or rust?		Y N N/A
Does water appear disc	olored or have an	unusual odor or appearance	ce?	Y N N/A
Is the lock on the well of	cover/cap clean a	nd fully functional?		Y N N/A
NOTES AND OBSERVATIONS:@	ill eargpn	nent present.		
-				

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification MW - 15 Inspection Date 19/11/19 Inspector LB
Measured Well Depth 27.36 Measuring Point Toc Depth to water 20.17
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all enuipment present.

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification MW - 16 Inspection Date of 11/19 Inspector LB
Measured Well Depth 14,41 Measuring Point Toc Depth to water 100.05
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A Y N N/A Y N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: an equipment prevent.

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification MW-17 Inspection Date OLD / 11 / 19 Inspector LB
Measured Well Depth 77.03 Measuring Point TDC Depth to water LQ. 10
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? 7) N/A 8) N/A 9) N/A 1) N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present.

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification WW - 18 Inspection Date OW / 11 / 19 Inspector LB
Measured Well Depth 78.47 Measuring Point TDC Depth to water 78.45
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: NO othing, clip, weight, Insufficient water.
<u> </u>

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw - 19 Inspection Date w/11/19 Inspector LB
Measured Well Depth 104, 108 Measuring Point TOC Depth to water 73, 108
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all encorpment present.

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw - 10 Inspection Date w/11/19 Inspector LB
Measured Well Depth 68.29 Measuring Point TOC Depth to water 52.32
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present.
·

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification (NW) -21 Inspection Date 4/11/19 Inspector LB
Measured Well Depth 910. 29 Measuring Point TOC Depth to water 13.30
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present.

Site Name/ Location Chevron Fuller Project Number B0047270.0007	
Well Identification MW - 22 Inspection Date 4 (11/19 Inspector LB	€;
Measured Well Depth 47,93 Measuring Point TOC Depth to water 63,446	
VISUAL INSPECTION	
2) Are hinges, latches, or locks functional and in good condition?	/A /A /A /A /A /A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	A B
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	A
Does bailer/pump travel freely to and from bottom of well? Y N N/A)
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N/A	\supset
Does water appear discolored or have an unusual odor or appearance? Y N N/A	
Is the lock on the well cover/cap clean and fully functional? Y N N/A	
NOTES AND OBSERVATIONS: all equipment prevent	=.5

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw - 23 Inspection Date 111/19 Inspector LB
Measured Well Depth 101.35 Measuring Point TDC Depth to water 91.08
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? N N/A N N/A N N/A N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present. Has mud at bottom of well.

Site Name/ Location Chevron Fuller Project Number <u>B0047270.0007</u>
Well Identification Mw - 24 Inspection Date 11/19 Inspector LB
Measured Well Depth 62.74 Measuring Point TOC Depth to water 49.44
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A Y N N/A Y N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present.

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw - 25 Inspection Date 6/11/19 Inspector LB
Measured Well Depth 95.50 Measuring Point TOC Depth to water 72.40
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A Y N N/A Y N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment prevent

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw - 24 Inspection Date w/11/19 Inspector UB
Measured Well Depth 75.75 Measuring Point Toc Depth to water 41.22
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: an equipment prevent

Site N	lame/ Location	Chevron Fuller	Project 1	Number <u>B</u>	0047270.0007			
Well I	dentification m	W-27	Inspection Date	e111/19	Inspector_US			
Measu	ared Well Depth	40, ST	Measuring Point	bC	Depth to water_		wei	1 dry
			VISUAL INSPE	CTION				
 Ai Is Is Is Is Is 	re hinges, latche concrete pad in well name or ot well cap in plac measuring poin	es, or locks function satisfactory cond their identification the and in good cort marked or readily	and secure? onal and in good con ition? marked clearly on ondition? ly recognized? gns of damage or det	dition?r near the we	117	Y Y Y Y Y	N N N N N N N N N N N N N N N N N N N	N/A N/A N/A N/A N/A N/A
			PHYSICAL INSP	ECTION		^		
Does v	water-level indic (Enter depth to water	cator/measuring doing the space provided ab	evice travel freely do	own well casi	ing?	Y	N	N/A
Does v	(Total depth may be f	cator/measuring defound on drilling logs, we note total depth in the sp	evice travel to bottor ell completion diagrams, or ace provided above.)	m of well? previous well		Y	N	N/A
Does l	bailer/pump trav	el freely to and fr	om bottom of well?		Y	N	N/A	
Upon			ow evidence of dam damage from foreig		Y	1 (N/A	
Does t	the bailer contain	n excessive amou	nts of silt or rust?		Y	N	N/A	
Does v	water appear disc	colored or have a	n unusual odor or ap	pearance?	Y	N	N/A	
Is the	lock on the well	cover/cap clean a	and fully functional?		Y	N	N/A	.
	ES AND ERVATIONS: <u>1</u>	o string, we	ight, or clip.	well dry	+			
							-	
								k

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Null - 28 Inspection Date Ull 19 Inspector LB
Measured Well Depth 74.14 Measuring Point TOL Depth to water 64.57
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? 8) N/A Y N N/A Y N N/A Y N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all earipment prevent

Site Name/ Location Chevron Fuller Project Number <u>B0047270.0007</u>
Well Identification MW - 29 Inspection Date vte / 11/14 Inspector LB
Measured Well Depth 18 42 Measuring Point 100 Depth to water 44 10
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all equipment present.

Site Name/ Location Chevron Fuller Project Number B0047270.0007			
Well Identification <u>Mw - 30</u> Inspection Date <u>w / 11 / 19</u> Inspector <u>US</u>			_
Measured Well Depth 13.45 Measuring Point TOC Depth to water_	<u>68.4</u>	4	_
VISUAL INSPECTION	^		
1) Is protective sleeve/cover in place and secure?	Y Y Y Y Y Y	N N N N N N N N N N N N N N N N N N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION	6		
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Y	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Y	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A)
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N (N	N/A	_
Does the bailer contain excessive amounts of silt or rust?	N	N/A	.)
Does water appear discolored or have an unusual odor or appearance?	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	N	N/A	
NOTES AND OBSERVATIONS: all equipment prevent.			

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification Mw-31 Inspection Date 10/11/19 Inspector US
Measured Well Depth 23,75 Measuring Point TOC Depth to water 20,21
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? N N/A N/A
5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? N N/A Y N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: all each prevent

Site Name/ Location Chevron Fuller Project Number B0047270.0007
Well Identification MW - 32 Inspection Date 1/11/19 Inspector LB
Measured Well Depth 97.95 Measuring Point TDC Depth to water 95.84
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure?
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: no orning weight, or clip. No hydrasteere

Site Name/ Location - Chevron Fuller Project NumberB0047270.0007	
Well Identification Www - \ Inspection Date \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Measured Well Depth 120.72 Measuring Point 100 Depth to water 49.44	
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N/A Y N N/A Y N N/A	
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	
Does bailer/pump travel freely to and from bottom of well? Y N N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N	
Does water appear discolored or have an unusual odor or appearance? Y N N/A	
Is the lock on the well cover/cap clean and fully functional? Y N N/A	
NOTES AND OBSERVATIONS: NO hydrauleure present	
	-

Site Name/ Location Chevron Fuller Project Number B0047270.0007	
Well Identification MW - W Inspection Date U1/19 Inspector US	
Measured Well Depth 47.31 Measuring Point TUL Depth to water 1.59	
VISUAL INSPECTION	
Is protective sleeve/cover in place and secure? Are hinges, latches, or locks functional and in good condition? Is concrete pad in satisfactory condition? Is well name or other identification marked clearly on or near the well? Is well cap in place and in good condition? Is measuring point marked or readily recognized? Does well opening/stickup show signs of damage or deterioration?	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION	
Ooes water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N/A
Ooes water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N/A
Ooes bailer/pump travel freely to and from bottom of well? Y N N/A)
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	ı
Ooes the bailer contain excessive amounts of silt or rust? Y N N/A)
Ooes water appear discolored or have an unusual odor or appearance? Y N/A	
s the lock on the well cover/cap clean and fully functional? Y N N/A	
OTES AND OBSERVATIONS: all equipment prevent.	

Site Name/ Location Chevron Fuller Project Number B0047270.0007	
Well Identification Rw - 1 Inspection Date w/11/19 Inspector LR	
Measured Well Depth Measuring Point ToC Depth to water to i. 4 to	
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N/A
Does bailer/pump travel freely to and from bottom of well? Y N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N N/A	
Does water appear discolored or have an unusual odor or appearance? Y N/A	L
Is the lock on the well cover/cap clean and fully functional? Y N N/A	L
NOTES AND OBSERVATIONS: primp in well, mable to gauge TD.	

Date:	ole 13 /19
Personnel:	LB JL
Total Depth:	81.76
Start Time:	8:12 am
	3

	Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	intervals)	recording)	(Fahrenheit or Celsius)
	W2	6,798	19.91
	84	0.794	19,93
	ulp	७.छ।+	19,92
	นอ	1.191	19.92
	70	1:561	19,91
	71	1.643	19.91
	74	1.6664	19,91
	76	1.10107	19.91
- 1	78	1.100+	19.91
- 1	80	1.467	19.91
\leq	81	800.1	19.91
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& denotes where hydrasteeve was set.

Site Name: GL EWIN	Date: 06/13/19	
Well Identification: mw - 7	Personnel: LB //L	
Static Water Level: 41,59	Total Depth: 71,80	
Stop Time: & III am	Start Time: 8 1 07 a.m	

	Depth (record in two foot	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	(record in two feet intervals)	recording)	(Fahrenheit or Celsius)
	lo 2.	1.474	19.41
	64	1.478	19.94
	ωφ	1,414	19.72
	UG	1,447	19.4)
- [10	1.971	14,71
- [70	2,108	19,71
	74	3. 661	19,72
X	710	3.958	19.72
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* denotes where nyavasteve was set.

Site Name: AL Envin	Date: 612/19
Well Identification: mw - 3	Personnel: LB JL
Static Water Level:	Total Depth: +3,05
Stop Time: 4:37 pm	Start Time: 4 · 34 pm

	Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
	.64	2,527	20.59
	le le	2,511	20.30
	u &	2.509	20.21
	70	3.095	Ze.18
K	72	U.183	20.14
^		W. 105	8 (19
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* denotes where my universe was vet.

Site Name: (1 L ENVIN	Date: 010 113 119
Well Identification: mw -4	Personnel: UB, JL
Static Water Level:	Total Depth: 73.08
Stop Time: 9155 wh	Start Time: 903 am

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
64	5, 10 11	20,42
७५	5. 407	20:42
UQ.	5. 242	20.42
10	8.54b	20,41
70	9,005	20,40
	-	

* aenotes where nyarusteure was vet.

Site Name: (1)	EVWIN	Date:	06/11/19
Well Identification:	mw-5	Personnel:	I B. J.L
Static Water Level:	\$9.53	Total Depth:	72.65
Stop Time: 🔠 🖳	130 pm	Start Time:	4:15 pm

	Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	intervals)	recording)	(Fahrenheit or Celsius
	UD	1.527	20.42
Į	Le 7	2.735	19.92
Į	6 4	3.718	14.85
ŀ	ره له	3.820	19.85
ļ	৬৪	3.365	19.86
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* denotes where hydrasteeve was set.

Site Name: (a) Evwin	Date: 04/12/19
Well Identification: mw-w	Personnel: LB JL
Static Water Level: 67.17	Total Depth: 74,74
Stop Time: 12:14 pm	Start Time: 12 110 pm

	Depth (record in two feet intervals)	Conductivity {Denote Us/cm or MS/cm for each recording}	Temperature (Fahrenheit or Celsius)
	to B We	1.922	20.62
	U8	1, 919	20.15
	70	1.925	20.09
	72	2.735	20.04
	74	5.736	20,06
*	76	5. 810	20.05
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* acnotes where hydraulieve was set.

Site Name: <u>AL Envir</u>	<u> </u>	Date:	06 112/19
Well Identification:	mw-7	Personnel:	LBIJL
Static Water Level:	44.75	Total Depth:	71.69
Stop Time: 4:25 pm		Start Time:	4 · 23 pm

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
ulp	1.193	20.32
៤ ៦	1.182	20.01
70	1.468	19.97

* denotes where hydrauleeve was vet.

Date:	06/12/14
Personnel:	LB,JL
Total Depth:	73.41
Start Time:	12:25 pm
	Personnel: Total Depth:

	Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
L	intervals)	recording)	(Fahrenheit or Celsius)
	Lefe	2.031	20.29
L	48	2:031	19.96
L	70	2.068	19.91
<u>-</u> L	72	3.256	19.90
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* alendes where hydrastelle was set,

Site Name:	CIL Erwin	Date:	06/12/19
Well Identificati	on: Mw -9	Personnel:	LB, JL
Static Water Lev	el: 42.87	Total Depth:	we. 44
Stop Time:	9:38 cm	Start Time:	9:36 am

	Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
	L	1.551	19.81
ı	ψb	1.548	19.76
	ഗ 8	1.555	19.79
*-	70	1.557	19.79
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* denotes where marasters was set.

Site Name: 6L En	wîn	Date:	66 112 119
Well Identification:	mw-10	Personnel:	LBIJL
Static Water Level:	69.83	Total Depth:	72,04
Stop Time: 10 167	an	Start Time:	10:05 cm

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet intervals)	recording)	(Fahrenheit or Celsius)
70	8.174	20.14
72	8.390	20:11
*no hydraulteve		
deployed.		

Site Name: AL En	NIN	Date:	04/12/14
Well Identification:	mw-11	Personnel:	LBNL
Static Water Level:	74.85	Total Depth:	75.59
Stop Time:	***	Start Time:	

(record in two feet intervals) **NO CONCLULT IVI by Profile clue to insuff cient water. Conclusion of the clue to insuff cient water. Conclusion of the clue to insuff c	Depth	Conductivity	Temperature
intervals) recording) (Fahrenheit or Celsius		Conductivity (Denote Us/cm or MS/cm for each	ı
**NO Cenductivity profile due to invatt cient water.	intervals)		
	*no conductivi	my profile due to insult	Uent water.
		1.5	

Site Name: GLENWIN	Date: Ole 112/19
Well Identification: พพ-าน	Personnel: LB. IL
Static Water Level:	Total Depth: 11,58
Stop Time: L: L+ pm	Start Time: 1 2050m

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius
72	5.541	20141
74	5.558	20.33
740	5,559	20.28

* denotes where hydrasteeve was vet

Site Name: CLEM	NA CONTRACTOR OF THE PROPERTY	Date: 04 112/19	
Well Identification:	MW -13	Personnel: LR JL	_
Static Water Level:	66.70	Total Depth: 70.29	_
Stop Time: 412 pr	η	Start Time: 4 : 10 pm	
			$\overline{}$

	Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	(record in two feet	(Denote Os/cill of Mis/cill for each	(Fahrenheit or Celsius)
	intervals)	recording)	
*	P8	2,924	20:11
	70	2.911	19,68
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Site Name: <u>AL Erwin</u>	Date: 64/12/19
Well Identification: mw - 14	Personnel: LB JL
Static Water Level: 71.75	Total Depth: 90.02
Stop Time: 2 ა ყა pm	Start Time: 2:40 pm
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	Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	intervals)	recording)	(Fahrenheit or Celsius)
	10	U; 10	21.12
	72	24.61	20.39
	74	210,94	20:22
	740	27.03	20.18
	18	27.05	20,14
	80	27.06	20116
	81	27.06	20.16
	84	27.67	10.15
*	Elp	27.06	20.15
	ଷ ୍	27.07	20.14
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* denotes where hydrasteeve was vet.

Date: DLQ [12 / 14
Personnel: LB JL
Total Depth: 210
Start Time: TSG PM

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius
81	2.197	20.54
વા	2.188	20.34
64	2.187	20,20
86	2.195	20.15

* denter where mydraviter was set.

Site Name:	nuin	Date:	Ule 112/14
Well Identification:	mw-16	Personnel:	LB IJL
Static Water Level:	W2.05	Total Depth:	74.41
Stop Time: 12:53	pm	Start Time:	17:54 pm

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius
ue	1.335	26.74
70	1 , 3 66	20.82
71	1.499	20.29
74	2.924	20.20

* acroses where injurasticere was set.

Site Name: (1)	noin	Date:	ce/12/19
Well Identification:	mw - 17	Personnel:	LBIJL
Static Water Level:	ناه اله	Total Depth:	41.03
Stop Time:	pm	Start Time:	2 -, 23 pm

	Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
Ì	76	1.412	20.63
	72	8वार्थः ।	20.46
	74	2.115	20.32
-	76	2.136	20.27
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* denotes where hydrasteers was set

Site Name:	Mich	Date:	ble 112/19
Well Identification:	MM-18	Personnel:	LB IJL
Static Water Level:	76.45	Total Depth:	79,47
Stop Time:		Start Time:	

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet intervals)	recording)	(Fahrenheit or Celsius)
no string, invutt	vient water to conduct	well
conductivity pro	tient water to conduct	

Site Name: GL Envin	Date: 64 112 /19
Well Identification: mw - 14	Personnel: LB JL
Static Water Level: 73.06	Total Depth: 164,66
Stop Time: 3:01 pm	Start Time: 2:53 pm

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius
intervals)		
74	4.165	20.90
He	7.640	20.84
78	8.354	20.29
80	8.776	20.26
62	8.866	20.25
84	8.929	20,25
84	8.950	20.24
88	8.953	20.23
90	2.948	20:23
qL	8.943	20.23
94	8,940	20.22
qu	8.942	20.22
98	6.942	20.22
100	9.945	20.21
102	8.946	20.11
104	7.456	20.21

* denote unete nydravleeve was vet.

Date: 06/12/14
Personnel: LB,JL
Total Depth: ৪৮, ৪৭
Start Time: 1:43 pm

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsiu
82	3.724	20.34
6 4	3.720	20.14
QU	3.724	20.10
ଫ୍ର	3.175	20.09

* clenotes where hydrastieve was set.

Site Name: GLEN	ûn	Date:	المان	113/19	
Well Identification:	20.24 mw-21	Personnel:	UB	,JL	
Static Water Level:	52-2 20	Total Denth:	Clin	. 20	

Stop Time: 3:10 pm Start Time: 3:15 pm

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature (Fahrenheit or Celsius
intervals)	recording)	(1 dill citifete et ecicias
72	1,364	20.70
74	1 - 354	20,48
76	1.398	20,44
79	1.423	20.42
20	1,430	20.42
91	1,434	20.41
24	1,437	20.41
ଓ ଓ	1.439	20,40

* denotes where nyaranteeve was vet.

Site Name: (1L È	rwin	Date:	06/12/19
Well Identification:	mw-12	Personnel:	LB, JL
Static Water Level:	43.40	Total Depth:	47.93

Stop Time: 09:38 am B 9:210am Start Time: 9:310 am B 9:21am

	Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	(record in two feet intervals)	recording)	(Fahrenheit or Celsius)
	بولع	8. +39	20.12
*	U8	8.864	26.11
	70	8.706	26.15
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* acrites where nydraslewe was set.

Date: 04/12/19
Personnel: LB, JL
Total Depth: 101,35
Start Time: 12:12 pm

1	Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
	intervals)	recording)	(Fahrenheit or Celsius
ſ	90	1.447	20.84
	92	1.439	20.38
ľ	94	1.431	26.25
	96	1.429	20.23
	98	1.429	20,22
	100	1.438	26.21
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*denotes where nydravluse was set.

Date:	04/12/19
Personnel:	LBNL
Total Depth:	62.74
Start Time:	3 - 3 46 pm

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius
50	5.222	20.43
52	5.193	20111
54	5,193	19.98
5 Lp	5.193	19.44
Sø	5.193	19.93
لعا	5.194	19.42
62	5,194	19.91

* denotes where hydravleave was vet.

Site Name: (1 L Ex	win	Date:	ole 112/14
Well Identification:	MW-25	Personnel:	LB, JL
Static Water Level:	१६. ५०	Total Depth:	95,50
Stop Time: 11 29	am	Start Time:	11:27 am

	Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
ı	78	7.204	20.37
*	60	7.192	20.30
1	82	7,167	20:29
- 1	84	7.187	20.29
1	860	7.188	20.28
Ī	ଚତ	7.189	20.28
- 1	90	7.187	20.28
Ī	92	7.180	26.28
	94	1,077	20. 28
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* clenotes where hydrasteeve was set,

Site Name: (1L Evu	in	Date:	06/12/14
Well Identification:	mw - 26	Personnel:	LB,JL
Static Water Level:	64.22	Total Depth:	45,75
Stop Time: 9: ধ 😘 🕬	1	Start Time:	9:08 am

	Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
L	intervals)		
4	lele	3.060	20, 24
L	108	3.052	26.28
L	70	3.044	20.28
L	72	3.041	26.28
L	74	3.018	20.27
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* denotes where hydraubleure was vet.

Site Name: GL En	ม์ได	Date:	04 112 / 14
Well Identification:	mw - 27	Personnel:	LB, NL
Static Water Level:	-well dry.	Total Depth:	48.57
Stop Time:		Start Time:	

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet intervals)	recording)	(Fahrenheit or Celsius)
intervals	3,	

Date: 06/12/19
Personnel: LB JL
Total Depth: 44,14
Start Time: 8:47 am

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius
le le	10.87	20.23
V8	13.40	20.21
7 0	14.00	20.20
71	14.48	20.19
74	15.63	20.19

* achder where hydrastelle was set.

Site Name: GL Erwin	Date: 010 112 119
Well Identification: mw 29	Personnel: The same of the sam
Static Water Level: Leu 10	Total Depth: 18.62
Stop Time: LI 163 pm	Start Time: 4 150 pm

(Denote Us/cm or MS/cm for each recording)	(Fahrenheit or Celsius
	20.40
7,448	
 	20.29
7.462	20.25
8.747	20,22
9,546	20:21
9,440	20.21
	8. 447 9.540

* denotes where mydrasteeve was oct.

Site Name: AL Erwi	\cap	Date:	01/2/14
Well Identification:	mw -30	Personnel:	LR IJL
Static Water Level:	U8,44	Total Depth:	73.95
Stop Time: 3!Sa pm		Start Time:	3:54 pm

	Depth (record in two feet	Conductivity {Denote Us/cm or MS/cm for each	Temperature
	intervals)	recording)	(Fahrenheit or Celsius)
	100	15.56	20.36
	70	21.45	19.88
	72	39.31	19.82
*	711	46.13	19.20
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Site Name: GL E	พโท	Date:	112119
Well Identification:	MW - 31	Personnel:	B, JL
Static Water Level:	80.21	Total Depth:	2,60
Stop Time: <u>10 : ೮೮</u>	am	Start Time: 15	254 am
			

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature (Fahrenheit or Celsius)
intervals)	recording)	
- ୧୦	2.048	20.58
81	2,048	20.52
* Myaravieure set	at 82', unvure it it'll be	enalyn
welter to sumple		

Site Name: AL Enuir	\	Date:	04/12/19
Well Identification:	mw-32	Personnel:	LB ,JL
Static Water Level:	छज. १५	Total Depth:	21.95
Stop Time: 12:30 pm		Start Time:	12:28 pm

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet		(Fahrenheit or Celsius)
intervals)	recording)	(Farirefinition of colorus)
र्धक	4,656	20.44
an he attrict seem t	1 N N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1	
NO MIGHANGEEVE AL	eployed the to missing e	quipment.

Site Name: (i L En	nia	Date:	ble 1 18/19
Well Identification:	- ww - 1	Personnel:	LB, JL
Static Water Level:	Lalla	Total Depth:	180,72
Stop Time: 71340	<u>um</u>	Start Time:	7:35 cum

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
70	1.406	19.78
91	1.39‡	19.78
14	1.396	19.12
TLP	1,396	19.78
72	1.394	19.78
90	1.396	19.78
ઉર	1:396	19.79
24	1.396	19.79
2 to	1,397	19.20
69	1:397	19.81
96	1,397	19.81
92	1.397	19.82
94	1.396	19.82
α φ	1,397	19.83
96	1.397	19.24
100	1.398	19.65
102	1,398	19.86
104	1,398	19.66
lolp	1.348	19.27
108	1,396	19.88
110	1,398	19.88
112	1.399	19,69
114	1.399	19.90
114	1.349	19.90
118	1.399	19.91
120	1.399	19,92
122	1.394	19.93
124	1.794	19.44
124	1,400	19.95
128	1.4100	19.45
130	1.400	14.46
132	1,400	19,97
134	[40]	19.98
134	1.401	19,99
138	1,401	20,00

Site Name:	rein	Date:	010/13/19
Well Identification:	ww -1 continued.	Personnel:	UR JUL
Static Water Level:	69,69	Total Depth:	180172
Stop Time:		Start Time:	

Depth (record in two feet		Temperature (Fahrenheit or Celsius
intervals)	recording)	
140	1,40	20,00
142	1.401	20101
144	1.401	20:02
146	1,401	20:02
148	1,400	20:03
150	LCHUD	20.04
102	1.400	20.04
154	1,4DD	20.05
156	(400	20,06
156	1:400	20:06
ILED	(,400	20.07
162	1,400	20.08
164	1,400	20.09
TUL	1.40	20.09
142	1.40	20.09
110	1.400	20.10
172	1.40	20.10
114	1,410	20:11
176	1,410	20:11
1+8	(,4W	20.12
190	1 - 343	20:12
£no hydravle	eve cleptorica	

Site Name: (1)	EMIN	Date:	010/12/19
Well Identification:	w-mw	Personnel:	LB, JL
Static Water Level:	101.59	Total Depth:	47.31
Stop Time: 955	4 am	Start Time:	9:50 am

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
62	0.515	20,44
W4	1.101	20.41
ulo	1.104	20.34
u7	1, 119	20.33

* clenotes where nydrasteeve was set.

Date: 01 113 114	
Personnel: LB, JL	
Total Depth: 👈 ເປເທ	
Start Time: 9:37 am	
	Personnel: LB, JL Total Depth: To . 46

	Depth (record in two feet intervals)	Conductivity (Denote Us/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius)
	to t	3,408	20.29
	124	3.420	20.32
	تعاق	3.511	20.32
	u6	4,469	20.32
	40	9.596	20.38
ì			
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The same of			
			1000

* amoter where my was vet.

Project:	$\overline{C} \times V$	tes Trun	when	_		Project No.			Page	1	of <u>1</u>
Site Location:	GLEN	win							Date	06/	19/10
Site/Well No.	MW-	1		_		Replicate No.			Code No.		
Weather:	Hot is	unny		. .		Sampling Time:	Begin	13:04	Enc	13:6	14
Evacuation Da	nta						Field Paramete			.0	
Sounded Well	Depth (ft bmp)	81.7L	2			-01	Color	Mut	light "	rall	
Depth to Water	r (ft bmp)	61.54					Odor				
Gallons Pumpe Prior to Sampli	ed/Bailed ng	Funn	yelvau	leeve			Appearance	cloud	<u>u</u>		
Sample Pump Depth (ft bmp)	Intake						*IRON, ferrous *SULFIDES	MA			
Sample Pump		1	MIA				Data Frame				
Purge Time	poly	Begin		End			Remarks				
Pumping Rate	(gpm)						Sampling Perso	nnol	IL [LB		
Evacuation Me	thod	Hydrac	TLEVE				Sampling Ferso	10161	1- 1-		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND (Turbidity (NTU)			
13:04			1,75	193,4	7,25	23.02	1,563				
Constituents	Sampled		Cont	ainer Descrip	otion		Number		Prese	rvative	
				1				standard units			
bmp °C ft	below measuring degrees Celsius feet			mS	militier milisiemens p microsiemens		s.u. mv NTU	milivolts Nephelometric Tu			
ml/min mg/L	milliters per minu miligrams per lite				not applicable not recorded	ı	umhos/cm VOC	Micromhos per co Volatile Organic (

ARCADIS		
Micropurge	Sampling	Log

Project:	CVX 1760 Transfer					Project No.			Page 1	of 1	
Site Location:	CILE	win				Replicate No.			Date <u>UL 19 19</u> Code No.		
Site/Well No.	mw-	ι		_							
Weather:	1-101	Junny		-		Sampling Time:	Begin	12153 pm	End_	12:53 PW	
Evacuation D	Data						Field Paramet	ers		-	
Sounded Well	Depth (ft bmp)	71.80	>			_	Color	tan			
Depth to Water	er (ft bmp)	61.59				_	Odor				
Gallons Pump Prior to Sampl		FUUN	yavus	Tieve		_	Appearance	Chrida			
Sample Pump Depth (ft bmp)		1	ALM			5.	*IRON, ferrous *SULFIDES	s MIA			
	Sample Pump controller Settings (cpm/psi)					·	Data Frame				
Purge Time		Begin		End		_	Remarks				
Pumping Rate	(gpm)					_		r. 1	110		
Evacuation Me	ethod	Hydras	LLEYC			-	Sampling Perso	onnel <u>1</u>	- ILB		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity (NTU)			
12.53pm		_	1.36	201.2	Fillo	23,59	2.512				
			_								
	-										
Constituents	s Sampled		Cont	ainer Descrip	otion		Number		Preserva	tive	
						· · ·					
						5 5 8					
						e 8					
		e (e				6 5 D g		=			
t	below measuring degrees Celsius feet milliliters per minu			mS/cm mS	mililiter milisiemens pr microsiemens	er centimeter	s.u. mv NTU	standard units milivolts Nephelometric Turbidi			
	miligrams per lite				not applicable not recorded		umhos/cm VOC	Micromhos per centim Volatile Organic Comp			

Project:	CUX	HEU Tru	unster	_		Project No.			Page 1 of 1
Site Location:	GLEV	wm							Date 04/19/19
Site/Well No.	mw-	3			Replicate No.		···	Code No.	
Weather:	Mut 15	hany		_		Sampling Time	: Begin	12:41 pm	
Evacuation Da	ata						Field Parame	eters	
Sounded Well I	Depth (ft bmp)	73,0	5			_	Color	Clear	tun
Depth to Water	r (ft bmp)	64.2	<u>io</u>			-	Odor		
Gallons Pumpe Prior to Samplii		Fullt	lycira	Steen	C		Appearance	church	1
Sample Pump i Depth (ft bmp)	Intake	Fun F	NIA			-	*IRON, ferror	us NIA-	,
Sample Pump of	controller					5	Data Frame	-	
Settings (cpm/p	osi)					-	Remarks		
Purge Time		Begin		End		-	Remarks		
Pumping Rate (-	Sampling Pers	annal	ILILB
Evacuation Met	hod	Hydrau	veeve			2	Sampling reis	Office	J L L S
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity) (NTU)	
12141pm			1.61	194.1	1.56	23.17	2.442	(11,0)	
Constituents 5	Sampled		Cont	alner Descrip	otion		Number		Preservative
		9							
		9						_	
		9						_	
						a			
		:: :-				3		: =	
	elow measuring p	point	ľ	ni i	mililiter		s.u.	standard units	
C de	egrees Celsius et			mS/cm i	milisiemens per microsiemens	centimeter	mv NTU	milivolts Nephelometric Turbid	isha d kmisha.
	ililiters per minute iligrams per liter	•	1	N/A I	not applicable		umhos/cm	Micromhos per centin	neter
- ""	Comme per mon		ŗ	***	not recorded		voc	Volatile Organic Com	pounds

ARCADIS		
Micropurge	Sampling	Log

Project:	CVX	HEU Tru	rutur	_		Project No.			Page_1	of <u>1</u>	
Site Location:	aL É	Muin							Date	06/19/19	
Site/Well No.	mw-	4		_		Replicate No.			Code No.		
Weather:	HUT, VI	unny				Sampling Time:	Begin	13:20	End	13:20	
Evacuation D	ata						Field Paramet	ers			
Sounded Well	Depth (ft bmp)	73.0	9			_	Color	tun			
Depth to Wate	er (ft bmp)	63.10				-	Odor				
Gallons Pumpe Prior to Sampl		Full hu	drast	eeve			Appearance	claure	-5:		
Sample Pump Depth (ft bmp)						2	*IRON, ferrous		A'		
Sample Pump Settings (cpm/			MA				Data Frame		I.		
Purge Time		Begin		End			Remarks				
Pumping Rate	(gpm)								11 110		
Evacuation Me	ethod	Hydrus	lieve				Sampling Perso	nnel	JLILB		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND (Turbidity (NTU)			
13:20			1.17	225.3	6.78	23,02	7.201				
Constituents	s Sampled		Cont	tainer Descrip	otion		Number		Preserva	rtive	
								_			
								_			
		: : : : : : : : : : : : : : : : : : :									
bmp °C ft ml/min	below measuring degrees Celsius feet militiers per minu	ite		mS/cm mS N/A	milliter millisiemens pe microsiemens not applicable	r centimeter	s.u. mv NTU umhos/cm	standard units milivolts Nephelometric Tur Micromhos per cei	ntimeter		
mg/L	miligrams per liter	ı		NR	not recorded		VOC	Volatile Organic C	compounds		

Project:	CVX	HEU TVI	unuter			Project No.			Page	1 of 1
Site Location:	OLE	Min							Date	04/19/19
Site/Well No.	mw-5					Replicate No.				
Weather:	Hot 5	unny		-		Sampling Time:	Begin	12:47 pm	1 End	12:47 pm
Evacuation D	ata						Field Parame	ters		
Sounded Well	Depth (ft bmp)	71.0	ς				Color	nut		
Depth to Water (ft bmp) Gallons Pumped/Bailed Prior to Sampling						-	Odor			
			Mctran	slerve		-	Appearance	chudy		
Sample Pump Depth (ft bmp)			4/14				*IRON, ferrou	IS MA		
Sample Pump Settings (cpm/							Data Frame	× ×		
Purge Time		Begin		End		-	Remarks			
Pumping Rate	(gpm)					_	:	V	V. 1. 0	
Evacuation Me	thod	Hydra	vecve			-	Sampling Person	onnel	JL JLB	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity (NTU)		
11247pm			1.35	204.2	726	23,00	2.043			
Constituents	Sampled		Conta	ainer Descrip	otion		Number		Preserva	itive
		,								
								=		
		-				0.0				
		-				1 19 1 18		=		
	below measuring	point		ml	mililiter		8.U.	standard units		
	degrees Celsius eet			mS/cm	milisiemens pe microsiemens	er centimeter	mv NTU	milivolts Nephelometric Turbi	idity Units	
	mililiters per minut miligrams per liter		1	N/A	not applicable		umhos/cm VOC	Micromhos per centi Volatile Organic Cor	imeter	
			•		10001404			Oranie Organic Cor	npounds	

Project:	LVX	FIEU Tro	ing ter	_		Project No.			Page 1 of 1
Site Location									Date 04 /19/1
Site/Well No.	nw-L)			Replicate No.			Code No	
Weather:	Hotic	sunny		_		Sampling Time	: Begin	12:36 pm	End 12:3600
Evacuation I	Data						Field Parame	ters	
Sounded Wel	ll Depth (ft bmp)	76.7	9			_	Color	CLECY	
Depth to Wat	ter (ft bmp)	LP.17	<u> </u>			-	Odor		
Gallons Pump Prior to Samp		Full H	MULLAN	Leve			Appearance	-	er.
Sample Pump						-	*IRON, ferrou	is M/k	gazire
Depth (ft bmp		-	MA				*SULFIDES	-	
Sample Pump Settings (cpm						-	Data Frame	-	
Purge Time		Begin		End		_	Remarks		
Pumping Rate	(gpm)					-3			
Evacuation Me	ethod	Hydra	Sluve			-	Sampling Person	onnel	IL /LB
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)	
12:36pm	\	-	1.46	183 , 1	7,67	23,43	1.820		
	ļ								
	-								
Constituents	s Sampled		Cont	ainer Descri	ation		Nombre		
				amer Descri	Puon		Number		Preservative
								=	
		: 94 1						=	
		a a						-	
								_	
								=	
	below measuring g	point		ml mS/cm	mililiter milisiemens pe		S.U.	standard units	
	feet milititers per minut	e	:	mS N/A	microsiemens		MV NTU	millvotts Nephelometric Turb	
	miligrams per liter	-		NR	not applicable not recorded		umhos/cm VOC	Micromhos per cent Volatile Organic Con	

Project:	CVX	HEU Tru	nuter	_		Project No.			Page 1 of 1
Site Location:	al en	vin							Date 66/19/19
Site/Well No.	mw = '	7				Replicate No.			Code No.
Weather:	rum	Muy				Sampling Time:	Begin	12:12 m	End 12:12 pm
Evacuation D	ata						Field Parame	ters	
Sounded Well	Depth (ft bmp)	21,14	4			- -	Color	tan	
Depth to Wate	er (ft bmp)	_ W. 75				-	Odor	H	
Gallons Pumpe Prior to Sampli		Full H	yciras	Iture		_	Appearance	Cludy	
Sample Pump Depth (ft bmp)			ALK			<u>-</u> :	*IRON, ferrou	a VIA	
Sample Pump Settings (cpm/			1			-	Data Frame		
Purge Time		Begin		End		_	Remarks		
Pumping Rate						5 8			JL/LB
Evacuation Med	thod	Hydrau	leeve			21	Sampling Person	onner	IL LID
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)	
12:12 pm			1.75	173.0	7.52	22.76	10131		
							1		
Constituents	Sampled		Cont	ainer Descrip	tion		Number		Preservative
		,				2 · 2			
								=	
								5 19 	
		79							
		6.5				8 9		=	
C (below measuring degrees Celsius feet			mS/cm mS	mililiter milisiemens pe microsiemens	r centimeter	s.u. mv NTU	standard units milivolts Nephelometric Turbid	
	mililiters per minut miligrams per liter				not applicable not recorded		umhos/cm VOC	Micromhos per centin Volatile Organic Com	

		HEU Tra	inu tev	-		Project No.			Page 1 of _1	
Site Location:	_(1 L EV	rein							Date <u>CU / 19 /</u>	
Site/Well No.	MW-9	පි		_		Replicate No.			Code No.	
Weather:	Hut , S	unny		_		Sampling Time:	Segin	12:21 pm		
Evacuation D	ata						Field Parame	ters		
Sounded Well	Depth (ft bmp)	_ 73.4	1			_	Color	light	tan	
Depth to Wate	r (ft bmp)	67.71					Odor			
Gallons Pumpo Prior to Sampl		Full hi	acivast	eeve			Appearance	Clara	1	
Sample Pump Depth (ft bmp)			MA				*IRON, ferrou	s_N/P		
Sample Pump Settings (cpm/			1.00			eri	Data Frame			
Purge Time		Begin		End			Remarks			_
rumping Rate (gpm) vacuation Method HUCKU		-					0		JL/LB	
Evacuation Me	Time Water Level Volume Purger						Sampling Person	onnei	00 1013	_
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)		
12:21 pm	-		1,44	189.2	7.52	22.86	1.924			
			7							
										_
Constituents	Sampled		Cont	ainer Descri	ption ————		Number		Preservative	
								- :		_
								-		_
T)		a 19 a 04						9 99 - 18		_
		i ::						=		_
										_
C	below measuring degrees Celsius	point		mi mS/cm	mililiter milisiemens per		s.u. mv	standard units milivolts		_
l/min	feet mililiters per minul			mS N/A	microsiemens not applicable		NTU umhos/cm	Nephelometric Tu Micromhos per co	•	
ng/L	miligrams per liter	•		NR	not recorded		VOC	Volatile Organic (Compounds	

Project:		HEU TVI	unter	_		Project No.			- Pa	ge 1 of 1	
Site Location:	CLE	min							_ Da	te_06 19/	19
Site/Well No.	mw-4	9		_		Replicate No.		gen.	Code N	lo	_
Weather:	Junne	INOT		-		Sampling Time:	Begin	9:32 a	w E	nd 8-32 a	<u>-M</u>
Evacuation D	ata						Field Parame	ters			- 0
Sounded Well	Depth (ft bmp)	७४,५५				=	Color	VUVT			_
Depth to Wate	er (ft bmp)	62,87				_	Odor	,			
Gallons Pumpi Prior to Sampl		Full H	Marin	sleeve		_	Appearance			liment @	botten
Sample Pump Depth (ft bmp)			1:0				*IRON, ferrou	as ALIA			8
Sample Pump Settings (cpm/			MIN				Data Frame				-
Purge Time		Begin		End		_	Remarks	-			-
Pumping Rate	(gpm)					-9	1	, v		^	
Evacuation Me	thod	Hyura	كالويون			- -/-	Sampling Person	onnel	JL/L	.13	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity (NTU)			1
8 32 am			1.45	125.9	7.64	20.95	1.567				
Constituents	Sampled		Conta	iner Descrij	ption		Number		Prese	rvative	
								ос ос 5 п 4 —			
		5.5									
								- 1			
°C (below measuring degrees Celsius	point	n	nS/cm	mililiter milisiemens pe	r centimeter	s.u. mv	standard units milivolts			
nl/min (feet milliliters per minut miliorame per liter		1	₩A	microsiemens not applicable		NTU umhos/cm	Nephelometric Tui Micromhos per ce	ntimeter		
ng/L ı	miligrams per liter		1	iR	not recorded		VOC	Volatile Organic C	ompounds		

Project:		HEU True	wher	-		Project No.			Page	1 of 1
Site Location:	-CIL	Erwin							Date	De/19/19
Site/Well No.	mw - 10	0		_		Replicate No.			Code No.	
Weather:	Junn	LIMOT		-		Sampling Time:	Begin	4 52 am	End	8:02 cm
Evacuation D)ata						Field Parame	ters		
Sounded Well	Depth (ft bmp)	72.06				_	Color	NA		
Depth to Wate	er (ft bmp)	Le 9.83				_	Odor			
Gallons Pump Prior to Sampi		MA					Appearance	_		
Sample Pump Depth (ft bmp)						_	*IRON, ferrou	JSS		
Sample Pump Settings (cpm/						-	Data Frame			
Purge Time		Begin		End		-	Remarks	$\overline{}$		
Pumping Rate	(gpm)					- ;			1 11 0	
Evacuation Me	thod	Hydras	leeve			S	Sampling Pers	onnel <u>J</u>	LILB	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)		
2:STOW	-									
No Ju	mple	collected	, thus	PHILL	y was	winw	ell			
Constituents	Sampled		Conta	ainer Descri	ption		Number		Preserv	ative
								_		
						9		_		
						: 3 : 8				
		-								
) (-						_		
C i	below measuring degrees Celsius feet miliiters per minu		r	nl nS/cm nS	mililiter milisiemens pe microsiemens not applicable	rcentimeter	s.u. mv NTU umhos/cm	standard units milivolts Nephelometric Turbid Micromhos per centin		
	miligrams per lite			IR.	not recorded		VOC	Volatile Organic Com		

Project:		teu trw	wher	-		Project No.			Page 1 of 1
Site Location:	CHL E	nuin							Date 66/19/10
Site/Well No.	Mm - 11			_		Replicate No.			Code No.
Weather:	HUT, 51	inny		-		Sampling Time:	Begin	8:58	End
Evacuation Da	ata						Field Parame	ters	
Sounded Well I	Depth (ft bmp)	75,50	1			-	Color	NIA	<u> </u>
Depth to Water	r (ft bmp)	74.85				-	Odor		
Gallons Pumpe Prior to Samplin		MIA				_	Appearance	_	
Sample Pump I Depth (ft bmp)	Intake					_	*IRON, ferrou	ıs	
Sample Pump of Settings (cpm/p						•	Data Frame	1	
Purge Time		Begin		End		_	Remarks		
Pumping Rate ((gpm)								11 110
Evacuation Met	hod					,	Sampling Pers	onnel	JLILB
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)	
_				,,,,,				(1410)	
NO 54	imple	Colletter	Linsu	tticio	nt wa	ter			
Constituents	Sampled		Conta	iner Descrip	otion		Number	_	Preservative
								_ 0	
						9		-	
		10 -				9			
		-						-0. 0	
		3							
°C d t fe mVmin n	pelow measuring plegrees Celsius eet nililiters per minut niligrams per liter		n N	nS/cm nS I/A	milliter milisiemens pe microsiemens not applicable not recorded	r centimeter	s.u. mv NTU umhos/cm vOC	standard units milivolts Nephelometric T Micromhos per c Volatile Organic	entimeter

Project:	CVX	HES Tru	nster	_		Project No.			Page 1 of 1
Site Location	: OLE	ruip							Date <u>314 14 14 14 14 14 14 14 </u>
Site/Well No.	mw-	12		_		Replicate No.		m	Code No.
Weather:	Juny	not				Sampling Time:	: Begin	10:09 eu	M End 10:09 au
Evacuation [Data						Field Paramet	ers	
Sounded Wel	I Depth (ft bmp)	17.5	8			_	Color	tun I v	นงา
Depth to Wate	er (ft bmp)	72.61					Odor	MULLE	1 Cloudy
Gallons Pump Prior to Samp		Fullh	yelvau	reive			Appearance		,
Sample Pump Depth (ft bmp			101/10			_	*IRON, ferrou *SULFIDES	s MIA	
Sample Pump Settings (cpm			CA				Data Frame		
Purge Time		Begin		End		-	Remarks		
Pumping Rate	(gpm)		- 3			-	Sampling Perso	nnel	JL/LB
Evacuation Me		Hydrad	steve			-			
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND ()	Turbidity (NTU)	
10:09an	1		1.40	194.7	6.74	23.10	5.102		
Constituent	s Sampled		Cont	ainer Descrip	otion		Number		Preservative
								=	
		1/2							
-								_	
		1 13 14 1 14					-	=	
bmp °C ft mt/min	below measuring degrees Celsius feet militiers per minu	ite		mS/cm mS N/A	mililiter milisiemens pe microsiemens not applicable		NTU umhos/cm	standard units milivolts Nephelometric Tur Micromhos per cer	ntimeter
mg/L	miligrams per liter	i		NR	not recorded		voc	Volatile Organic Co	ompounds

Project:	(VXI	160 Trun	Vitur			Project No.	Page	1 of 1			
Site Location:	CILEN	win					Date OLC				
Site/Well No.	mw-	13		_		Replicate No.					
Weather:	Hut, SI	MANY				Sampling Time:	Begin	12:05 pm	End	12:05 pw	
Evacuation D	ata						Field Paramet	ers			
Sounded Well	Depth (ft bmp)	76,30	<u> </u>				Color	tun/ m	UT		
Depth to Water	r (ft bmp)	Ub. 70				_	Odor				
Gallons Pumpe Prior to Sampli		Hulf	yara	Tewe	1 FLUR	11	Appearance				
Sample Pump Depth (ft bmp)			NIA			-	*IRON, ferrous	s MIA			
Sample Pump Settings (cpm/			12 (1)			-0	Data Frame				
Purge Time		Begin		End		_	Remarks				
Pumping Rate	(gpm)								() ()	2	
Evacuation Me	vacuation Method Time Water Level Volume Purgeo					-	Sampling Perso	onnel	IL/LI	5	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity (NTU)			
12:05 pm	_		1.08	1710.3	7.10	24.12	2.879				
Constituents	Sampled		Cont	ainer Descri	ption		Number		Preserv	/ative	
								_			
								-			
								_			
	holou manana	a a sint		#-I	1995						
rc o	below measuring degrees Celsius	point		ml mS/cm	miliiter milisiemens pe	er centimeter	s.u. mv	standard units milivolts			
ml/min				mS N/A	microsiemens not applicable		NTU umhos/cm	Nephelometric Turbid Micromhos per centin	-		
ml/min mililiters per minute mg/L miligrams per liter				NR	not recorded		VOC	Volatile Organic Com			

Project:	CVX	HEU Tru	notes	_		Project No.			Page 1 of 1
Site Location:	GL EN	win				Replicate No. Code No.			
Site/Well No.	MW-11	Ч				Replicate No.			Code No.
Weather:	Hutiu	unny		-		Sampling Time:	Begin	11:Mam	End 11:32 am
Evacuation Da	ata						Field Paramet	ers	
Sounded Well	Depth (ft bmp)	90.02				3	Color	mary /	twn
Depth to Water	r (ft bmp)	71,75				-	Odor		
Gallons Pumpe Prior to Sampli		Fun H	yelrw	1-teve		 	Appearance	cloudy	
Sample Pump Depth (ft bmp)			NIF			23 40	*IRON, ferrou	s NA	
Sample Pump Settings (cpm/)			1.11	1		•5	Data Frame		
Purge Time		Begin		End			Remarks	1/	
Pumping Rate	(gpm)								LILB
vacuation Method <u>HULLVUI</u> Time Water Level Volume Purgeo			LEVE				Sampling Perso	onnel <u>d</u>	C 1 L15
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)	
11-32			1.09	213,0	6,50	21.10	25.42		
Constituents	Sampled		Cont	ainer Descriț	otion		Number		Preservative
							7	-	
								_	

°C t	below measuring degrees Celsius feet				mililiter milisiemens pe microsiemens	er centimeter	s.u. mv NTU	standard units milivolts Nephelometric Turbi	
	mililiters per minu miligrams per lite			N/A NR	not applicable not recorded		umhos/cm VOC	Micromhos per centi Volatile Organic Con	

Project:	CUX	HES Trur	wter	=3		Project No.			Page	1 of 1
Site Location:	GIL E	Min							Date	06/19/19
Site/Well No.	mw-1	5				Replicate No.			Code No.	
Weather:	Hot ist	unny		- g		Sampling Time:	Begin	10:01 cm	End	10:02 cm
Evacuation Da	ata						Field Paramet	ers		
Sounded Well I	Depth (ft bmp)	87.36					Color	tan		
Depth to Water	(ft bmp)	20.17				_	Odor			
Gallons Pumpe Prior to Sampli	ed/Bailed ng	Fun M	Javas	leeve		5	Appearance	cland		
Sample Pump Depth (ft bmp)	Intake		11111			•	*IRON, ferrous	THE THE		
Sample Pump of Settings (cpm/p			MIM				Data Frame			
Purge Time		Begin		End		_	Remarks	$\overline{\mathbf{A}}$		
Pumping Rate ((gpm)					5	01		L, LB	
Evacuation Met	thod	Hydrullu ture				Đ;	Sampling Perso	onnei <u>-</u>	<i>L</i>) <i>C</i> <i>D</i>	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)		
10:01am			1.55	155.3	7.08	22.99	2.058		Î	
Constituents	Sampled		Cont	ainer Descrip	otion		Number	_	Preser	vative
							-	_		
		,								
								=		
°C ft	below measuring degrees Celsius feet			ml mS/cm mS	militier milisiemens pr microsiemens		s.u. mv NTU	standard units milivolts Nephelometric Turb	-	
	mililiters per minu miligrams per lite			N/A NR	not applicable not recorded		umhos/cm VOC	Micromhos per cent Volatile Organic Co		

Project:	LVX F	TEU Trai	WHEV	_		Project No.			Page	1 of 1
Site Location:	GLEN	vin								06/19/1
Site/Well No.	mw-11	0				Replicate No.			Code No.	
Weather:	110+10	unny		_		Sampling Time:	Begin	17:12 pm	1 End	12:28 pm
Evacuation D	ata						Field Paramet	ers		
Sounded Well	Depth (ft bmp)	74.4				-	Color	rusti	tun	
Depth to Wate	er (ft bmp)	68,65				-	Odor			
Gallons Pumpe Prior to Sampli		Full W	Lavas	Leeve			Appearance	cloud	Ч	
Sample Pump Depth (ft bmp)		1	HIM			=: 	*IRON, ferrou	AIM s		
Sample Pump Settings (cpm/			IOIH				Data Frame			
Purge Time		Begin		End			Remarks	W		
Pumping Rate	(gpm)					6		N .	1. 1.0	
Evacuation Me	thod	Mydrae	terve			p)	Sampling Perso	onnel	JLJLA	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)		
12:28pm			1.27	182.7	7.32	23.24	1.608			
Constituents	Sampled		Cont	ainer Descri	ption		Number		Preserv	ative
								=		
		,						_		
								6 16 -		
	below measuring degrees Celsius	point		ml mS/cm	miliiter milisiemens pe	r centimeter	s.u. mv	standard units		
	feet mililiters per minu	te		mS N/A	microslemens not applicable		NTU umhos/cm	Nephelometric Turi Micromhos per cer		
	mitigrams per liter			NR	not recorded		VOC	Volatile Organic Co		

Project:		HEY IVU	inster	-		Project No.			Page	1 of 1
Site Location:	CILE	Niwis							Date	Óis 119/14
Site/Well No.	mw -	1+				Replicate No.			Code No.	
Weather:	Hot,	vunny		- 2		Sampling Time:	Begin	11:19 am	End	11119 an
Evacuation Da	ıta						Field Parame	ters		
Sounded Well I	Depth (ft bmp)	17.0	3				Color	Marry		
Depth to Water	(ft bmp)	69.16				- 1	Odor			
Gallons Pumpe Prior to Samplin		Full H	y cirus!	ILLUC			Appearance	ruut Colu	v e bo	itam
Sample Pump (Depth (ft bmp)	ntake	7	NIIA				*IRON, ferrou	IS MIA		
Sample Pump of Settings (cpm/p			1010				Data Frame			
Purge Time		Begin		End			Remarks			
Pumping Rate (gpm)							V	1.0	
Evacuation Met	vacuation Method 114 druu		lewo				Sampling Pers	onnel <u>I</u>	LILB	
Time (min)	10 15	Volume Purged		ORP	рΗ	Temp	COND	Turbidity		
11-19am	(feet)		(mg/L)	(mv)	7.360	24.67	1,148	(NTU)		
11 1 (10)			1010	1700	1.30	2007	11178			
							0			
Constituents	Sampled		Cont	ainer Descri	ption		Number		Preserv	vative
		;						_ =		
			H					=		
								_		
								_		
								-		
								-		-
t f	below measuring degrees Celsius feet			ml mS/cm mS	mililiter milisiemens pe microsiemens	r centimeter	s.u. mv NTU	standard units milivoits Nephelometric Turbid	ity Units	
	mililiters per minu miligrams per lite			N/A NR	not applicable not recorded		umhos/cm VOC	Micromhos per centin Volatile Organic Com		

	CUXF	iês Trun nuin	ster	-		Project No.				of 1
Site Location:										16/19/10
Site/Well No.	mw - 1			2		Replicate No.				
Weather:	Hu in	ining				Sampling Time:	Begin		End	,
Evacuation Da	ta						Field Paramete	ers		
Sounded Well [Depth (ft bmp)	78,47				-:	Color	NIA		
Depth to Water	(ft bmp)		nell d	ny			Odor	-		
Gallons Pumpe Prior to Samplin		MA					Appearance *IRON, ferrous			
Sample Pump I Depth (ft bmp)	ntake						*SULFIDES			
Sample Pump of Settings (cpm/p							Data Frame Remarks			
Purge Time		Begin		End		-	Remarks	A		
Pumping Rate (gpm)					,	Sampling Person	nnei	JL/LB	
Evacuation Met							Sampling relac	nii i Gi		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND ()	Turbidity (NTU)		
no va	upre	colleter	well	dry						
			-							
Constituents	Sampled		Cont	ainer Descri	ption		Number		Preserva	tive
								-		
								-		
								-		
								-		
°C ft ml/min	below measuring degrees Celsius feet milliters per minu miligrams per lite	ute		mI mS/cm mS N/A NR	miliiter milisiemens pi microsiemens not applicable not recorded		s.u. mv NTU umhos/cm VOC	standard units milivolts Nephelometric Micromhos per Volatile Organic	centimeter	

Project:	CAX	HEJ Truy	wter	_		Project No.			Page 1	of 1
Site Location:	(1 L EV	win							Date C	119/1
Site/Well No.	mw -	.4		=		Replicate No.		MARIE IN A	Code No.	
Weather:	HUT , U	unny				Sampling Time:	Begin	11:39 am	End 11	19 an
Evacuation Da	ata						Field Paramet	ers		
Sounded Well	Depth (ft bmp)	104.68				-	Color	tan / n	Wt	
Depth to Water	r (ft bmp)	73.09	ò			-	Odor	***************************************		
Gallons Pumpe Prior to Sampli		FUIL ME	laraut	Leve		=	Appearance	- 1/A		
Sample Pump Depth (ft bmp)		2	ALL				*IRON, ferrou *SULFIDES	s_NIA		
Sample Pump (Settings (cpm/)						-	Data Frame			
Purge Time		Begin		End		_	Remarks			
Pumping Rate	(gpm)					_		- V	1 11 0	
Evacuation Method Time Water Level Volume F		MULIVA	Heve				Sampling Perso	onnel <u>J</u>	LILB	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)		
11:39um	_		1.05	200.5	6.18	22.50	१,444			
Constituents	Sampled		Cont	ainer Descri	ption		Number	_	Preservative	
								_		
						5 5		· ·		
								_		
°C ft ml/min	below measuring degrees Celsius feet milliters per minu	te		mi mS/cm mS N/A	milliliter millisiemens po microsiemens not applicable		s.u. mv NTU umhos/cm	standard units milivolts Nephelometric Turbi Micromhos per centi	meter	
mg/L	miligrams per lite	Г		NR	not recorded		VOC	Volatile Organic Con	pounds	

Project: <u>LVX HEU TVX</u>			noter	_		Project No.	-		Page 1 of 1
Site Location:	ar en	WIN							Date 64 (14/1
Site/Well No.	mw -	20		_		Replicate No.			Code No.
Weather:	Hut , S	unny		_		Sampling Time:	Begin	9:53 am	End 9: 53 am
Evacuation D	ata						Field Parame	ters	
Sounded Well	Depth (ft bmp)	_ 68.89				-	Color	VUVI H	avy
Depth to Wate	r (ft bmp)	82.72				-	Odor		
Gallons Pumpe Prior to Sampli		Full HI	yelvans l	LLVL		- ∰	Appearance	Chuay	
Sample Pump Depth (ft bmp)		1	IIA			5	*IRON, ferrou	AIN SI	
Sample Pump Settings (cpm/						.	Data Frame		
Purge Time		Begin		End			Remarks		
Pumping Rate	Pumping Rate (gpm) Evacuation Method FULLY					5	Canalina Bass		JLILB
Evacuation Me	Time Water Level Volume Purge						Sampling Perso	onnei	2- 102
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)	
9:53 am			1.48	158, 2	69.0	22.83	3.427		
Constituents	Sampled		Cont	ainer Descrip	otion		Number		Preservative
								-	
		7.							
		X-							
omn	halau m							a. dete	
rc ·	below measuring degrees Celsius	point		mS/cm	mililiter milisiemens pe		s.u. mv	standard units milivolts	
	feet mililiters per minut	te			microsiemens not applicable		NTU umhos/cm	Nephelometric Turbio Micromhos per centin	= -
	miligrams per liter		N/A not applicable NR not recorded			voc	Volatile Organic Com		

Project:					Project No.			_ Pa	age 1 of 1		
Site Location:	GL EN	vîn							D	ate <u>Old [18]</u>	9
Site/Well No.	mw-1	- 1		-		Replicate No.		and provided in the	Code	No	
Weather:	Hot, ou	nny		=:		Sampling Time:	Begin	9:42 01	1/4	End 9.42 0	LM
Evacuation D	ata						Field Paramet	ers			
Sounded Well	Depth (ft bmp)	96.20	1			-	Color	VWY	Itan		
Depth to Water	r (ft bmp)	73,30	١			-01	Odor				
Gallons Pumpe Prior to Sampli		Full HI	www	leve		-3	Appearance	cloud s FILA	Ч		
Sample Pump Depth (ft bmp)		1	HIA			-,	*IRON, ferrou	SMIH			
Sample Pump Settings (cpm/			10.1				Data Frame Remarks		<u> </u>		
Purge Time	mping Rate (gpm)			End		-	Remarks				
Pumping Rate	cuation Method Hyck						Sampling Person	onnel	HILLR)	
Evacuation Me	me Water Level Volume Purge		ust revc				Sampling Fersi	Julie:	1-1-5		_
Time (min)			d DO ORP pH (mg/L) (mv) (su)			Temp ©	COND	Turbidity (NTU)			
9:42 am			1.601	146.5	7.04	22.76	1.359				
											_
								1			_
											_
Constituents	Sampled		Conf	tainer Descri	ption		Number	_	Pre	servative	
											_
								_			
								<u>-</u>			
								-			
							2	=	-		_
bmp	below measuring	point		ml	mililiter		S.Ų.	standard units			_ '`^
°C ft	degrees Celsius feet			mS/cm mS	milisiemens pe		mv NTU	milivolts Nephelometric	Furbidity Linits		
ml/min	mililiters per minu			N/A NR	not applicable		umhos/cm VOC	Micromhos per Volatile Organio	centimeter		
mg/L miligrams per liter			1417	The recorded		,50	voiaure Organic	Computition			

Project:	CVX HEG Transter			→ ;		Project No.			Page 1 of 1		
	<u>mw -</u>	22		-		Replicate No.	()		Date <u>0 4 (19 / 19</u> Code No		
Weather:	Junne	1.7(0)				Sampling Time:	Begin	6.24 am	End 8: EU an		
Evacuation Da							Field Paramet	ers			
Sounded Weil [Depth (ft bmp)	67.93					Color	TON			
Depth to Water	(ft bmp)	163,66	p			-5	Odor	<u> </u>			
Gallons Pumpe Prior to Samplir		Full H	y cirus i	LLVL		e;	Appearance		1 cloudy		
Sample Pump I Depth (ft bmp)	ntake		4114			ē.	*IRON, ferrou *SULFIDES	s MA			
Sample Pump of Settings (cpm/p						Data Frame					
Purge Time	nping Rate (gpm)			End		Remarks					
Pumping Rate (Évacuation Met	ing Rate (gpm) uation Method HUARASTELY Fime Water Level Volume Purged DO		Itere	e		Sampling Personnel			LILB		
Time (min)		(feet) (mg/L)			pH (su)	Temp ©	COND	Turbidity (NTU)			
es 24am			1.15	100.5	0.94	21.23	8.116				
Constituents	Sampled		Cont	ainer Descrip	otion		Number		Preservative		
								-			
								_			
								_			
C c t f nl/min r	degrees Celsius n feet n nin millitters per minute		ml milliter mS/cm millisiemens per mS microsiemens N/A not applicable NR not recorded			s.u. mv NTU umhos/cm VOC	standard units milivolts Nephelometric Turbid Micromhos per centim Volatile Organic Comp	neter			

Project:	CVX	tes Trans	ster	_		Project No.				Page 1 of 1
Site Location:	CIL EY	Win								Date 01/19/10
Site/Well No.		3				Replicate No.			Cod	de No.
Weather:	Hotio	way		<u>-</u> -		Sampling Time:	Begin	9 =23 a	<u>~a\</u> √	End 91 23 alm
Evacuation D	ata						Field Parame	ters		
Sounded Well	Depth (ft bmp)	101.39				<u>-</u>	Color	clear	etrp	. MUST @ bottom
Depth to Wate	f (ft bmp)	91.08				_	Odor			
Gallons Pumpe Prior to Sampli		Full t	yelra	ileave			Appearance			buttum
Sample Pump Depth (ft bmp)		1	NIA			_	*IRON, ferrou	AILU si		
Sample Pump Settings (cpm/			121			-	Data Frame			
Purge Time		Begin		End		_	Remarks	7		
Pumping Rate	nping Rate (gpm) Accuation Method Hydraule					- 08			0. 7	<u> </u>
Evacuation Med	Time Water Level Volume Purged D						Sampling Person	onnel	JLIL	_15
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity (NTU)		
9:23am			1,29	133.2	1,25	22.98	1.369			
	i _o v η									
Constituents	Sampled		Cont	ainer Descri	ption		Number	_	Pi	reservative
								<u> </u>		
		,						-		
								±: 2:		
	below measuring degrees Celsius	point		ml mS/cm	mililiter milisiemens pe	er centimeter	s.u. mv	standard units milivolts		
t ·	feet		1	mS .	microsiemens		NTU	Nephelometric 1	Furbidity Units	
	mililiters per minut miligrams per liter			N/A N/R	not applicable not recorded		umhos/cm VOC	Micromhos per o Volatile Organic		

Project:		ieu Trun				Project No.	-		Page 1 of 1		
Site Location:	Mw 2	HB (IL EV	win						Date <u>OLe 119 / (4</u>		
Site/Well No.	MW-2	Ц		_0		Replicate No.	V		Code No.		
Weather:	HUT	SHUNH				Sampling Time:	Begin	934 am	End 9:34 am		
Evacuation Da	ata						Field Paramete	ers .			
Sounded Well	Depth (ft bmp)	62.74					Color		ear		
Depth to Water	r (ft bmp)	49.44					Odor	-			
Gallons Pumpe Prior to Sampli		FULL HU	ctrav (+	LLV C			Appearance	NIA			
Sample Pump Depth (ft bmp)	Intake		NIA			+ 3	*IRON, ferrous				
Sample Pump of Settings (cpm/p			14/11			-1	Data Frame Remarks				
Purge Time		Begin		End			Nemano				
Pumping Rate	(gpm)						Sampling Perso	anal d	LIUB		
Evacuation Met	Water Level Volume Purged						Sampling Perso	nner <u>o</u>	7 43		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND (Turbidity (NTU)			
9134am		1.19			w.91	22.37	4.858	_			
Constituents	Sampled		Conf	tainer Descri	otion		Number		Preservative		
								=			
								_			
								=			
								=			
	below measuring point			ml milliter			8.u.	standard units			
ît .	degrees Celsius feet			mS/cm mS	milisiemens pe microsiemens	r centimeter	mv NTU	milivolts Nephelometric Turbid	ity Units		
	mililiters per minu miligrams per lite		N/A not applicable NR not recorded				umhos/cm VOC	Micromhos per centin Volatile Organic Com			

Project:	uter	-		Project No.	0			Page 1	of <u>1</u>			
Site Location:	GL LM	un_							_	Date 0	6119/19	_
Site/Well No.	paw - 1	25		-3		Replicate No.			Coo	de No		_
Weather:	Hut, su	inny		-0		Sampling Time:	Begin	9:01 an	<u>^</u>	End_C	1:01 am	-
Evacuation Da	nta						Fleid Paramete	ers				7.
Sounded Well	Depth (ft bmp)	95.5	0			-	Color	rust				
Depth to Water	r (ft bmp)	78.40				20	Odor					2
Gallons Pumpe Prior to Sampli		FULL M	<u>aavaut</u>	دوباس		_	Appearance *IRON, ferrous			2 hot	tun-Vu	st colored
Sample Pump Depth (ft bmp)	Intake	N	17			-	*SULFIDES		Γ			5
Sample Pump of Settings (cpm/p						<u>.</u>	Data Frame	V	r . H. o.c.	لممد	o to that	•
Purge Time		8egin		End		_	Remarks				at Thiu	2
Pumping Rate	(gpm)					21	time.		<u> </u>			8
Evacuation Met	racuation Method I-tyuravicus						Sampling Perso	nnel				<u>.</u>
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND (Turbidity (NTU)				
9:01 am			1.23	136.4	w.26	21.85	6.724					
Constituents	Sampled		Cont	ainer Descrip	otion		Number		P	reservat	tive	
						:						
hmo	holow massuring	noint		ml	millitor			standari				
°C ft	below measuring degrees Celsius feet milliters per minu			mS/cm mS	milliter millsiemens pe microsiemens not applicable		s.u. mv NTU umhos/cm	standard units milivolts Nephelometric ? Micromhos per		:		
	miligrams per lite				not recorded		VOC	Volatile Organic				

Project:	CVX HES Transfer					Project No.			Page	1 of <u>1</u>
Site Location:	GL EV	min							Date	ae 119/19
Site/Well No.	MW-2	عا		_		Replicate No.			Code No.	
Weather:	Junny	HOT		=1		Sampling Time:	Begin	8:14	End	ष्टः।प
Evacuation Da	ata						Field Paramet	ers		
Sounded Well i	Depth (ft bmp)	75.7	7			-	Color	rust		
Depth to Water	r (ft bmp)	64.21	2			_	Odor			
Gallons Pumpe Prior to Sampli		FULL HI	yarus	Heve			Appearance	Will Tra		
Sample Pump Depth (ft bmp)	Intake		MIN			. :	*IRON, ferrous	SHA		
Sample Pump of Settings (cpm/p							Data Frame			
Purge Time		Begin		End		-	Remarks			
Pumping Rate	(gpm)					-			JLILB	
Evacuation Met	I-14aras		drasteve			201	Sampling Perso	innei	0 = (= 1)	
Time (min)	Water Level	Volume Purged	ed DO ORP (mg/L) (mv)		pH (su)	Temp ©	COND	Turbidity (NTU)		
8:14			1.48	160.1	7,40	21.32	3,375	Ţ		
Constituents	Sampled	i a	Cont	ainer Descri	ption		Number		Preserv	rative
		9								
Lanua .	halou a	a alot								
°C ft ml/min	ft feet			ml milliter mS/cm millsiemens per mS microsiemens N/A not applicable		8 NTU Nephelometric		milivolts Nephelometric T Micromhos per c	centimeter	
mi/min milliters per minute mg/L miligrams per liter			NR not recorded				VOC	Volatile Organic	Compounds	

Project:		les tran	ster	-		Project No.			Page 1 of 1
Site Location:	GL En	orth							Date <u>CLC /14/16</u>
Site/Well No.	mw-23	+				Replicate No.			Code No.
Weather:	Hot , ul	rund			_	Sampling Time:	Begin	14:53 CLAV	End 10 S7 CUV
Evacuation Da	nta						Field Paramete	ers	
Sounded Well [Depth (ft bmp)	48.57					Color	MA	
Depth to Water	(ft bmp)	well	ing				Odor		
Gallons Pumpe Prior to Samplir		MIA					Appearance *IRON, ferrous		
Sample Pump I Depth (ft bmp)	Intake						*SULFIDES		
Sample Pump of Settings (cpm/p							Data Frame		
Purge Time		Begin		End			Remarks	$\overline{}$	
Pumping Rate ((gpm)						Sampling Perso	enel	JLILB
Evacuation Met	Time Water Level Volume Purged						Sampling Perso	rillei	100
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)	
11 103am									
No Ju	imple c	tterted	well	WY					
				,					
Constituents	s Sampled		Cont	ainer Descri	iption		Number		Preservative
								_	
								_	
							Annahand . W.		
fit feet mS			mS/cm	mililiter milisiemens pe	er centimeter	s.u. mv	standard units milivolts		
t reet mil/min mililiters per minute Nu mg/L miligrams per liter Ni					microsiemens not applicable		NTU umhos/cm	Nephelometric Tur Micromhos per cer	

Site Location: CLL ETWIN SiteAvel No. MW - 28 Replicate No. Dup - 1 SiteAvel No. MW - 28 Replicate No. Dup - 1 Sequential Sample Pump Date Sunded Well Depth (ft brop) Depth to Water (ft brop) Depth to Water (ft brop) Depth to Water (ft brop) Sample Pump Intake Depth (ft brop) Sample Pump controller Settings (cpanyes) Sample Pump (ft brop) Do ORP pH Temp COND Turbdity Great Ground Volume Pumped DO ORP pH Temp COND (MI) (MI) (MI) (MI) (MI) (MI) (MI) (MI)	_ of 1
Weather: Sunny, warm Sampling Time: Begin 9:03 End 9 Evacuation Data Sounded Well Depth (ft bmp) Depth to Water (ft bmp) Gallons Pumped/Balled Prior to Sampling Sample Pump Intake Depth (ft bmp) Sample Pump controller Settings (cpm/psi) Purge Time Pumping Rate (gpm) Evacuation Method Full Available Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm²) Time (teet) Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm²) Time (teet) Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm²) Time (teet) Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm²) Time (teet) Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm², tm²) Time (teet) Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm², tm²) Time (teet) Volume Purged Do ORP pH Temp COND (mg, tm², tm², tm², tm², tm², tm², tm², tm²	119/19
Evacuation Data Sounded Well Depth (ft bmp) Depth to Water (ft bmp) Gallons Pumped/Galled Prior to Sampling Full Hyuwwell Sample Pump Intake Depth (ft bmp) Sample Pump Intake Depth (ft bmp) Sample Pump controller Settings (cpm/psi) Purge Time Purge Time Begin Evacuation Method Hyuran Level (mini) (feet) Time (water Level (min) (feet) Time (water Level (mgn, mgn, mgn, mgn) Time (feet) Time (feet) Time (mgn, mgn, mgn) Time (mgn, mgn, mgn) Time (mgn, mgn, mgn) Time (mgn, mgn, mgn) Time (mgn, mgn) Time (mgn, mgn, mgn) Time (mgn, Ti	
Sounded Well Depth (if bmp) Depth to Water (if bmp) Gallons Pumped/Balled Prior to Sampling Full Hydracite Sample Pump Intake Depth (if bmp) Sample Pump Intake Depth (if bmp) Sample Pump controller Settings (cpm/psi) Purge Time Begin End Time Water Level (min) (feet) Time Water Level (min) (feet) Time (int) (feet) Time Water Level (min) (feet) Time Water Le	03
Depth to Water (ft bmp) Gallons Pumped/Balled Prior to Sampling FLUL HULLIULUEUL Sample Pump Intake Depth (ft bmp) Sample Pump controller Settings (cpm/psi) Purge Time Pumping Rate (gpm) Evacuation Method HULLIAN STEEVE Time Water Level (min) (feet) Volume Purged DO (mg/L) (my) (su) © (mg/L) (mt) (NTU) 8:03 1.43 223.4 (2.40 22.11 11.41 Presequeting Presonal Department Cond (mg/L) (mt) (mt) (mt) Begin End Pumping Rate (gpm) Full HULLIAN STEEVE Sampling Personnel JL UR Presequeting (ms/L) (ms/	
Gallons Pumped/Balled Prior to Sampling Full Hyuviusteurs "IRON, ferrous NIA" Sample Pump Intake Depth (ft bmp) Sample Pump controller Settings (cpm/psi) Pumper Time Begin End Sampling Personnel Time (min) Water Level (feet) Volume Purged DO (mg/L) (my) (su) © (ms/L) (NTU) 8:03 - 1.43 273.4 (2.40 22.17 11.41 -)	
Prior to Sampling Sample Pump Intake Depth (fi bmp) Sample Pump controller Settings (cpm/psi) Purge Time Pumping Rate (gpm) Evacuation Method HUANANTIENE Time (min) (reet) Volume Purged DO ORP pH Temp COND (mg/L) (mv) (su) (su) (ms, (m³, (NTU)) B : 0 3	
Sample Pump Intake Depth (ft bmp) Sample Pump controller Settings (cpm/psi) Purge Time Begin End Sampling Personnel Fine Water Level (min) (feet) Water Level (mg/L) (mg/L)	
Settings (cpm/psi) Purge Time Begin End Sampling Personnel Suppling Rate (gpm) Evacuation Method HUAVASTEEVE Time Water Level (min) (feet) (mg/L) (my) (su) (su) (ms, (ms) (NTU) (NTU) Brosonzation Do ORP pH Temp COND Turbidity (NTU) (feet) (ms) (1 ms) (NTU) Brosonzation Do ORP pH Temp COND Turbidity (NTU) Brosonzation Do ORP pH Temp COND Turbidity (NTU) Brosonzation Do ORP pH Temp COND Turbidity (NTU) Brosonzation Do ORP pH Temp COND Turbidity (NTU) Brosonzation Drosonzation	
Pumping Rate (gpm) Evacuation Method Hydraviteve Sampling Personnel JL, LB Sampling Personnel JL, LB Time Water Level (feet) Volume Purged DO (mg/L) (mv) (su) © (ms, (m³, (m³, (nтu))) (ntu) (
Time Water Level Volume Purged DO ORP pH Temp COND Turbidity (min) (feet) (my) (su) © (ms, m³) (NTU)	
Time Water Level (feet) Volume Purged DO ORP PH Temp COND Turbidity (mg/L) (my) (su) © (mg/L) (NTU) 8:03 - 1.43 223.4 4.40 22.17 11.41 - 1.41	
(min) (feet) (mg/L) (mv) (su) © (ms, cm ³) (NTU) 8:03 — 1.43 223.4 4.40 22.17 11.41 —	
8:03 — 1.43 273.4 (2.40 22.17 11.41 —)	
Number Preservation	
Constituents Sampled Container Description Number Preservation	
Constituents Sampled Container Description Number Preservation	
Constituents Sampled Container Description Number Preservation	
Constituents Sampled Container Description Number Preservation	
Constituents Sampled Container Description Number Preservation	
Constituents Sampled Container Description Number Preservation	
	ve
below measuring point ml mililiter s.u. standard units *C degrees Celsius mS/cm milisiemens per centimeter mv milivolts fit feet mS microsiemens NTU Nephelometric Turbidity Units ml/min mililiters per minute N/A not applicable umhos/cm Micromhos per centimeter mg/L miligrams per liter NR not recorded VOC Volatile Organic Compounds	

Project:						Project No.			47	Page 1	of <u>1</u>
Site Location:	GL EN	vin								Date 00	119/10
Site/Well No.	mw - 9	19				Replicate No.	Dup-	2	Code	e No	
Weather:	Hot I W	inny		-2		Sampling Time:	Begin	13:26	End 13:24		
Evacuation D	ata						Field Paramet	ers			
Sounded Well	Depth (ft bmp)	78.62				-	Color	Clear	V		
Depth to Wate	er (ft bmp)	ule. 10)			_	Odor	-			
Gallons Pumpe Prior to Sampli		Full V	lydrad	teeve		_	Appearance		A		
Sample Pump Depth (ft bmp)						_,	*IRON, ferrou	ss	A		
Sample Pump Settings (cpm/j			TA			= 0	Data Frame				
Purge Time		Begin		End		_	Remarks				
Pumping Rate	nping Rate (gprn)							V	ti I	· n	
Evacuation Met	thod	Hydrus	rusperve		-	Sampling Perso	onnel	11	<u> </u>		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)			
13:14			1.71	224.0	6.80	23.36	7.806				
Constituents	Sampled		Conta	ainer Descrip	otion		Number		Pro	eservative	
						-					
						-0 0		_			
						9 1		5 <u>-</u>			
								_			
								-			
omp	below measuring	point		ml	mililiter		8.11	atandasi			
C	degrees Celsius feet	F14	i	mS/cm	milisiemens p		s.u. mv NTU	standard units milivolts Nephelometric Tu	phidity t Inte		
ni/min	mililiters per minu miligrams per liter				not applicable not recorded	1	umhos/cm VOC	Micromhos per ce Volatile Organic C	entimeter		

Project: (VX HEV Tray Site Location: GL Exwin		i ter	-		Project No.			Pa	age <u>1</u>	of 1	
Site Location:	GLE	win_							D	ate <u>Olo</u>	119/19
Site/Well No.	mw - 3	20		→ ?		Replicate No.	Dup -	1	Code	No	
Weather:	HUL, U	runny		-		Sampling Time:	Begin	12: wpn	V	End 12	W IDIN
Evacuation Da	ata						Field Parame	ters			
Sounded Well	Depth (ft bmp)	73,0	15			-:	Color	clear			
Depth to Water	r (ft bmp)	66,44				_	Odor				
Gallons Pumpe Prior to Sampli		FULLE	ILJ CIVU	vlerv	۲	-:	Appearance	MIA			
Sample Pump Depth (ft bmp)	Intake		×1 (+	1		-	*IRON, ferrou	s			
Sample Pump (Settings (cpm/p			1911	X .			Data Frame	chung - I	/ +414	1 +0 1	
Purge Time		Begin		End		-	Remarks	dup-1			DCI
Pumping Rate	umping Rate (gpm) vacuation Method							time 12			
Evacuation Met	Time Water Level Volume Purge						Sampling Person	onnel	11/1	15	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)			
12 W/W/			1.24	194.2	10.109	23,53	25.42				
Constituents	Sampled		Cont	ainer Descrip	otion		Number		Pres	servative	

								-			
		:						_			
С	below measuring degrees Celsius feet	point		mS/cm	milliter milisiemens pe	r centimeter	s.u. mv	standard units milivolts	La 2 adria		
ni/min	mililiters per minu miligrams per liter			N/A	microsiemens not applicable not recorded		NTU umhos/cm VOC	Naphelometric Turt Micromhos per cen Volatile Organic Co	itimeter		

Project: CVX 11CO TVA			NOTEV	4		Project No.			Page 1	of 1
Site Location:	GL EW	M							Date OL	119/19
Site/Well No.	mw -	31		_		Replicate No.	-		Code No	
Weather:	1-1ut , 5	unny		_		Sampling Time:	Begin	gillam		12 our
Evacuation D	ata						Field Parame	ters		
Sounded Well	Depth (ft bmp)	83.75				<u>-</u> :	Color	NIA		
Depth to Wate	er (ft bmp)	80.21				-	Odor			
Gallons Pump Prior to Sampl		'NIA				_	Appearance	-		
Sample Pump Depth (ft bmp)						e: ■	*IRON, ferrou	JS		
Sample Pump Settings (cpm/							Data Frame			
Purge Time		Begin		End		_	Remarks			
Pumping Rate (gpm)					€:	Complian David		ILB		
Evacuation Me	vacuation Method					e.	Sampling Pers	onnei <u>J</u>	1 613	
Time (min) Water Level (feet) Volume Purged		DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND	Turbidity (NTU)			
		112121								
NU SU	MPLE CI	nectut,	THALLIT	rcient	vocate					
Constituents	s Sampled		Cont	ainer Descr	ription		Number		Preservati	ve
	-									
										
	below measuring degrees Celsius feet militers per minu			ml mS/cm mS N/A	mililiter milisiemens pe microsiemens not applicable	er centimeter	s.u. mv NTU umhos/cm	standard units milivolts Nephelometric Turbidi Micromhos per centim	-	
nl/min milliters per minute ng/L millgrams per liter			NR	not recorded		VOC	Volatile Organic Comp			

Project:	CVX 1	teu Trun	ister			Project No.			Page	1 of 1
Site Location:	CIL EN	มใก							Date	06/19/19
Site/Well No.	mw -	32			i	Replicate No.			Code No.	
Weather:	Hot, Ju	nay				Sampling Time:	Begin	-4-24am	\ End	9:34 00M
Evacuation Da	ata						Field Parame	ters		
Sounded Well	Depth (ft bmp)	87.85					Color	CHIA	f	
Depth to Water	r (ft bmp)	85,84					Odor	+		
Gallons Pumpe Prior to Sampli		FULL HV	LWUST	uve			Appearance *IRON, ferror	us NA		
Sample Pump Depth (ft bmp)	Intake	1	4114				*SULFIDES	J.S. T.A. T.A.		
Sample Pump Settings (cpm/							Data Frame Remarks			
Purge Time		Begin		End						
Pumping Rate Evacuation Me		Hyar	بدالودم	LB_			Sampling Pers	sonnel	JLILB	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp	COND	Turbidity (NTU)		
(may	(1001)		(11.3.2)	1.111			,			
NO JI	anoto	celles	a. no	nyd	mula	we				
1.0 0.										
						_				
Constituent	s Sampled		Cont	ainer Descri	ption		Number		Presei	vative
								_		
		5 3 6 3								
								_		
								-8		
bmp °C ft ml/min mg/L	below measuring degrees Celsius feet milliters per min miligrams per lite	ute		mI mS/cm mS N/A NR	militier milisiemens pe microsiemens not applicable not recorded	er centimeter	s.u. mv NTU umhos/cm VOC	standard units milivolts Nephelometric T Micromhos per c Volatile Organic	entimeter	

Project:	CUXI	tes Truns	ster			Project No.			Page 1 0	of 1
Site Location:	GL EN	พเก							Date OLC 11	4/19
Site/Well No.	WW - 1					Replicate No.		adjutini.	Code No.	
Weather:	HOTIVL	unny		-		Sampling Time:	Begin		End	
Evacuation Da	ata						Field Paramete			
Sounded Well	Depth (ft bmp)	180.72				-:	Color	NIA		
Depth to Water	r (ft bmp)	69.69					Odor			
Gallons Pumpe Prior to Sampli		MIA					Appearance	_		
Sample Pump Depth (ft bmp)							*IRON, ferrous			
Sample Pump Settings (cpm/							Data Frame			_
Purge Time		Begin		End			Remarks			
Pumping Rate							Sampling Person	nnel	JLILB	
Evacuation Me				000	T -11	T	COND	Trushisliba		
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND (Turbidity (NTU)		
חט ענ	mple	Collecte	t, MC	rydro	viewe	_				
Constituents	s Sampled		Cont	ainer Descri	iption		Number		Preservative	
								= 3		
,						•		- :		
								- 3		
								4 9	í	
·								- ;		
hmn	halou mana sina	a noint		ml	mililiter		C 14	standard units		
bmp °C ft ml/min	below measuring degrees Celsius feet milliliters per mini			mI mS/cm mS N/A	millisiemens p microsiemens not applicable	i	s.u. mv NTU umhos/cm	milivolts Nephelometric 7 Micromhos per 6		
mg/L	miligrams per lite			NR	not recorded	•	VOC	Volatile Organic		

Project:		HES Trun				Project No.			Page 1	
Site Location:		win								
Site/Well No.	<u>cw - m</u>	IW				Replicate No.			Code No	
Weather:	Hot ra	unny		*		Sampling Time:	Begin	13:15	End 17'-	15
Evacuation Da							Field Paramete			
Sounded Well !	Depth (ft bmp)	70,46) 				Color	Tun		
Depth to Water	(ft bmp)	42.28					Odor			
Gallons Pumpe Prior to Sampli		FullW	yelvan	leve			Appearance *IRON, ferrous	clud	,	
Sample Pump Depth (ft bmp)	intake		a Lia				*SULFIDES			
Sample Pump (Settings (cpm/p			Tolla	Y			Data Frame			
Purge Time	,	Begin		End			Remarks	-		
Pumping Rate	(gpm)						Sampling Perso	nnel	ILILB	
Evacuation Met	thod	Hydrast	erve				Camping relac	inter	0-1	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND ()	Turbidity (NTU)		
13 15			1.49	269.0	7.14	22.91	3,658			
Constituents	Sampled		Cont	ainer Descrip	otion		Number		Preservative	
								-		
								<u>.</u>		
								-		
								2	<u> </u>	
°C	below measuring degrees Celsius			ml mS/cm	militer milisiemens pe	er centimeter	s.u. mv	standard units milivotts		
ft	feet			mS	microsiemens		NTU umber form	Nephelometric 1		
ml/min mg/L	militers per min miligrams per lite			N/A NR	not recorded		umhos/cm VOC	Micromhos per o Volatile Organic		

Project:	_(VX	HEU Tra	nutev	2		Project No.			Page 1	of <u>1</u>
Site Location:	GL EM	vin							Date _	04/19/19
Site/Well No.	w-Mu					Replicate No.	4	The sale of	Code No.	
Weather:	runny			-		Sampling Time:	Begin	6:39 am		8.39 am
Evacuation Da	ata						Field Paramete	ers		
Sounded Well	Depth (ft bmp)	47.3	1			_	Color	Clear		
Depth to Water	r (ft bmp)	61.59				_	Odor	/=		
Gallons Pumpe Prior to Sampli		Full H	y aru	Steve		_	Appearance *IRON, ferrous	HIA		
Sample Pump Depth (ft bmp)			N	p			*SULFIDES			\$
Sample Pump Settings (cpm/						-	Data Frame Remarks	- Allej		
Purge Time		Begin		End		_	Nemarka	$\overline{}$		
Pumping Rate	(gpm)				- Sanger	-	Sampling Perso	anno!	JLILI	2
Evacuation Me	thod	Hydrus	leve			2	Sampling Perso	milei	7	
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND ()	Turbidity (NTU)		
8:39cm			17.2	1.53	7.54	21,33	1.024			
Constituents	s Sampled		Cont	tainer Descr	iption		Number		Preserv	ative
								_		
		- 2				-				
		•						_		
						-				
										**
bmp	below measuring			ml	mililiter		s.u.	standard units		
°C ft	degrees Celsius feet			mS/cm mS	milisiemens p microsiemens	er centimeter s	mv NTU	milivolts Nephelometric Turbi	idity Units	
ml/min	mililiters per min	ute		N/A	not applicable		umhos/cm	Micromhos per centi	meter	
mg/L	miligrams per lite	er		NR	not recorded	ı	VOC	Volatile Organic Con	npounds	

Project:	CVXI	HEU Trano	rei			Project No.			Page 1 of 1
Site Location:	GLE	nuin							Date 06/19/19
Site/Well No.	rw-1					Replicate No.			Code No.
Weather:	Hut /	sunny				Sampling Time:	Begin		End
Evacuation Da	nta						Field Paramete	rs)V/H	
Sounded Well [Depth (ft bmp)	pur	NP IN	well			Color	100 / N	
Depth to Water	(ft bmp)	61,46					Odor		
Gallons Pumpe Prior to Samplii		MIA					Appearance *IRON, ferrous		
Sample Pump I Depth (ft bmp)	intake		· ·				*SULFIDES		
Sample Pump of Settings (cpm/g							Data Frame Remarks		
Purge Time		Begin		End					
Pumping Rate	(gpm)						Sampling Perso	nnel	
Evacuation Me	thod								
Time (min)	Water Level (feet)	Volume Purged	DO (mg/L)	ORP (mv)	pH (su)	Temp ©	COND ()	Turbidity (NTU)	
NO JI	ample	contented,	puvio	inu	eil, p	amp una	LEV LUT	υ.	
Constituents	s Sampled		Conta	ainer Descri	iption		Number	-	Preservative
								_	
								-	
		-: -:					-	-	
								-	
bmp °C	below measurin degrees Celsius			ml mS/cm	mililiter milisiemens pe	er centimeter	s.u. my	standard units	-
ft	feet			mS N/A	microsiemens		NTU umhos/cm	Nephelometric Tu Micromhos per ce	
mi/min mg/L	milifiters per mir miligrams per lit			N/A NR	not applicable not recorded		VOC	Volatile Organic (



Gauging Form HES Transfer Site Name: G.L. Erwin Lea County, New Mexico

Monitoring Well ID	Date Gauged	DTW (ft btoc)	Total Depth (ft btoc)	Notes
MW-1	11/21/19	60.73	80.7	
MW-2	11/21/19	60.74	71.68	
MW-3	11/21/19	64.46	73.30	
MW-4	11/21/19	63.25	73.63	
MW-5	11/21/19	59.75	72.51	
MW-6	11/21/19	67.44	76,72	
MW-7	11/21/19	66.93	71.63	not enough water for hydrasteeve stock weight from this
MW-8	11/22/19	67.81	73.47	middle well now w/ paint pen.
MW-9	11/21/19	63.17	63.26	no weight? Took weight from Mw-7 + deployed hydrodeene
MW-10	11/21/19	69.94	72.02	no weight
MW-11	1122/19	74,93	75.6	not enough water for hydrastear . Will use bailor for amplying. Did not deploy hydrasteeve due to lack St water will osebailor for
MW-12	11/22/19	72.66	77.49	THE SIDE STORY STREETS WE TO TOUR OF CHEST STREETS SO
MW-13	11/21/19	66.6	70.4	Didn't deployhydrasteeve due to lack of water
MW-14	11/21/19	71.70	89.97	
MW-15	11/22/19	30.6	87.37	
MW-16	N 11/22/19	68,25	74.41	
MW-17	11/22/19	69.25	76.94	put well name clearly on well of paint yen
MW-18	11/21/19	78.44	78.50	unable to complete conductioning test due to lade of water
MW-19	11/21/19	73.01	104.55	whethe is complete consultating tell use to last of water
MW-20	11/22/19	82.79	04.83	
MW-21	11/21/19	73.6	96.17	
MW-22	11/21/19	63.87	67.79	Miles Carles P. A. Carles V. M. S. F. W. C.
MW-23	11/22/19	91.11	101.52	Not enough water for hydrasteeve will se bailor for campling
MW-24	11/21/19	49,52	62.63	
MW-25	11/22/19	78,50	94,30	
MW-26	11/20/19	64.30	75.73	
MW-27	11/20/19	- Cu.50	48.58	Wall day as who lad
MW-28	11/20/19	64.66	72.90	Well dry no water level manurement acquired
MW-29 /	11/21/19	66.83	78.60	
MW-30	11/21/19	68,54	73.70	
MW-31	11/22/19	80.33	92.75	not enough water to hydrasteen will use bailor to collect
MW-32	11/21/19	85.83	87.0	not enough water to deploy hydrasteers.
WW-1	11/22/19	69.48	187.80	- %
West MW	11/21/19	61.80	67.30	
Southwest MW	11/21/19	62.42	70.91	
RW-1	7	-	70.11	

Well Conductivity Profile Field data Sheet

Date: 11/20/19
Personnel: CF CM
Total Depth: 72.90
Start Time: 1619

Depth	Conductivity (Denote Us/cm or MS/cm) for each	Temperature
(record in two feet intervals)	recording)	(Fahrenheit or Celsius)
66	12.47	20.83
-9	15.11	20.80
70	16.07	20-78
72	16.28	20.78
	10100	20.10

Well Inspection Checklist and Reporting Form

Site Name/ Location Project Number
Well Identification NW-28 Inspection Date 11/20/14 Inspector CF, CM
Measured Well Depth 72.90 Measuring Point 69 Depth to water 64.66
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N/A 7) Does well opening/stickup show signs of damage or deterioration? Y N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: added a clear mark for the measuring point just above The bottom of the well

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Well Conductivity Profile Field data Sheet

Site Name:	Erwin	Date:	11/20/19
Well Identification:	MW-26	Personnel:	CF, CM
Static Water Level:	64.30	Total Depth:	75.73
Stop Time:	1637	Start Time:	1629

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Eahrenheit or Celsius)
66	3,305	20,74
69	3-279	20-32
70	3.258	20.93
72	3.231	20.84
74	3.214	20.94
	_	

Well Inspection Checklist and Reporting Form

Site Name/ Location Project Number		
Well Identification MW 26 Inspection Date 11/20/19 Inspector CF	- CM	
Measured Well Depth 75,73 Measuring Point 76 Depth to water	64.3	30
VISUAL INSPECTION		
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	Y TO THE TOTAL T	N N/A N N/A N N/A N N/A N N/A N N/A N N/A N N/A
PHYSICAL INSPECTION		
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Y	N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Y	N N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N I	N/A
Does the bailer contain excessive amounts of silt or rust?	R	N/A
Does water appear discolored or have an unusual odor or appearance?	(N)	N/A
Is the lock on the well cover/cap clean and fully functional?	N	N/A
NOTES AND OBSERVATIONS:		

Page:
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Well Conductivity Profile Field data Sheet

Date: 11/21/9	
Personnel: CF CM	
Total Depth: 67,79	
Start Time: 1030	
	Personnel: CF.CM Total Depth: 67.79

Depth	Conductivity (Denote U s/cm or MS/cm for each	Temperature
(record in two feet	(Denote Osychi or Wis/citr for each	(Fahrenheit or Celsius)
intervals)	recording)	(Famerinest of Celsius)
64	9.830	20.80
. 66	9.893	20.77
- 00	1.513	20-17
/=		

Well Inspection Checklist and Reporting Form

Site Name/ Location				
Well Identification MW-ZZ Inspection Date 11/21/19 Inspector	CF	LM		
Measured Well Depth 67.7% Measuring Point Depth to w	ater_	63.8	37	
VISUAL INSPECTION				
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	 (YYYYYY	NNXNN	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION				
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		(V	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)		Ŷ	N	N/A
Does bailer/pump travel freely to and from bottom of well?	Y	N	N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	Y 1	I N	N/A	
Does the bailer contain excessive amounts of silt or rust?	Y	N	N/A	L
Does water appear discolored or have an unusual odor or appearance?	Y		N/A	
Is the lock on the well cover/cap clean and fully functional?	Y	N	N/A	
NOTES AND OBSERVATIONS: Added name to well with paint pen. No clear measuring point, likely due to little to no white being well. No veight prosent at well be hydrasteeve chips present on top of our my	prese	at	in A	N

Page:
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Site Name: _GL Erwin	Date: 1121119	
Well Identification:	Personnel: CF CM	Π
Static Water Level: 63-17	Total Depth: 68.76	
Stop Time: 043	Start Time: 1039	

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet intervals)	recording)	-(Fahrenheit or Celsius)
	-4	
6l _f	1.670	20.40
66	1.642	20.37
- 68	1.64	20.37

Site Name/ Location Project Number					
Well Identification MN-9 Inspection Date 1/21/19 Inspector C	E,CM				
Measured Well Depth (8.26 Measuring Point 6 Depth to water	r 63.1	7			
VISUAL INSPECTION					
1) Is protective sleeve/cover in place and secure?	YYYY	N N/A N N/A N N/A N N/A N N/A N N/A			
PHYSICAL INSPECTION					
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Y	N N/A			
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	4	N N/A			
Does bailer/pump travel freely to and from bottom of well? Y N N/A					
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A					
Does the bailer contain excessive amounts of silt or rust?	Y 🕥	N/A			
Does water appear discolored or have an unusual odor or appearance?	Y W	N/A			
Is the lock on the well cover/cap clean and fully functional?	Y N	N/A			
NOTES AND OBSERVATIONS: AC weight from Mw-7 and after thoroughts decontramentally we were able to deplay the hydrasteere. Added a clear measuring point State dixdocation when small approach of self is nixed but is negligible.	Hu h	seight			

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Site Name:	Date: 11/2/19
Well Identification:	Personnel: CF CM
Static Water Level: 69.94	Total Depth: 72.07
Stop Time:	Start Time: 1103

Depth (record in two feet	Conductivity (Denote Us/cm of MS/cm for each	Temperature
intervals)	recording)	(Eahrenheit or Celsius
70	8.223	20.79
72	8.997	20.70

Site Name/ Location	GL Enow	Project	Number		_		
Well Identification	MW-10	Inspection Date_	11/21/19	Inspector_C	,00	1	
Measured Well Depth_	72.02	Measuring Point_	71	Depth to water_	4691	.94	
		VISUAL INSPI	ECTION				
 Is protective sleeve Are hinges, latches Is concrete pad in s Is well name or oth Is well cap in place Is measuring point Does well opening/ 	s, or locks function satisfactory conduction are identification and in good con marked or readi	onal and in good co lition? marked clearly on ndition? ly recognized?	or near the we	<u></u>	A GERELA RE		N/A N/A N/A N/A N/A N/A
		PHYSICAL INSE	PECTION				
Does water-level indica (Enter depth to water in			down well cas	ing?	$\hat{\mathbf{Y}}$	N	N/A
		vell completion diagrams, o				N	N/A
Does bailer/pump travel	I freely to and fr	rom bottom of well?	?	Y	N	N/A	A
Upon removal from well cuts, scrapes) su the well?		now evidence of dar damage from forei			N]	N/A	
Does the bailer contain	excessive amou	nts of silt or rust?		Y	N	N/A	7
Does water appear disco	olored or have a	n unusual odor or a	ppearance?	Y	B	N/A	7
Is the lock on the well c	over/cap clean a	and fully functional	?	Y	N	N/A	7
NOTES AND OBSERVATIONS:	ot enough w	later to deploy	hydrogleen	Now will	bail		

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Site Name:	CL Erwin	Date:	11/21/10
Well Identification:	Southwest - MW	Personnel:	CFICM
Static Water Level:	62.92	Total Depth:	70.91
Stop Time:	1/36	Start Time:	1031

Depth (record in two feet	Conductivity (Denote U s/cm or MS/cm for each	Temperature
intervals)	recording)	(F ahrenheit or Celsius)
64	3.044	21.04
66	3.353	20.93
68	7.081	20.40
70	વ,શાઇ	20.94
	=1	

Site Name/ Location GLETINA Project Number	
Well Identification Swifnwest - MW Inspection Date 11/21/19 Inspector CF, CM	
Measured Well Depth 70.9\ Measuring Point 66 Depth to water 62.9	2
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	N N/A N N/A N N/A N N/A N N/A N N/A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N N/A
Does bailer/pump travel freely to and from bottom of well? Y N	N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N	I/A
Does the bailer contain excessive amounts of silt or rust? Y	N/A
Does water appear discolored or have an unusual odor or appearance? Y	N/A
Is the lock on the well cover/cap clean and fully functional?	N/A
NOTES AND OBSERVATIONS: Chip's to top of cashing due to small amount of silt	

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Site Name: GL Erwin	Date: 11/21/19
Well Identification: West - MW	Personnel: CC, CM
Static Water Level: 61.80	Total Depth: 67.30
Stop Time: 1046	Start Time: N40

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet	(Denote Us/cm or MS/cm for each	(Fahranhait an Calhina
intervals)	recording)	(Fabrenheit or Celsius)
62	1.030	20.96
64	1.083	20.89
66	1.082	20.88
-		

Site Name/ Location Project Number			
Well Identification West - MW Inspection Date 11/21/19 Inspector Co	E, CM	1	
Measured Well Depth 67.30 Measuring Point 64 Depth to water	61.8	30	
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	Y & BOOK BOOK	N N N N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	(\hat{Y})	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Ŷ	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	L
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N I	N/A	
Does the bailer contain excessive amounts of silt or rust?	N	N/A	L
Does water appear discolored or have an unusual odor or appearance?	D	N/A	L
Is the lock on the well cover/cap clean and fully functional?	N	N/A	L
NOTES AND OBSERVATIONS: dups project on hop & casing			

Site Name:	Erwin	Date:	11/21/19
Well Identification:	MW-4	Personnel:	CF,CM
Static Water Level:	_63.25	Total Depth:	73.03
Stop Time:	1202	Start Time:	1200

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or (MS/cm) for each recording)	Temperature (Fahrenheit or Celsius)
64	5.540	21.15
h6	5.563	21.04
68	6.039	21.01
OF	8.630	20.99
72	8.820	21.00

Site Name/ Location GL Euric Project Number	
Well Identification MW-4 Inspection Date 11/21/19 Inspector CF CM	
Measured Well Depth 73.03 Measuring Point 70 Depth to water 63.25	
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? 8) N N/2 10 N N/2 11 N N/2 12 N N/2 13 N N/2 14 N N/2 15 N N/2 16 N N/2 17 N N/2 18 N N/2 19 N N/2 10 N N/2	A A A A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	1
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	7
Does bailer/pump travel freely to and from bottom of well? Y N N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N/A	
Does water appear discolored or have an unusual odor or appearance? Y N N/A	
Is the lock on the well cover/cap clean and fully functional? Y N N/A	
NOTES AND OBSERVATIONS:	
	_
	a g

Site Name:	Date: 11/21/11/0
Well Identification:	Personnel: CF CM
Static Water Level:	Total Depth:
Stop Time:	Start Time:

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet	(Denote Us/cm or MS/cm for each	
intervals)	recording)	(Fahrenheit or Celsiu
	ì	
	/	
	/	
	/	
	/	
/		
+		
		/
	*	
23		

Site Name/ Location Project Number				
Well Identification Note Inspection Date 1/2/19 Inspector	orC	F, C	M	
Measured Well Depth Measuring Point Depth to	water_	•		
VISUAL INSPECTION				
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?		Y Y Y Y Y Y	N (N) (N) N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION			5	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		Y	NA	TA
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)		Y/	N (2	
Does bailer/pump travel freely to and from bottom of well?	Y	N	N/A)
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	Y	N ((N/A)	
Does the bailer contain excessive amounts of silt or rust?	Y	N	N/A)
Does water appear discolored or have an unusual odor or appearance?	Y	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	Y	N	N/A)	
NOTES AND OBSERVATIONS: Well was unaccessible due to gamp down we	<i>M.</i>			

Site Name:GE	rwin	Date:	11/21/19
Well Identification:	MW-29	Personnel:	CE, CM
Static Water Level:	66.83	Total Depth:	78.60
Stop Time:	1244	Start Time:	1240

Depth (record in two	feet	Conductivity (Denote Us/cm or MS/cm	for each	Temperature
intervals	rieet	recording)	joi cacii	(Fahrenheit or Celsius)
68		7.274		20.89
70		7.269		20.83
72		7.418		20,80
74		9.084		20.80
76		9.632		20.80
78		9.690		20.79

Site Name/ Location Project Number		_		
Well Identification MW-29 Inspection Date 11/21/19 Inspector	<u></u>	F, Cr	1	
Measuring Point 76 Depth to wa	ter_	66.	83	
VISUAL INSPECTION				
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	••	Y B BBBBBBB	NNNNN	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION			_	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		Ŷ	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)		(Y)	N	N/A
Does bailer/pump travel freely to and from bottom of well?	Y	N	N/A	Ą
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	ζ.	n :	N/A	
Does the bailer contain excessive amounts of silt or rust?	Y	(N)	N/2	A
Does water appear discolored or have an unusual odor or appearance?	Y	N	N /2	A
Is the lock on the well cover/cap clean and fully functional?	Y	N	N/A	A
NOTES AND OBSERVATIONS:				

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Site Name: GL Envin	Date: 11/21/19
Well Identification: Mw-3	Personnel: CF, CM
Static Water Level: 64.46	Total Depth: 73.30
Stop Time: 1300	Start Time: 1253

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenhei t or Celsius)
66	2.422	20.71
68	2.465	20.73
70	3.512	20.73
72	6.753	20.74

Site Name/ Location Project Number	-		
Well Identification MW-3 Inspection Date 1/21/9 Inspector C	7, C1	۸	
Measured Well Depth 64.46 Measuring Point 70 Depth to water_	64	,46	_
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	Y BOOD OF BOOK	N N N N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Ŷ	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Ŷ	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	L
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y	N N	N/A	
Does the bailer contain excessive amounts of silt or rust?	N	N/A	L
Does water appear discolored or have an unusual odor or appearance?	N	N/A	L
Is the lock on the well cover/cap clean and fully functional?	N	N/A	L
OBSERVATIONS: This dischoration due to prisere d'a some	U		

Date: \\\/2\\/\9
Personnel: CF, CM
Total Depth: 76,72
Start Time: 1306

Depth (record in two feet	Conductivity (Denote Us/cm of MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit of Celsius)
63	1.919	20,7
70	1,921	20,67
72	1,974	20,66
74	3 833	20.65
76	5.678	20.64

Site Name/ Location Project Number	
Well Identification MV-6 Inspection Date W21/19 Inspector CF, CM	
Measured Well Depth 76.72 Measuring Point 74 Depth to water 67.44	
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? Y N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N/A
Does bailer/pump travel freely to and from bottom of well? Y N N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N N/A	
Does water appear discolored or have an unusual odor or appearance? Y N/A	
Is the lock on the well cover/cap clean and fully functional? Y N N/A	
NOTES AND OBSERVATIONS:	

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Site Name:	Envin	Date:	11/21/19
Well Identification:	MW-5	Personnel:	CF,CM
Static Water Level:	59.75	Total Depth:	72.51
Stop Time:	1328	Start Time:	1323

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenh eit or Celsius)
60	1.496	20.54
62	1.494	20.43
64	1-626	20,38
66	2.842	20.33
p3	3,986	20.40
70	4.116	20.41
72	4.116	20.44
21		

Site Name/ LocationProject Number			
Well Identification MW-5 Inspection Date 11/21/19 Inspector C	E, CI	1	
Measured Well Depth 72.51 Measuring Point 70 Depth to water	59.	75	
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	TO THE PROPERTY OF THE PROPERT	N N N N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION		0	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Ŷ	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Ŷ	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N N	Ñ/A	
Does the bailer contain excessive amounts of silt or rust?	(N)	N/A	
Does water appear discolored or have an unusual odor or appearance? Y	(N)	N/A	
Is the lock on the well cover/cap clean and fully functional?	N	N/A	
OBSERVATIONS: MWW dups on lop & casing.			_

Site Name:	GL Erwin	Date:	11/21/19	
Well Identification:	MW-1	Personnel:	CF. CM	
Static Water Level:	60.73	Total Depth:	80.7	
Stop Time:	1343	Start Time:	1338	

Depth (record in two feet	Conductivity (Denote betem of MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
62	0.773	20.49
64	0.972	20.48
66	.368	20.49
68	1,545	20.49
70	1, 648	20.49
72	. 657	20.50
74	1.658	20-50
76	1.657	20.50
78	1.657	20.51
<i>ිරි</i>	1.656	20.51

Site Name/ Location GL Found Project Number	
Well Identification MW-1 Inspection Date 11/21/19 Inspector CF, CM	
Measured Well Depth 60.7 Measuring Point 77 Depth to water 60.73	_
VISUAL INSPECTION	
2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N	N/A N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	I/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	I/A
Does bailer/pump travel freely to and from bottom of well? Y N N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y $\stackrel{\text{N}}{\nearrow}$ N/A	
Does water appear discolored or have an unusual odor or appearance? Y N/A	
Is the lock on the well cover/cap clean and fully functional? Y N N/A	
OBSERVATIONS: MINOR Chip's on too or cooner small amount of sill by bottom of you course discontion	

Site Name:	CrL Erwin	Date:	11/21/14	
Well Identification:	_Mw-2	Personnel:	CF, CM	_
Static Water Level:	60.74	Total Depth:	71,65	_
Stop Time:	1401	Start Time:	1356	

Depth (record in two feet	Conductivity (Denote Us/cm or VIS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
62	1-490	20.30
64	14573	20.26
66	2.649	20.27
68	3.85	20.30
70	3.920	20.32

Site Name/ Location Project Number
Well Identification MW-2 Inspection Date 11/21/19 Inspector CF, CM
Measured Well Depth 7.68 Measuring Point 68 Depth to water 60.74
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N/A 7) Does well opening/stickup show signs of damage or deterioration? 7) N/A 7) N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y (N) N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: Shiple discovering due to Small amond of soll

Site Name: GL Eastin	Date:	11/21/19
Well Identification: MW-7	Personnel:	CACM
Static Water Level: 66, 93	Total Depth:	71.63
Stop Time:	Start Time:	1409

Depth (record in two feet	Conductivity (Denote Us/em or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
68	1,229	20.56
70	1.371	20.56 20.55

Site Name/ Location Project Number Project Number
Well Identification MW-7 Inspection Date 11/21/19 Inspector CF, CM
Measured Well Depth 71.63 Measuring Point 71 Depth to water 66.93
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N N/A 7) Does well opening/stickup show signs of damage or deterioration? 7) N N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y $\begin{pmatrix} N \\ N \end{pmatrix}$ N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: water depth too Shallow, upable to deploy hydrosleeres

Site Name:	- Erwin	Date:	11/21/19
Well Identification:	MW-13	Personnel:	CF. CM.
Static Water Level:	66.6	Total Depth:	70.41
Stop Time:	1444	Start Time:	1442

Depth (record in two feet	Conductivity (Denote Us/cm or VIS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius
68	2.982	
70	20965	20.53
	-a (0.5	10,43

Site Name/ Location GL Ecwin Project Number		
Well Identification MW-13 Inspection Date 11121/19 Inspector	Cf,	CM
Measured Well Depth 66.6 Measuring Point Depth to wa	iter_7c	0.41
VISUAL INSPECTION		
1) Is protective sleeve/cover in place and secure?	F & P & &	N N/A N N/A N N/A N N/A N N/A N N/A N N/A N N/A
PHYSICAL INSPECTION		
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	②	N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	(Y)	N N/A
Does bailer/pump travel freely to and from bottom of well?	Y N	N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	YN	N/A
Does the bailer contain excessive amounts of silt or rust?	Y	N/A
Does water appear discolored or have an unusual odor or appearance?	Y N	N/A
Is the lock on the well cover/cap clean and fully functional?	Y N	N/A
NOTES AND OBSERVATIONS: Water depth hos shallow, words to diply	Mydras	leve

Site Name:CL_	Erwin	Date:	11/21/19
Well Identification:	MW-18	Personnel:	CFICM
Static Water Level:	78.44	Total Depth:	78.5
Stop Time:		Start Time:	***************************************

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature
(record in two feet	(Denote Os/cm or Ms/cm for each	(Fahrenheit or Celsius
intervals)	recording)	(Fairrenniell of Ceisius
		/
		/
	/	
_		
		1
		/

Site Name/ Location Project Number				
Well Identification MIN-18 Inspection Date 11/2/19 Inspector	CF	CM	\	
Measured Well Depth 78.5 Measuring Point Depth to wa	ter_	78	ilele	
VISUAL INSPECTION				
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?		Y O O O O Y		N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION				
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		0	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	1	(¥)	N	N/A
Does bailer/pump travel freely to and from bottom of well?	Y	N	N/A	A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	<i>(</i> 1	N	N/A	
Does the bailer contain excessive amounts of silt or rust?	Y	N	N/A	1
Does water appear discolored or have an unusual odor or appearance?	Y	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	Y	N	N/A	
NOTES AND OBSERVATIONS: not enough water to obtain a reading water yes	_0	۲	lo	

in	Date:	11/21/19
N-27	Personnel:	CFICM
-	Total Depth:	48.58
	Start Time:	amagin.
_	√-27 -	√-2¬ Personnel: Total Depth:

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsiu
	<u> </u>	
)	
/		
		_/
	/	

Site Name/ Location			
Well Identification	CF,C	M	
Measured Well Depth 48.58 Measuring Point Depth to water		_	
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	A CA	NNNNN	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	(Y)	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Y	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	k.
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N	N/A	
Does the bailer contain excessive amounts of silt or rust?	N	N/A	
Does water appear discolored or have an unusual odor or appearance?	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	N	N/A	-
NOTES AND OBSERVATIONS: Well dry; unable to conduct conductivity deflay hydrasleeve.	hest	_0√	
		_	

Site Name: (4)	asin	Date:	11/21/19	
Well Identification:	MW-30	Personnel:	CE CM	
Static Water Level:	68.54	Total Depth:	73.70	
Stop Time:	151	Start Time:	1507	

Depth	Conductivity (Denote Us/cm o r WS/cm)for each	Temperature	
(record in two feet	(Denote Us/cm o r MS/cm) for each	(Eabrenheit or Celsius	
intervals)	recording)	1Earness or Ceisius	
OF	29.87	20.29	
72	43.86	20-33	
73,70 (bottom)	46.99	20.34	

Site Name/ Location Project Number Project Number
Well Identification MW 30 Inspection Date 11/21/2019 Inspector CE, CM
Measured Well Depth 73.70 Measuring Point 72 Depth to water 68.54
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N N/A 7) Does well opening/stickup show signs of damage or deterioration? 7) N N/A 8) N/A 9) N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: Well not clearly marked and was subsequently

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0	11/21/2019
Personnel:	CfoCM
Total Depth:	99,97
Start Time:	1520
	Start Time:

Depth	Conductivity (Denote Us/cm or MS/cm for each	Temperature	
(record in two feet	(Denote Us/cm -or(MS/cm) for each	(Gebrook ait an Galain)	
intervals)	recording)	(F ahrenheit or Celsius	
72	27.15	20.43	
74	27.27	20.68	
76	27.36	20.72	
78	27.39	20.74	
80	27.40	20.74	
82	27.40	20.74	
84	27.41	20.74	
86	27.41	20,74	
88	27.40	20.73	

Site Name/ Location Project Number Project Number
Well Identification MW-14 Inspection Date 1/21/2019 Inspector CF, CM
Measured Well Depth 81.97 Measuring Point 85 Depth to water 71.70
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N N/A 7) Does well opening/stickup show signs of damage or deterioration? 7) N N/A 7) N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance?
Is the lock on the well cover/cap clean and fully functional? $Y = N = N/A$
NOTES AND OBSERVATIONS: Shift displanation due to perme da small

Site Name:	win	Date:	11/21/19	
Well Identification:	MW-19	Personnel:	CF CM	
Static Water Level:	73.01	Total Depth:	104.55	
Stop Time:	1544	Start Time:	1536	

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
74	7.972	20.57
76	8,043	20.77
78	9.362	20.82
80	8.599	20,83
82	8.618	20.82
84	8.744	20.83
88 86	8.805	20.83
83	8.823	20.83
90	8,823	20,82
92	9.818	20.82
94	8.83	20.81
96	8.812	20.81
98	8.812	20.81
100	8.811	20.80
102	80814	20.80
104	8.813	70.80

Site Name/ LocationProject Number
Well Identification MW-19 Inspection Date 1/21/19 Inspector CF, CM
Measured Well Depth 104.55 Measuring Point 92 Depth to water 73.01
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N/A 7) Does well opening/stickup show signs of damage or deterioration? 7) N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.) N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance? Y N N/A
Is the lock on the well cover/cap clean and fully functional? $Y = N - N/A$
OBSERVATIONS: Well not dealy marked subsequently marked with paint gen Small discoloration are to presence of a small amount of salt

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win	Date:	11/2-1/19
MW-21	Personnel:	CF CM
73.6	Total Depth:	96.17
1558	Start Time:	1552
		MW-21 Personnel: 73.6 Total Depth:

Depth (record in two feet	Conductivity (Denote Us/c m or MS/cm)for each	Temperature
intervals)	recording)	(Fahrenhei t or Celsius)
74	1.380	20,76
76	1.423	20.53
78	1.458	20.88
80	1.481	20,94
82	1.483	20.95
84	1.486	20,97
36	1.487	20.97
88	1.487	20,97
90	1,487	20.97
92	1.487	20.97
94	1.489	20,96
96	1.408	20.94

Site Name/ LocationProject Number			
Well Identification MW-2\ Inspection Date \\\2\\\9\\ Inspector	f, cr	4	
Measured Well Depth	73.	6	
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration?	Y BOOK COLLEGE	N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		N I	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	$\langle Y \rangle$	N]	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N N	N/A	
Does the bailer contain excessive amounts of silt or rust?	(N)	N/A	
Does water appear discolored or have an unusual odor or appearance?	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	N	N/A	
NOTES AND OBSERVATIONS: Shiph disoloration due to presence de	a S	mul	

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Site Name:	L Erwin	Date:	11/21/19	
Well Identification:	MW-24	Personnel:	CE.CM	_
Static Water Level:	49.52	Total Depth:	62.63	
Stop Time:	161	Start Time:	1607	

Depth	Conductivity (Denote Us/cm or (MS/cm)for each	Temperature
(record in two feet	(Denote Us/cm or <u>MS/cm</u> for each	I
intervals)	recording)	(Fahrenheit or Celsius)
50	5,207	20.06
52	5.208	20.24
54	5.201	20.36
56	5.201	20.39
58	5.20	20,42
60	5.201	20,42
62	5,200	20.43

Site Name/ Location GL Froject Number
Well Identification MW-24 Inspection Date 11/21/19 Inspector CF, CM
Measured Well Depth 62. 63 Measuring Point 56 Depth to water 49.52
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N/A 7) Does well opening/stickup show signs of damage or deterioration? 7) N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.) N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? $Y \stackrel{?}{N} N/A$
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS:

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Site Name:	LErwin	Date:	11/22/19	
Well Identification:	MW-32	Personnel:	CF CM	_
Static Water Level:	85.83	Total Depth:	27.0	_
Stop Time:	1627	Start Time:	1623	

Depth	Conductivity (Denote Us/cm or (MS/cm for each	Temperature
(record in two feet	(Denote Us/cm or (MS/cm for each	
intervals)	recording)	(Fahrenhei t or Celsius)
85.83	4.740	20.783
87.83	4.754	20.78

Site Name/ Location The Project Number Project Number
Well Identification MW-32 Inspection Date 11/2/19 Inspector CF, CM
Measured Well Depth 27 Measuring Point Depth to water 85,83
VISUAL INSPECTION
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition? 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) N/A 7) Does well opening/stickup show signs of damage or deterioration? 8) N/A N/A
PHYSICAL INSPECTION
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.) N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)
Does bailer/pump travel freely to and from bottom of well? Y N N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A
Does the bailer contain excessive amounts of silt or rust? Y N/A
Does water appear discolored or have an unusual odor or appearance? Y N/A
Is the lock on the well cover/cap clean and fully functional? Y N N/A
NOTES AND OBSERVATIONS: Dater depth hos shallow work to affect depthy

Site Name: GL En	wivo	Date:	11/2/10	
Well Identification:	MW-23	Personnel:	CF. CM	
Static Water Level:	91.11	Total Depth:	101,52	
Stop Time:	11(8	Start Time:	що	

Depth (record in two feet intervals)	Conductivity (Denote Us/cm or (MS/cm) for each recording)	Temperature
92	1.526	20.66
94	1.522	20.71
96	1.517	20.73
93	1,516	20,70
100	1,516	20.75
102	[,5 5	20.74

Site Name/ Location Project Number Project Number				
Well Identification MW-23 Inspection Date 11/22/19 Inspector CF CM				
Measured Well Depth 101.52 Measuring Point 94 Depth to water 91.				
VISUAL INSPECTION				
1) Is protective sleeve/cover in place and secure? Y 2) Are hinges, latches, or locks functional and in good condition? Y 3) Is concrete pad in satisfactory condition? Y 4) Is well name or other identification marked clearly on or near the well? Y 5) Is well cap in place and in good condition? Y 6) Is measuring point marked or readily recognized? Y 7) Does well opening/stickup show signs of damage or deterioration? Y	N N/A N N/A N N/A N N/A N N/A N N/A N N/A			
PHYSICAL INSPECTION				
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N N/A			
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N N/A			
Does bailer/pump travel freely to and from bottom of well? Y N	N/A			
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A				
Does the bailer contain excessive amounts of silt or rust? Y N	N/A			
Does water appear discolored or have an unusual odor or appearance? (Y) N N/A				
Is the lock on the well cover/cap clean and fully functional? Y N N/A				
OBSERVATIONS: Stall displanation due la small amont de sit				
	_			

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Site Name:	Erwin	Date:	11/22/19
Well Identification:	MW-15	Personnel:	CF, CM
Static Water Level:	80.6	Total Depth:	87.37
Stop Time:	1137	Start Time:	1132

Depth (record in two feet	Conductivity (Denote Us/cm of MS/cm for each recording)	Temperature
	(Denote 25/Lin or MS/cm) for each	(Fahrenheit or Celsius
intervals)		Train chineit of CCIsius
82	2.219	20.51
84	2.217	20.63
86	2.234	20.67

Site Name/ LocationProject Number				
Well Identification MW-\5 Inspection Date \1/22/\9 Inspector C	CM			
Measured Well Depth 87.37 Measuring Point 83 Depth to water 80	7.6			
VISUAL INSPECTION				
1) Is protective sleeve/cover in place and secure?	N N/A N N/A N N/A N N/A N N/A			
PHYSICAL INSPECTION				
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)) _{N N/A}			
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	N N/A			
Does bailer/pump travel freely to and from bottom of well?	N/A			
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A				
Does the bailer contain excessive amounts of silt or rust? Y	N/A			
Does water appear discolored or have an unusual odor or appearance?	N/A			
Is the lock on the well cover/cap clean and fully functional? Y N	N/A			
NOTES AND OBSERVATIONS: Shall disodoration due to small amount of Sill MINOT chips on top of cusing)			

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Date: 1122/19
Personnel: CR CM
Total Depth: 88,83
Start Time: \\52

Depth	Conductivity (Denote Us/cm or MS/cm) for each	Temperature
(record in two feet	(Denote Us/cm or MS/cm) for each	
intervals)	recording)	(Fahrenheit or Celsius
84	3.840	20.51
86	3.857	20.62
88	3.85Z 3.854	20.64

Site Name/ LocationProject Number	_				
Well Identification MW-20 Inspection Date 11/22/19 Inspector CF	CM				
Measured Well Depth 88.83 Measuring Point Depth to water_	81.	79			
VISUAL INSPECTION					
 Is protective sleeve/cover in place and secure? Are hinges, latches, or locks functional and in good condition? Is concrete pad in satisfactory condition? Is well name or other identification marked clearly on or near the well? Is well cap in place and in good condition? Is measuring point marked or readily recognized? 	Y Y Y Y Y	N N N N N	N/A N/A N/A N/A N/A		
7) Does well opening/stickup show signs of damage or deterioration?	Y	N	N/A		
PHYSICAL INSPECTION					
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	$\left(\mathbf{Y}\right)$	N	N/A		
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Ŷ	N	N/A		
Does bailer/pump travel freely to and from bottom of well?	N	N/A			
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A					
Does the bailer contain excessive amounts of silt or rust? Y N/A					
Does water appear discolored or have an unusual odor or appearance? N N/A					
Is the lock on the well cover/cap clean and fully functional?	N	N/A			
NOTES AND OBSERVATIONS: Styll dischoration due to Studl amon	nt (r s	1		

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Site Name:	PARAME GL Erwin	Date:	11/12/10
Well Identification	1: _MW-12	Personnel:	CF CM
Static Water Level	72,66	Total Depth:	77.49
Stop Time:	1308	Start Time:	1306

Depth (record in two feet	Conductivity (Denote Us/em or MS/cm)for each	Temperature
	(Denote Osyeni orlivis/cm) for each	(Fahrenheit or Celsius)
intervals)	recording)	(1 dill cimer of Celsius)
74	5. 871	20.67
76	5.871	20.74
`.		

Site Name/ Location GL Erwin Project Number	_		
Well Identification MW-12 Inspection Date 11/22/19 Inspector CF	, CM		
Measured Well Depth 77,49 Measuring Point 7 Depth to water_	72.	66	
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure? 2) Are hinges, latches, or locks functional and in good condition? 3) Is concrete pad in satisfactory condition?	Y Y Y	N N N	N/A N/A N/A
 4) Is well name or other identification marked clearly on or near the well? 5) Is well cap in place and in good condition? 6) Is measuring point marked or readily recognized? 7) Does well opening/stickup show signs of damage or deterioration? 	Y Y Y Y	N N N N	N/A N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	(\hat{Y})	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	(Y)	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	L
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	N 1	N/A	
Does the bailer contain excessive amounts of silt or rust?	R	N/A	L
Does water appear discolored or have an unusual odor or appearance?	N	N/A	L
Is the lock on the well cover/cap clean and fully functional?	N	N/A	L
OBSERVATIONS: 1/2 Stight discologation du la suplament	d ?	rd/r	

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Site Name:	rl Erwin	Date:	11/22/19
Well Identification:	MW-16	Personnel:	CF, CM
Static Water Level:	* 72,66	Total Depth:	77.49
Stop Time:	1308	Start Time:	1306

Depth	Conductivity (Denote Us/cm or (MS/cm) for each	Temperature
(record in two feet	(Denote Us/cm or MS/cm) for each	
intervals)	recording)	(Fahronhei t o Celsius
69	1.693	20.59
71	2.398	20.67
73	2.995	20.71

Site Name/ LocationProject Number		-		
Well Identification MW-16 Inspection Date 11/12/19 Inspector	Œ,	CM		
Measured Well Depth 74.41 Measuring Point 71 Depth to wa	ater	68.2	5	
VISUAL INSPECTION				
 Is protective sleeve/cover in place and secure? Are hinges, latches, or locks functional and in good condition? Is concrete pad in satisfactory condition? Is well name or other identification marked clearly on or near the well? Is well cap in place and in good condition? Is measuring point marked or readily recognized? Does well opening/stickup show signs of damage or deterioration? 		Y Y Y Y Y	N N N N N	N/A N/A N/A N/A N/A N/A
7) Does well opening/stickup show signs of damage or deterioration?	•••	· Δ	11	14/21
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	(y (i)	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	/	Y	N	N/A
Does bailer/pump travel freely to and from bottom of well?	Y	N	N/A	L
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	Y N	I N	[/ A	
Does the bailer contain excessive amounts of silt or rust?	Υĺ	N	N/A	L
Does water appear discolored or have an unusual odor or appearance?		N	N/A	
Is the lock on the well cover/cap clean and fully functional?	Y	N	N/A	
NOTES AND OBSERVATIONS: discoloration due to small amount	St à	all		
			_	

Date:	11/22/19
Personnel:	CFICIM
Total Depth:	76.94
Start Time:	1340
	Personnel: Total Depth:

	Depth (record in two feet	Conductivity (Denote Ba/cm or MS/cm for each	Temperature
	intervals)	recording)	(Fahrenheit or Celsius)
	HO	1.559	20.90
	72	1.893	20.86
	74	2.239	20.84
	26 76	2.245	20.83
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Site Name/ Location GL Erwin Project Number	-		
Well Identification MW-17 Inspection Date 11/22/19 Inspector CF	GM		
Measured Well Depth 76.94 Measuring Point 74 Depth to water_	69	.25	>
VISUAL INSPECTION			
 Is protective sleeve/cover in place and secure? Are hinges, latches, or locks functional and in good condition? Is concrete pad in satisfactory condition? Is well name or other identification marked clearly on or near the well? Is well cap in place and in good condition? 	Y Y Y Y	N N N N	N/A N/A N/A N/A
6) Is measuring point marked or readily recognized?	Y Y	N N	N/A N/A
PHYSICAL INSPECTION			
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	(Y)	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	(A)	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	L.
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N	1 N	N/A	
Does the bailer contain excessive amounts of silt or rust?	X	N/A	L
Does water appear discolored or have an unusual odor or appearance?	N	N/A	L
Is the lock on the well cover/cap clean and fully functional?	N	N/A	
NOTES AND OBSERVATIONS:			
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Site Name:	L Erwin	Date:	11/22/19
Well Identification:	MW-8	Personnel:	CECM
Static Water Level:	67.81	Total Depth:	73 1-7
Stop Time:	1405	Start Time:	1407

Danish		
Depth	Conductivity (Denote tas/em or MS/cm) or each	Temperature
(record in two feet	recording)	(Fahrenheit or Celsius)
intervals)	recording)	
68	2.115 2.650 3.388	20,29
70	2.650	20.40
72	3.388	20.40
-		
N		

Site Name/ LocationProject Number	
Well Identification MW-B Inspection Date 11219 Inspector CF CM	
Measured Well Depth 73,44 Measuring Point 70 Depth to water 67,8	
VISUAL INSPECTION	
2) Are hinges, latches, or locks functional and in good condition?	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	/A
Ooes water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	/A
Does bailer/pump travel freely to and from bottom of well? Y N N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N N/A	
Does the bailer contain excessive amounts of silt or rust? Y N/A	
Does water appear discolored or have an unusual odor or appearance? YN N/A	
s the lock on the well cover/cap clean and fully functional? Y N N/A	
DESERVATIONS: Shill discoloration due to presence d'Silt	=
	_
	_

Site Name:G_L_E	noin	Date:	11/22/19
Well Identification:	MW-11	Personnel:	CF.CM
Static Water Level:	74.93	Total Depth:	= 35%
Stop Time:	421	Start Time:	1420

Depth	Conductivity (Denote Us/cm of MS/cm for each	Temperature
(record in two feet	(Denote Os/cm or MS/cm for each	(Fahrenheit or Celsius
intervals)	recording)	(Familien or Ceisius
75	7. 65	20.22

Site Name/ Location Project Number			
Well Identification MW-II Inspection Date 1/22/9 Inspector CC	, cm		
Measured Well Depth 75.6 Measuring Point 75 Depth to water_	74	.93	_
VISUAL INSPECTION			
1) Is protective sleeve/cover in place and secure?	Y	N	N/A
2) Are hinges, latches, or locks functional and in good condition?	Y	N	N/A
3) Is concrete pad in satisfactory condition?	Y	N	N/A
4) Is well name or other identification marked clearly on or near the well?	Y	N	N/A
5) Is well cap in place and in good condition?	Y	N	N/A
6) Is measuring point marked or readily recognized?	Y	N	N/A
7) Does well opening/stickup show signs of damage or deterioration?	Y	N	N/A
PHYSICAL INSPECTION	200		
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	Y	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	y	N	N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A	
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y	J 1	N/A	
Does the bailer contain excessive amounts of silt or rust?		N/A	
Does water appear discolored or have an unusual odor or appearance? Y	$\binom{N}{}$	N/A	
Is the lock on the well cover/cap clean and fully functional?	N	N/A	
NOTES AND			
OBSERVATIONS:			
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Date:	11/22/19
Personnel:	CF. CM
Total Depth:	94.30
Start Time:	1446
	Personnel: Total Depth:

Depth (record in two feet	Conductivity (Denote Listen or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
පීර	7.259	20.70
82	7.247	20.81
84	7.246	20.85
86	7.242	20.86
88	7,244	20.86
90	7.248	20.86
92	7.248	20.85
94	7.240	20.85
j		
*		

Site Name/Location GL Erwin Project Number	
Well Identification MW - 25 Inspection Date 11/22/19 Inspector CF, C	М
Measured Well Depth 94.30 Measuring Point 91 Depth to water 7	8.50
VISUAL INSPECTION	
1) Is protective sleeve/cover in place and secure? Y 2) Are hinges, latches, or locks functional and in good condition? Y 3) Is concrete pad in satisfactory condition? Y	N N/A
4) Is well name or other identification marked clearly on or near the well?	N N/A N N/A
6) Is measuring point marked or readily recognized? Y 7) Does well opening/stickup show signs of damage or deterioration? Y	
PHYSICAL INSPECTION	
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)) N N/A
Does bailer/pump travel freely to and from bottom of well? Y N	N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N	N/A
Does the bailer contain excessive amounts of silt or rust? Y	N/A
Does water appear discolored or have an unusual odor or appearance?	N/A
Is the lock on the well cover/cap clean and fully functional?	N/A
NOTES AND OBSERVATIONS:	

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W	Date:	11/22/19
MW-31	Personnel:	CF, CM
80.33	Total Depth:	82.75
1504	Start Time:	1504
		Personnel: 30,33 Total Depth:

Depth (record in two feet	Conductivity (Denote Us/e m of MS/cm for each recording)	Temperature
intervals)	recording)	(Fahrenhei t or Celsius)
81	2.355	20.83

Site Name/ Location GL FOUN Project Number		
Well Identification MW-B Inspection Date 11/22/19 Inspector C	CM	
Measured Well Depth 82.75 Measuring Point 9 Depth to water	30.3	3
VISUAL INSPECTION		
 Is protective sleeve/cover in place and secure? Are hinges, latches, or locks functional and in good condition? Is concrete pad in satisfactory condition? Is well name or other identification marked clearly on or near the well? 	Y Y	N N/A N N/A N N/A N N/A
 5) Is well cap in place and in good condition?	Y	N N/A N N/A N N/A
PHYSICAL INSPECTION		
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	Y) :	N N/A
Does bailer/pump travel freely to and from bottom of well?	N	N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well? Y N	1 N	// A
Does the bailer contain excessive amounts of silt or rust?	W	N/A
Does water appear discolored or have an unusual odor or appearance?	N	N/A
Is the lock on the well cover/cap clean and fully functional?	N	N/A
NOTES AND OBSERVATIONS: Styly discoloration due to small amount	of s	Sill.

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Site Name:	Ecwin	Date:	11/22/19
Well Identification:	WW-1 lof 2	Personnel:	CF, CM
Static Water Level:	69.78	Total Depth:	187.80
Stop Time:	1610	Start Time:	1526

Depth (record in two feet	Conductivity (Denote Us/cm or MS/cm for each	Temperature
intervals)	recording)	(Fahrenheit or Celsius)
70	1.510	20.34
72	1.509	11
74	11	20.35
76	1)	11
78	11	20.36
80	1.508	11
82	11	20.37
84	11	11
36	11	17
88	11	20.39
00	и	11
92	н	20.40
94	D	11
96	tı	1/
98	p	20,42
100	n.	20.43
02	D	20-44
104	11	20.45
106	11	1/
108	н	11
110	D	20.46
112	11	20.47
114	17	n
116	11	20.48
118	II.	20.49
-120	1.509	20.50
122	1.508	U
124	tt	20.51
126	1.509	20.52
12.8	И	11
130	į l	20.53
132	i l	20154
134	₹1	20.55
136	u	20.56
136	i i	20.57

Site Name/ Location GL From Project Number				
Well Identification WW - \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	CE	, cr	1	
Measured Well Depth 87.80 Measuring Point 178 Depth to wa	ater_	69	78	
VISUAL INSPECTION				
 Is protective sleeve/cover in place and secure? Are hinges, latches, or locks functional and in good condition? Is concrete pad in satisfactory condition? Is well name or other identification marked clearly on or near the well? Is well cap in place and in good condition? Is measuring point marked or readily recognized? Does well opening/stickup show signs of damage or deterioration? 	••••	Y Y Y Y Y Y	N N N N N N	N/A N/A N/A N/A N/A N/A
PHYSICAL INSPECTION				
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)	(y)	N	N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	1	Y	N	N/A
Does bailer/pump travel freely to and from bottom of well?	Y	N	N/A	\
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	Y N	I I	N/A	
Does the bailer contain excessive amounts of silt or rust?	Y	(N)	N/A	
Does water appear discolored or have an unusual odor or appearance?	(3)	N	N/A	
Is the lock on the well cover/cap clean and fully functional?	Y	N	N/A	
NOTES AND OBSERVATIONS: Sight discoverion due to presence of a	Spu	U o	ME	mt d
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Site Name:	Erwin		Date:	11/22/19
Well Identification:	_ WW-1 cont.	20/2	Personnel:	CRIM
Static Water Level:	69.78		Total Depth:	187.80
Stop Time:	1610		Start Time:	1526

Depth (record in two feet intervals)	Conductivity (Denote U s/cm or MS/cm for each recording)	Temperature (Fahrenheit or Celsius
140	1.509	20.57
142	ä	20.58
144	и	20.59
146	ıí	20.60
148	30"	1/
150	U	20,61
152	1¢	()
154	ct	20.62
156	tt .	20.63
158	ξι	20.64
160	ı'	11
162	и	20.65
164	tl.	20.66
166		11
168	fi	20.67
170	tl	11
172	(!	20.68
174	13	11
176	£1	20.69
178	1	20.70
180	ll	11
182	1.499	20.71
184	1.498	20.71
86	1(20,71
		ω, τι

Site Name/ Location Project Number Project Number		
Well Identification WW-1 sat. 2012 Inspection Date 11/22/19 Inspection	or CF, C	M
Measured Well Depth 187.80 Measuring Point 176 Depth to	water 69	1.78
VISUAL INSPECTION		
1) Is protective sleeve/cover in place and secure?	Y Y Y Y Y	N N/A N N/A N N/A N N/A N N/A N N/A N N/A N N/A
PHYSICAL INSPECTION		
Does water-level indicator/measuring device travel freely down well casing? (Enter depth to water in the space provided above.)		N N/A
Does water-level indicator/measuring device travel to bottom of well? (Total depth may be found on drilling logs, well completion diagrams, or previous well inspection forms. Enter total depth in the space provided above.)	(k)	N N/A
Does bailer/pump travel freely to and from bottom of well?	Y N	N/A
Upon removal from well, does bailer show evidence of damage (gouges, cuts, scrapes) suggestive of well damage from foreign objects in the well?	Y N	N/A
Does the bailer contain excessive amounts of silt or rust?	Y (N) N/A
Does water appear discolored or have an unusual odor or appearance?	(Y N	N/A
Is the lock on the well cover/cap clean and fully functional?	Y N	N/A
NOTES AND OBSERVATIONS: Slight divoloration due to Small	agrand	r d sur

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Z:\Houston-TX\ENV\ChevronTexaco TX8\HES Transfer\04 Field Investigations\2019\1 - Field Prep\Work Request Packages\November 2019 Groundwater monitoring Q4 and Semi-annual\Owen, Cooper and Erwin\Cooper Jal\Forms\Well Inspection Forms.doc

APPENDIX C

Cumulative Summary of Groundwater Analytical Results

Cumulative Summary of Groundwater Analytical Results Chevron Environmental Management Company G.L. Erwin "A B" Federal NCT-2 Tank Battery Lea County, New Mexico



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1.000	NA	NA
MW-1	2/17/1998	<2.00	220.0	233			92					812	276.00	
	2/7/2001	<1.00	136.0	440	2.10	2.80	70	16	55.80	11.40	115.0	1,200		
	5/3/2002	<1.00	144.0	428	1.60	3.06	73	103	38.70	8.68	105.0			<1.00
	10/11/2002	<0.10	155.0	230			109	69	24.80	7.45	125.0	737		<0.10
	12/27/2002	<0.10	149.0	248			109	77	27.40	5.16	129.0	728		<0.10
	2/18/2003	<0.10	147.0	213			114	59	21.40	5.06	116.0	713		<0.10
	6/2/2003	<1.00	132.0	434	1.77	2.99	73	135	47.80	8.62	118.0	1,320		<1.00
	8/25/2003	<1.00	144.0	279	1.76	3.39	73	93	31.30	7.17	118.0	856		<1.00
	11/5/2003	<1.00	162.0	330	1.94	3.42	79	110	37.70	9.03	114.0	994		<1.00
	2/4/2004	<1.00	142.0	390	1.92	3.25	71	117	43.20	10.20	113.0	940		<1.00
	5/6/2004	<1.00	260.0	403	1.90	4.80	135	60	18.30	8.93	302.0	1,316		<1.00
	8/3/2004	<0.10	155.0	222			83	64	30.80	6.41	127.0	431		<0.10
Dup	8/3/2004	<0.10	158.0	301			104	101	45.50	672.00	436.0	605		<0.10
	2/11/2005	<1.00	146.0	289	2.68	4.30	79	98	33.50	8.18	108.0	840		<1.00
	8/5/2005	<1.00	156.0	245	2.08	4.34	90	76	26.70	6.99	125.0	856		<1.00
	2/22/2006	<10.00	160.0	180	1.60	3.50	83	56	18.70	5.19	104.0	707		<10.00
Dup	2/22/2006	<10.00	170.0	160	1.60	3.50	85	58	20.00	5.23	102.0	840		<10.00
	8/24/2006	<10.00	300.0	180	<2.5	3.11	81	57	19.30	4.36	107.0	660		<10.00
	2/28/2007	<10.00	170.0	170	1.80	3.60	81	55	18.20	<5.0	103.0	650		<10.00
	8/23/2007	<10.00	138.0	420	1.40	2.80	76	102	34.80	5.37	101.0	1,810		138.00
	2/20/2008	<5.00	166.0	300	1.90	2.92	82	111	39.70	7.34	104.0	860		<5.00
	8/12/2008	<1.53	212.0	217	1.48	3.06	80	58	19.50	5.20	114.0	692		<1.53
	2/19/2009	<5.00	160.0	150	2.00	3.00	84	55	19.00	5.30	120.0	610		<5.00
	7/29/2009	<5.00	79.0	150	0.95	1.40	41	67	24.00	5.90	110.0	500		<5.00
	2/25/2010	<5.00	172.0	167	1.79	3.23	83	58	21.20	4.28	105.0	684		<5.00
Dup	2/25/2010	<5.00	192.0	157	1.68	<0.100	84	53	17.60	4.34	103.0	544		<5.10
Zup	7/28/2010	<5.00	168.0	147	1.88	2.56	85	51	17.10	3.82	91.6	564		<5.00
	2/16/2011	<2.00	165.0	149	1.74	3.12	82	58	18.70	3.98	94.4	510		<2.00
Dup	2/16/2011	<2.00	145.0	155	1.74	3.25	82	55	17.90	4.02	91.9	604		<2.00
Zup	8/18/2011	<5.00	167.0	127	1.76	3.34	83	51	17.20	2.80	91.4	490		<5.00
	2/22/2012	<5.00	153.0	385	1.61	2.70	68	96	33.50	5.12	96.5	1,280		<5.00
	8/29/2012	<10.00	149.0	456	1.60	1.48	67	130	44.30	5.61	90.5	1,340		<10.0
	2/21/2013	<6.00	141.0	452	1.17	2.24	70	139	45.60	6.39	104.0	1,300		<6.00
Dup	2/21/2013	<6.00	141.0	454	1.18	2.26	71	141	44.40	6.30	101.0	1,170		<6.00
Zup	8/14/2013	<6.00	140.0	490	1.47	2.33	67	158	53.20	7.07	112.0	1,590		<6.00
	4/3/2014	<10.00	182.0	498	1.30	1.73	67	139	48.20	6.33	103.0	1,160		<10.00
	10/9/2014	<4.00	168.0	213 J	1.10	2.89 J	80	85.7 J	29.2 J	5.18	105.0	554		<4.00
	10/9/2014	<4.00	146.0	427 J	0.92	2.23 J	73	148 J	50.1 J	6.73	107.0	559		<4.00
	6/25/2015			420	<2.00		72					1,230		
	10/6/2015			209	<4.00		81					623		
	6/22/2016			403	1.27		64					1,240		
	10/06/2016			449	1.35		79					1,240		
	05/23/2017			366	1.16		65					1,140		
	10/12/2017			378	1.22		67					902		
	5/9/2018			374	1.29		68					906		
	10/9/2018			419	1.41		74					870		
	6/19/2019			412	1.41							1,340		
	11/25/2019			470	1.42		90					1,200		

Appendix C Cumulative Summary of Groundwater Analytical Results Chevron Environmental Management Company G.L. Erwin "A B" Federal NCT-2 Tank Battery Lea County, New Mexico



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA.	NA	NA	1.000	NA	NA
MW-2	2/17/1998	<2.00	360.0	423			141					1,257	124.00	
	2/7/2001	<1.00	234.0	570	2.70	5.00	130	124	40.70	10.90	359.0	1,500		
	5/3/2002	<1.00	262.0	349	2.28	5.36	148	21	6.18	8.52	315.0			<1.00
	10/11/2002	<10.00	250.0	337			176	18	4.92	7.49	329.0	1,120		<0.10
	12/27/2002	<12.00	238.0	319			142	18	5.16	6.10	339.0	1,110		<0.10
	2/18/2003	<0.10	228.0	310			178	19	6.02	6.30	331.0	1,070		<0.10
	6/2/2003	<1.00	206.0	769	2.05	4.43	115	176	52.60	9.94	383.0	1,955		<1.00
	8/25/2003	<1.00	242.0	374	2.07	5.14	142	36	10.80	8.49	333.0	1,240		<1.00
	11/5/2003	<1.00	232.0	498	2.21	5.13	145	69	21.10	10.10	327.0	1,354		<1.00
	2/4/2004	<1.00	230.0	450	2.06	4.97	131	76	25.20	10.70	324.0	1,424		<1.00
	5/6/2004	<1.00	150.0	341	1.79	3.23	75	108	38.50	8.38	102.0	984		<1.00
	8/3/2004	<0.10	236.0	496			144	51	34.70	11.00	472.0	811		<0.10
	2/11/2005	<1.00	220.0	604	2.79	5.48	130	103	34.50	11.30	324.0	1,462		<1.00
	8/5/2005	<1.00	228.0	404	2.24	5.70	154	35	10.30	10.70	341.0	1,120		<1.00
	2/22/2006	<10.00	250.0	320	1.70	5.10	150	20	5.84	6.15	259.0	1,150		<10.00
	8/24/2006	<10.00	250.0	290	<2.5	3.78	140	26	7.70	4.23	298.0	1,610		<10.00
	2/28/2007	<10.00	260.0	280	2.10	5.40	140	21	6.01	6.74	278.0	950		<10.00
	8/23/2007	<10.00	226.0	290	1.70	5.30	140	19	5.60	<5	303.0	1,280		226.00
	2/20/2008	<5.00	223.0	441	1.94	5.11	143	242	83.20	11.80	329.0	1,190		<5.00
	8/12/2008	<1.53	287.0	331	1.54	5.39	144	21	5.84	6.53	308.0	1,080		<1.53
	2/19/2009	<5.00	240.0	310	1.80	5.30	160	21	6.10	7.20	350.0	1,100		<5.00
	7/29/2009	<5.00	200.0	730	1.50	4.60	130	16	4.60	3.10	160.0	1,900		<5.00
	2/25/2010	<5.00	255.0	380	1.39	5.78	157	27	8.51	4.72	333.0	1,130		<5.00
	7/28/2010	<5.00	275.0	273	1.58	4.68	167	21	5.56	4.29	354.0	1,010		<5.00
	2/16/2011	<2.00	250.0	305	1.26	5.30	154	48	13.90	5.08	276.0	1,050		<2.00
D	8/18/2011 8/18/2011	<5.00 <5.00	251.0	259 255	1.52	5.56	158	25	6.98	3.48	263.0	1,090		<5.00 <5.00
Dup	2/22/2012	<5.00 <5.00	272.0 203.0	255 857	1.38	5.76 4.61	135 111	21	5.36 5.96	4.08 4.42	276.0 251.0	1,090 2.340		<5.00 <5.00
	8/29/2012	<5.00 <10.00	203.0 165.0	1.180	1.30	2.19	84	23 335	105.00	4.42 8.09	251.0	3,340		<5.00 <10.00
	2/21/2013	<6.00	185.0	934	0.99	4.48	106	238	72.80	7.31	282.0	2,260		<6.00
	8/14/2013	<6.00	177.0	1,140	1.36	4.48	113	292	105.00	8.41	264.0	2,780		<6.00
	4/3/2014	<10.00	277.0	548	1.18	4.29	148	57	18.60	5.42	297.0	132		<10.00
	10/9/2014	<4.00	260.0	220	0.81	5.96 J	173	32	8.90	5.75	274.0	939		<4.00
	6/25/2015		200.0	204	<2.00	3.90 3	155			3.73	274.0	863		
	10/6/2015			217	<8.00		159					952		
	6/22/2016			998	0.83		74					2,590		
	10/06/2016			778	1.21		117					1.970		
	05/23/2017			264	0.92		144					1,130		
	10/12/2017			289	1.01		139					1,270		
	5/9/2018			418	1.07		135					1,210		
	10/9/2018			401	0.95		144					1,100		
Dup	10/9/2018			556	0.94		131					1,220		
Dup	6/19/2019			726	0.54							1,910		
	11/25/2019			525	1.17		210					1,210		

Cumulative Summary of Groundwater Analytical Results Chevron Environmental Management Company G.L. Erwin "A B" Federal NCT-2 Tank Battery Lea County, New Mexico



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-3	2/17/1998	<2.00	410.0	983			173					2,261	232	
	2/7/2001	<8.00	278.0	890	3.40	7.30	200	57	18.70	20.40	648.0	2,100		
	5/2/2002	<1.00	298.0	735	2.84	7.57	213	28	8.39	24.70	42.8			<1.00
	5/3/2002	<1.00	146.0	767	2.90	7.39	207	38	11.50	25.50	28.2			<1.00
	10/11/2002	<0.10	288.0	753			272	29	9.18	20.60	622.0	1,960		<0.10
	12/27/2002	<0.10	288.0	727			231	27	7.34	19.90	698.0	1,950		<0.10
	2/18/2003	<0.10	277.0	762			180	25	7.84	16.40	580.0	1,950		<0.10
	6/2/2003	<1.00	270.0	802	3.07	8.06	203	65	20.00	18.50	728.0	2,720		<1.00
	8/26/2003	<1.00	282.0	799	3.00	7.99	198	55	18.00	16.40	597.0	2,320		<1.00
	11/6/2003	<1.00	286.0	746	2.92	7.26	214	37	11.10	24.90	577.0	2,092		<1.00
Dup	11/6/2003	<1.00	132.0	521	1.85	2.92	98	120	39.50	9.15	200.0	1,392		<1.00
	2/4/2004	<1.00	296.0	755	2.74	7.36	205	43	13.10	27.10	546.0	2,275		<1.00
	5/7/2004	<1.00	300.0	774	2.57	7.02	197	39	11.20	22.20	528.0	2,140		<1.00
	8/3/2004	<0.10	291.0	798			155	22	16.70	25.80	794.0	1,640		<0.10
	2/11/2005	<1.00	292.0	879	4.61	9.47	196	47	14.50	19.10	590.0	2,240		<1.00
	8/4/2005	<1.00	282.0	922	2.86	8.17	217	48	14.70	21.10	630.0	1,950		<1.00
	2/22/2006	<10.00	250.0	1,100	1.60	8.50	190	47	15.30	15.10	446.0	3,860		<10.00
	8/24/2006	<10.00	260.0	750	2.60	6.43	190	25	7.68	11.90	565.0	1,990		<10.00
	2/28/2007	<10.00	270.0	850	2.20	8.50	190	31	9.02	18.00	516.0	1,800		<10.00
	8/23/2007	<10.00	204.0	1,000	1.50	9.50	190	228	80.00	<50	673.0	2,330		204.00
	2/20/2008	<5.00	246.0	1,070	3.18	8.38	222	80	26.20	19.10	721.0	2,480		<5.00
	8/13/2008	<5.00	222.0	1,180	2.59	8.27	210	47	14.30	17.50	896.0	2,700		<5.00
	2/19/2009	<5.00	220.0	1.300	2.00	7.80	220	50	16.00	20.00	920.0	2.800		<5.00
	7/29/2009	<5.00	190.0	1,600	1.60	7.60	210	140	47.00	26.00	770.0	3,400		<5.00
	2/24/2010	<5.00	237.0	1,380	1.49	8.81	248	65	17.50	15.10	938.0	2,670		<5.00
	7/28/2010	<5.00	221.0	1,230	1.68	7.12	259	85	24.60	14.10	857.0	2,680		<5.00
	2/16/2011	<2.00	238.0	1,300	1.40	8.97	1,290	135	41.30	14.40	746.0	2,430		<2.00
	8/18/2011	<5.00	227.0	1,250	1.42	9.18	887	76	23.20	11.20	700.0	2,750		<5.00
	2/22/2012	<5.00	235.0	1,260	1.40	7.39	252	104	32.60	13.20	809.0	2,800		<5.00
Dup	2/22/2012	<5.00	230.0	1,470	1.53	8.75	224	132	39.20	13.40	770.0	2,940		<5.00
	8/29/2012	<10.00	283.0	1,200	1.72	6.42	271	56	16.40	13.10	745.0	2,600		<10.00
	2/21/2013	<6.00	252.0	1.100	1.26	8.87	261	131	40.20	13.40	770.0	2,500		<6.00
	8/14/2013	<6.00	275.0	1,330	1.40	7.59	309	254	87.90	12.30	925.0	2,890		<6.00
	4/3/2014	<10.00	356.0	839	1.52	9.26	346	45	12.70	15.30	665.0	2,280		<10.00
	10/9/2014	<4.00	291.0	961	0.75	7.36 J	300	106	32.80	16.00	671.0	3,400		<4.00
	6/25/2015			568	<2.00		282					2,020		
	10/6/2015			518	<20.0		290					1,710 J		
Dup	10/6/2015			575	<20.0		291					1,690 J		
	6/23/2016			1,560	1.31		178					4,580		
	10/06/2016			846	1.44		273					1,980		
	05/23/2017			456	1.21		242					1,500		
	10/12/2017			615	1.21		223					1,550		
	5/9/2018			533	1.45		214					1,660		
	10/9/2018			586	1.06		224					1,510		
	6/19/2019			521								1,250		
	11/25/2019			486	3.43		202					1,540		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA.	NA	NA	1.000	NA	NA
MW-4	2/17/1998	<2.00	510.0	372			136					1,268		
	2/7/2001	<1.00	286.0	1,200	1.70	4.70	100	248	84.70	24.00	506.0	2,600		
	5/3/2002	<1.00	250.0	868	1.00	4.72	163	137	48.40	40.70	441.0			<1.00
	10/14/2002	<0.10	342.0	381			124	9	2.48	38.40	405.0	1,220		<0.10
Dup	10/14/2002	<0.10	358.0	372			116	9	2.38	37.40	409.0	1,260	-	<0.10
	12/27/2002	<0.10	288.0	505			114	21	4.42	50.60	461.0	1,450	-	<0.10
Dup	12/27/2002	<0.10	158.0	115			139	56	23.00	4.94	94.4	594		<0.10
	2/18/2003	<0.10	264.0	691			118	32	7.50	59.00	474.0	1,610		<0.10
	5/30/2003	<1.00	236.0	1,020	<2.0	5.53	796	113	29.70	59.80	664.0	2,670		<1.00
	8/25/2003	<1.00	192.0	1,170	<2.0	5.43	73	143	35.00	82.10	616.0	2,935	-	<1.00
	11/7/2003	<1.00	194.0	1,620	<2.0	5.48	77	228	61.40	83.60	629.0	3,035		<1.00
	2/5/2004	<1.00	170.0	1,730	<2.0	5.93	79	277	75.90	108.00	630.0	3,380		<1.00
	5/6/2004	<1.00	158.0	2,150	<3.0	5.94	88	407	99.90	99.70	593.0	4,090		<1.00
	8/3/2004	<0.10	150.0	2,730			125	632	191.00	124.00	832.0	6,810		<0.10
	2/11/2005	<1.00	136.0	4,520	<1.0	5.19	127	1,060	289.00	156.00	983.0	9,030		<1.00
	8/4/2005	<1.00	132.0	6,580	<1.0	5.34	166	1,650	375.00	142.00	1,440.0	13,200		<1.00
	2/23/2006	<10.00	130.0	9,100	<2.5	10.00	220	1,510	326.00	141.00	1,070.0	17,900		<10.00
	8/25/2006	<10.00	140.0	12,000	<5	6.13	290	1,550	364.00	136.00	1,890.0	17,500	-	<10.00
	2/28/2007	<10.00	170.0	10,000	<250	<200	<2000	1,550	310.00	160.00	1,520.0	21,800		<10.00
	8/21/2007	<10.00	167.0	10,000	0.30	9.00	490	1,630	443.00	112.00	3,080.0	26,000		167.00
	2/20/2008	<5.00	210.0	8,220	1.33B	6.05	587	1,200	372.00	143.00	3,160.0	18,200		<5.00
	8/13/2008	<5.00	263.0	6,270	<1.5	6.64	607	770	209.00	97.30	2,510.0	15,100		<5.00
	2/19/2009	<5.00	300.0	4,900	<0.5	5.60	620	580	160.00	72.00	2,200.0	11,000		<5.00
	7/29/2009	<5.00	320.0	3,700	<0.5	6.40	580	380	110.00	63.00	1,800.0	8,400		<5.00
	2/25/2010	<5.00	338.0	3,590	0.23	5.94	478	378	107.00	40.00	1,830.0	7,940		<5.00
	7/28/2010	<5.00	283.0	3,840	0.45	4.00	419	273	62.80	30.40	1,840.0	8,820		<5.00
	2/16/2011	<2.00	337.0	2,480	0.54	4.08	1,240	179	53.60	30.60	1,300.0	5,840		<2.00
	8/18/2011	<5.00	358.0	2,530	0.68	5.39	479	156	41.40	23.90	1,240.0	4,870		<5.00
	2/22/2012	<5.00	292.0	3,250	0.72	5.30	220	656	204.00	27.80	1,180.0	8,100		<5.00
	8/28/2012	<5.00	227.0	3,860	0.54	3.06	315	880	263.00	27.80	1,050.0	9,420		<5.00
	2/21/2013	<6.00	303.0	2,450	0.58	5.53	331	761	228.00	27.50	1,070.0	5,170		<6.00
	8/14/2013	<6.00	257.0	3,420	0.66	3.83	324	711	231.00	28.00	1,160.0	6,500		<6.00
	4/3/2014	<10.00	380.0	2,010	<0.5	3.83	353	185	52.00	23.30	1,140.0	3,360		<10.00
	10/9/2014	<4.00	259.0	2,330	0.29	3.71 J	312	420	130.00	26.70	1,020.0	5,870		<4.00
	6/25/2015			1,870	<2.00		451					4,100		
	10/6/2015			2,760	<80.0		330					7,120 J		
	6/23/2016			3,030	0.65		221					7,460		
	10/06/2016			3,050	0.59		270					5,860		
	05/23/2017			2,180	0.59		343					5,570		
	10/13/2017			2,120	0.61		367					4,320		
	5/9/2018			2,440	0.39		322					4,460		
	10/9/2018			2,550	7.26		400					3,970		
	6/19/2019			2,550								6,390		
	11/24/2019			1,180	4.85		251					2,090		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-5	2/17/1998	<2.00	360.0	408			151					1,219	116.00	
	2/7/2001	<1.00	214.0	570	1.60	4.80	140	123	40.80	20.30	331.0	1,500		
	5/3/2002	<1.00	238.0	335	0.96	5.36	162	37	11.10	27.30	287.0			<1.00
	10/11/2002	<0.10	232.0	337			173	32	10.00	20.70	305.0	1,100		<0.10
	12/27/2002	<0.10	232.0	337			171	31	8.55	20.60	319.0	1,210		<0.10
	2/18/2003	<0.10	210.0	319			176	27	8.48	16.50	231.0	1,110		<0.10
	6/2/2003	<1.00	196.0	588	1.23	4.86	142	132	40.50	21.20	364.0	1,644		<0.10
	8/26/2003	<1.00	210.0	447	1.32	4.85	141	95	29.00	23.40	291.0	1,480		<1.00
	11/6/2003	<1.00	214.0	456	1.43	5.11	152	94	29.30	24.80	282.0	1,430		<1.00
	2/4/2004	<1.00	206.0	504	1.38	5.31	147	95	31.40	27.30	289.0	1,410		<1.00
	5/7/2004	<1.00	222.0	381	1.02	5.98	151	56	16.30	25.70	301.0	1,250		<1.00
Dup	5/7/2004	<1.00	242.0	330	1.04	5.75	152	51	14.60	27.40	292.0	1,168		<1.00
	8/3/2004	<0.10	229.0	461			155	48	31.30	31.10	435.0	968		<0.10
	2/11/2005	<1.00	288.0	408	2.58	8.36	243	46	13.30	30.60	433.0	1,598		<1.00
	8/4/2005	<1.00	256.0	423	1.83	6.82	201	61	18.60	20.30	354.0	1,334		<1.00
Dup	8/4/2005	<1.00	242.0	394	1.82	6.74	200	49	14.80	21.50	341.0	1,220		<1.00
	2/22/2006	<10.00	220.0	800	1.30	6.60	160	222	69.40	14.00	274.0	2,670		<10.00
	8/24/2006	<10.00	190.0	930	<5	5.09	140	145	47.60	13.10	295.0	1,280		<10.10
	2/28/2007	<10.00	300.0	730	3.50	5.20	340	37	10.60	18.40	301.0	1,310		<10.20
	8/23/2007	<10.00	115.0	360	1.80	5.20	170	50	18.40	16.40	291.0	2,500		<10.30
	2/20/2008	<5.00	255.0	505	2.90	5.61	168	127	42.10	19.60	353.0	1,500		<10.40
	8/13/2008	<5.00	220.0	438	1.77	6.20	191	63	19.30	23.90	362.0	1,300		<10.50
	2/19/2009	<5.00	220.0	390	1.60	6.20	200	63	19.00	25.00	310.0	1,200		<10.60
	7/29/2009	<5.00	210.0	490	1.40	6.20	200	110	35.00	23.00	280.0	1,500		<10.70
	2/25/2010	<5.00	223.0	326	1.02	6.27	195	58	19.00	16.50	232.0	1,120		<10.80
	7/28/2010	<5.00	235.0 233.0	272 283	1.15	4.61	189 192	51	14.60 19.20	13.80	257.0 269.0	1,130		<10.90
Dup	7/28/2010	<5.00			1.11	5.17		61		16.70		1,180		<10.10
	2/16/2011	<2.00	206.0 224.0	272 325	1.12 1.22	5.87 <0.0300	413 175	65 59	18.80 17.60	14.90	240.0 233.0	1,010		<2.00
	8/18/2011 2/22/2012	<5.00 <5.00	174.0	1,140	0.86	4.06	95	55	16.00	13.20 14.90	272.0	1,160 3,330		<5.00 <5.00
	8/29/2012	<10.00	186.0	1,140	1.04	2.92	94	319	102.00	7.45	246.0	3,640		<10.00
	2/21/2013	<6.00	159.0	1,350	0.76	3.99	101	224	69.20	10.50	339.0	3,110		<6.00
	8/14/2013	<6.00	161.0	1,350	1.01	3.57	102	370	125.00	9.47	281.0	3,780		<6.00
	4/3/2014	<10.00	263.0	627	1.33	5.91	165	172	56.60	11.70	296.0	1,460		<10.00
	10/9/2014	<4.00	185.0	957	0.57	3.99 J	124	263	84.80	11.10	344.0	3.750		<4.00
	6/25/2015			801	<2.00	3.99 3	176				344.0	2.160		
	10/6/2015			480	<8.00		153					1,370 J		
	6/23/2016			1.090	0.71		94					3,340		
	10/06/2016			1,050	0.89		105					2.880		
Dup	10/06/2016			1,220	0.94		103					3.080		
Dup	05/23/2017			899	0.68		120					2,810		
	10/12/2017			1,080	0.71		95					1,900		
	5/9/2018			1,110	0.83		104					2,140		
	10/10/2018			863	0.84		149					1,670		
	6/19/2019			464								1,360		
	11/24/2019			289	1.77		193					1,120		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-6	2/7/2001	<1.00	200.0	1,800	3.30	5.40	140	323	108.00	18.80	657.0	3,800	-	
	5/2/2002	<1.00	264.0	503	3.68	7.04	183	25	7.29	17.40	475.0			<1.00
	10/14/2002	<0.10	262.0	620			206	19	5.34	17.50	556.0	1,670		<0.10
	12/27/2002	<36.00	218.0	620			192	21	6.08	13.60	584.0	1,650		<0.10
	2/18/2003	<16.00	238.0	638			298	22	6.43	11.80	524.0	1,700		<0.10
	6/2/2003	<1.00	244.0	772	3.24	6.62	181	69	23.30	14.40	614.0	2,040		<1.00
	8/26/2003	<1.00	246.0	607	2.95	6.65	179	36	11.60	12.20	525.0	2,370		<1.00
	11/6/2003	<1.00	250.0	649	3.28	6.89	191	46	13.90	18.10	503.0	1,932		<1.00
	2/4/2004	<1.00	266.0	713	3.15	7.20	189	49	15.40	19.90	517.0	2,210		<1.00
	5/7/2004	<1.00	266.0	696	2.92	6.74	182	55	16.10	16.00	503.0	2,095		<1.00
	8/3/2004	<0.10	260.0	718			240	23	21.70	21.70	825.0	1,430		<0.10
	2/11/2005	<1.00	270.0	660	3.76	7.84	192	30	9.13	19.50	531.0	1,774		<1.00
	8/4/2005	<1.00	268.0	764	3.16	7.83	206	57	18.80	15.30	576.0	1,650		<1.00
	2/22/2006	<10.00	270.0	610	2.40	7.90	180	24	7.41	10.90	380.0	1,570		<10.00
	8/24/2006	<10.00	260.0	590	3.00	5.96	170	108	35.00	9.38	448.0	1,880		<10.00
	2/28/2007	<10.00	280.0	530	3.00	7.80	170	21	6.14	12.80	397.0	1,550		<10.00
	8/23/2007	<10.00	265.0	1,100	2.30	7.60	150	30	11.70	8.35	440.0	3,970		265.00
	2/20/2008	<5.00	227.0	799	3.05	7.43	163	181	62.40	15.70	492.0	1,930		<5.00
	8/13/2008	<5.00	238.0	563	2.56	7.83	176	23	6.57	14.40	558.0	1,640		<5.00
	2/19/2009	<5.00	370.0	1,200	2.00	6.10	150	140	47.00	16.00	590.0	3,200		<6.00
	7/29/2009	<5.00	210.0	1,200	2.10	7.00	160	37	11.00	16.00	550.0	2,700		<5.00
	2/24/2010	<5.00	243.0	780	2.07	7.89	193	40	10.60	9.02	558.0	1,910		<5.00
	7/28/2010	<5.00	247.0	702	2.23	8.99	204	31	8.93	10.30	591.0	1,740		<5.00
	2/16/2011	<2.00	214.0	768	1.56	6.36	385	31	8.32	9.81	539.0	1,800		<2.00
	8/18/2011	<5.00	243.0	657	2.00	8.73	205	81	25.20	7.68	492.0	1,830		<5.00
	2/22/2012	<5.00	273.0	685	2.28	9.03	228	86	27.70	8.62	504.0	1,810		<5.00
	8/29/2012	<10.00	315.0	849	2.20	5.30	207	91	27.30	7.54	498.0	1,930		<10.00
	2/21/2013	<6.00	253.0	812	1.71	8.30	221	26	7.77	8.68	496.0	1,900		<6.00
	8/14/2013	<6.00	245.0	865	2.06	7.96	241	214	74.90	8.92	628.0	1,870		<6.00
	4/3/2014	<10.00	329.0	607	2.34	9.32	265	41	12.20	9.04	517.0	1,880		<10.00
	10/9/2014	<4.00	286.0	560	1.21	8.11 J	265	42	12.80	10.00	532.0	1,730		<4.00
	6/25/2015			465	<2.00		273					1,690		
	10/6/2015			431	<20.0		251					1,470 J		
Dup	10/6/2015			642	<20.0		238					1,710 J		
	6/23/2016			1,220	1.73		159					2,690		
	10/06/2016			357	1.89		256					1,290		
	05/23/2017			319	1.51		211					1,400		
Dup	05/23/2017			336	1.50		207					1,370		
	10/12/2017			336	1.67		197					1,250		
	5/9/2018			365	1.24		177					1,340		
	10/9/2028			413	1.59		190					1,200		
	6/19/2019			335								1,250		
	11/25/2019			487	3.55		186					1,500		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-7	2/7/2001	<1.00	238.0	500	3.20	4.10	100	80	27.30	10.40	326.0	1,300		
	5/2/2002	<1.00	244.0	466	2.94	4.18	106	47	17.00	8.42	307.0			<1.00
	10/11/2002	<0.10	242.0	408			128	40	13.50	6.70	316.0	1,120		<0.10
	12/27/2002	<0.10	232.0	452			109	56	19.20	5.82	353.0	1,220		<0.10
	2/17/2003	<0.10	200.0	603			134	91	30.90	5.86	339.0	1,440		<0.10
	6/2/2003	<1.00	242.0	388	3.23	4.33	115	40	12.50	6.16	370.0	1,216		<1.00
	8/25/2003	<1.00	232.0	367	2.77	4.07	105	39	12.30	7.14	309.0	1,244		<1.00
	11/5/2003	<1.00	240.0	343	3.08	4.16	117	37	11.40	7.67	304.0	1,186		<1.00
Dup	11/5/2003	<1.00	238.0	355	3.04	4.19	117	35	10.80	7.63	298.0	1,170		<1.00
	2/4/2004	<1.00	262.0	320	3.10	4.25	112	31	9.87	7.95	298.0	1,138		<1.00
	5/6/2004	<1.00	260.0	339	2.90	4.00	112	35	10.30	6.81	282.0	1,172		<1.00
	8/3/2004	<0.10	248.0	328			126	23	12.10	7.55	436.0	734		<0.10
	2/11/2005 8/5/2005	<1.00 <1.00	238.0 240.0	332 430	3.76 3.10	4.65 4.36	123 144	32 58	9.99 19.20	7.75 8.43	296.0 325.0	1,128		<1.00 <1.00
D	8/5/2005	<1.00	240.0			4.30	144	39	19.20	6.51	325.0	1,180		<1.00
Dup	2/22/2006	<10.00	290.0	387 240	3.14 2.60	3.30	120	39	9.98	4.89	227.0	1,100 1,120		<10.00
	8/24/2006	<10.00	290.0	230	3.10	2.97	110	23	7.82	2.96	245.0	952		<10.00
	2/28/2007	<10.00	270.0	240	3.30	3.60	100	21	6.57	2.90 <5	230.0	885		<10.00
	8/23/2007	<10.00	261.0	250	2.70	3.20	110	19	8.00	<5	247.0	2,320		261.00
	2/20/2008	<5.00	251.0	269	2.40	3.18	122	38	12.40	5.41	261.0	930		<5.00
	8/13/2008	<5.00	274.0	251	2.41	3.21	121	25	7.64	4.86	273.0	887		<5.00
	2/19/2009	<5.00	250.0	240	2.90	3.30	100	26	8.30	5.10	260.0	880		<5.00
	7/29/2009	<5.00	260.0	260	2.90	3.90	110	40	13.00	5.80	250.0	950		<5.00
	2/24/2010	<5.00	263.0	282	2.54	4.08	106	34	9.10	3.56	310.0	1,000		<5.00
	7/28/2010	<5.00	259.0	279	2.61	3.39	113	29	9.03	3.60	265.0	950		<5.00
	2/16/2011	<2.00	212.0	286	2.55	4.07	123	33	9.39	3.64	246.0	910		<2.00
	8/18/2011	<5.00	248.0	268	2.76	4.16	121	28	8.56	2.31	234.0	1,060		<5.00
Dup	8/18/2011	<5.00	262.0	265	2.58	4.27	105	29	8.22	3.32	255.0	1,010		<5.00
	2/22/2012	<5.00	262.0	287	2.80	4.50	107	33	9.87	3.45	266.0	952		<5.00
	8/28/2012	<10.0	275.0	287	2.90	2.88	123	27	8.41	3.20	252.0	962		<10.00
	2/21/2013	<6.00	257.0	258	2.30	4.76	134	29	9.11	3.79	284.0	904		<6.00
	8/14/2013	<6.00	244.0	285	2.74	4.92	143	32	9.27	3.92	283.0	962		<6.00
	4/3/2014	<10.0	307.0	303	3.08	5.48	149	31	8.89	3.80	305.0	1,020		<10.00
	10/9/2014	<4.00	257.0	252	1.74	4.90 J	146	28	8.31	3.75	286.0	955		<4.00
	6/25/2015			227	2.44		163					890		
	10/6/2015			218	<8.00		139					940		
_	6/23/2016			222	2.78		131					954		
Dup	6/23/2016			259	2.66		128					979		
	10/06/2016			222	2.39		145					873		
	05/23/2017			207	1.94		129					868		
	10/12/2017			393	1.54		111					1,300 795		
	5/9/2018			155	2.21		125 141							
	10/9/2018			182	2.32							771		
	6/19/2019 11/25/2019			147 221	1.67		134					806 780		
	11/25/2019			221	1.67		134					780		

Appendix C Cumulative Summary of Groundwater Analytical Results

Chevron Environmental Management Company G.L. Erwin "A B" Federal NCT-2 Tank Battery Lea County, New Mexico





Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-8	2/7/2001	<20.00	240.0	900	3.20	6.60	160	79	24.50	12.70	604.0	2,100		-
	5/2/2002	<1.00	236.0	818	2.65	6.68	168	95	29.20	13.00	527.0			<1.00
	10/14/2002	<0.10	250.0	842			194	52	20.40	10.80	597.0	1,920		<0.10
	12/27/2002	<0.10	233.0	833			173	60	20.00	8.64	627.0	2,000		<0.10
	2/18/2003	<0.10	213.0	833			185	53	17.60	7.13	489.0	1,930		<0.10
	6/2/2003	<1.00	244.0	777	3.29	6.82	173	60	18.90	9.47	650.0	1,968		<1.00
	8/25/2003	<1.00	244.0	738	2.85	6.42	159	59	17.30	11.40	534.0	1,996		<1.00
	11/7/2003	<1.00	248.0	722	3.27	6.65	171	58	17.90	12.20	525.0	1,972		<1.00
	2/4/2004	<1.00	254.0	764	3.77	7.85	161	55	18.20	13.20	522.0	2,038		<1.00
	5/6/2004	<8.000	262.0	774	3.36	7.43	164	56	16.90	10.70	501.0	1,968		<1.00
	8/4/2004	<0.10	246.0	771			222	29	21.50	11.00	707.0	1,530		<0.10
	2/11/2005	<1.00	238.0	818	4.28	8.46	167	58	19.00	13.20	543.0	2,080		<1.00
	8/5/2005	<1.00	236.0	888	3.29	7.66	184	72	23.30	11.70	574.0	2,230		<1.00
	2/22/2006	<10.00	230.0	810	2.40	7.90	170	55	18.00	8.05	390.0	1,740		<10.00
	8/24/2006	<10.00	280.0	710	3.20	5.51	170	51	16.50	6.00	470.0	926		<10.00
	2/28/2007	<10.00	260.0	740	3.30	7.30	170	68	20.70	8.59	381.0	1,780		<10.00
	8/22/2007	<10.00	259.0	700	3.00	7.40	170	49	18.50	5.35	449.0	1,980		259.00
	2/20/2008	<5.00	240.0	711	3.66	7.15	188	82	26.40	9.48	461.0	1,780		<5.00
	8/12/2008	<1.53	357.0	668	2.99	6.74	171	64	19.70	8.49	541.0	1,750		<1.53
	2/19/2009	<5.00	230.0	700	3.60	6.40	170	64	21.00	8.80	500.0	1,700		<5.00
	7/29/2009	<5.00	290.0	740	3.50	6.80	170	60	19.00	9.50	490.0	1,800		<5.00
	2/24/2010	<5.00	255.0	754	3.16	6.58	160	56	16.10	5.07	510.0	1,760		<5.00
	7/28/2010	<5.00	263.0	711	3.43	5.67	164	54	17.00	4.75	533.0	1,720		<5.00
	2/16/2011	<2.00	218.0	749	3.11	6.73	182	54	15.80	4.91	466.0	1,760		<2.0
	8/18/2011	<5.00	257.0	676	3.21	7.56	148	47	15.00	3.68	440.0	1,770		<5.00
	2/22/2012	<5.00	264.0	751	3.27	6.46	167	62	19.50	5.24	512.0	1,720		<5.00
	2/20/2013	<6.00	271.0	643	3.17	7.01	203	47	15.00	4.66	443.0	1,590		<6.00
	8/14/2013	<6.00	262.0	665	3.48	7.52	216	55	16.70	5.27	492.0	1,530		<6.00
	4/3/2014	<10.00	336.0	674	4.01	8.17	206	54	16.30	5.20	450.0	1,560		<10.00
	10/10/2014	<4.00	284.0	527	2.29	7.65	194	51	15.90	5.42	454.0	1,550		<4.00
	6/24/2015			528	3.42		213					1,440		
	10/6/2015			518	<20.0		202					1,460 J		
	6/22/2016			507	3.63		181					1,540		
	10/06/2016			478	3.16		212					1,480		
	05/23/2017			418	2.91		192					1,280		
	10/12/2017			413	3.48		188					836		
	5/9/2018			357	1.76		175					1,250		
	10/10/2018			412	3.45		181					1,290		
	10/10/2018			419	3.40		178					1,310		
	6/19/2019			353								1,250		
	11/25/2019			350	3.17		168					1,310		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-9	8/28/2012	<10.00	268.0	684	3.49	5.06	176	83	25.40	5.70	483.0	1,670		<10.00
	5/1/2002	<1.00	142.0	439	1.88	3.26	106	99	35.80	9.93	188.0			<1.00
	10/14/2002	<0.10	137.0	443			119	88	33.10	10.40	216.0	1,240	-	<0.10
	12/27/2002	<0.10	124.0	434			120	94	33.80	6.22	192.0	1,080	-	<0.10
	2/18/2003	<0.10	105.0	461			126	99	34.10	5.62	200.0	1,190		<0.10
	5/30/2003	<1.0	122.0	514	1.82	3.01	102	113	37.90	7.98	240.0	1,324		<1.00
	8/25/2003	<1.00	114.0	562	1.58	2.98	95	120	39.20	9.45	219.0	1,428		<1.00
	11/7/2003	<1.00	132.0	468	1.68	2.86	96	119	39.00	9.18	200.0	1,250		<1.00
	2/5/2004	<1.00	124.0	610	2.32	4.18	98	125	41.10	10.30	221.0	1,345		<1.00
Dup	2/5/2004	<1.00	120.0	581	1.23	2.19	54	132	43.90	10.10	203.0	1,325		<1.00
	5/5/2004	<1.00	122.0	616	1.39	2.68	91	142	50.00	9.65	212.0	1,428		<1.00
Dup	5/5/2004	<1.00	124.0	599	1.43	2.72	92	144	46.70	9.82	223.0	1,476		<1.00
	8/3/2004	<0.10	110.0	691			115	184	62.90	10.50	279.0	1,530		<0.10
	2/11/2005	<1.00	98.0	1,960	3.63	5.36	103	495	164.00	21.50	388.0	3,920		<1.00
	8/4/2005	<1.00	218.0	10,000	1.54	5.15	224	2,280	686.00	42.80	1,390.0	27,000		<1.00
	2/23/2006	<10.00	110.0	13,000	<2.5	19.00	430	2,050	438.00	47.80	1,450.0	24,300		<10.00
	8/25/2006	<10.00	260.0	10,000	<2.5	3.75	360	1,330	360.00	38.30	1,920.0	24,100		<10.00
	2/28/2007	<10.00	140.0	8,700	<0.5	4.60	430	1,180	276.00	46.90	1,510.0	17,700		<10.00
	8/23/2007	<10.00	157.0	6,900	<0.1	3.70	400	934	283.00	<50	2,290.0	17,100		157.00
	2/20/2008	<5.00	229.0	6,270	<0.3	<0.2	447	867	293.00	27.70	2,190.0	12,500		<5.00
	8/12/2008	<1.53	257.0	4,910	1.19	3.74	443	720	236.00	36.20	1,760.0	11,400		<1.53
	2/19/2009	<5.00	310.0	4,300	0.75	3.00	490	600	190.00	25.00	1,900.0	9,700		<5.00
	7/29/2009	<5.00	250.0	3,300	0.91	3.40	500	420	150.00	32.00	1,400.0	7,800		<5.00
	2/24/2010	<5.00	304.0	2,070	1.00	3.56	452	249	65.50	9.21	1,220.0	4,370		<5.00
	7/28/2010	<5.00	312.0	1,260	1.41	2.38	413	136	46.70	7.65	848.0	3,100		<5.00
	2/16/2011	<2.00	311.0	911	1.55	3.03	562	93	29.90	6.80	600.0	1,830		<2.00
	8/18/2011	<5.00	285.0	689	2.06	2.95	294	63	21.10	3.92	484.0	1,940		<5.00
	2/22/2012	<5.00	269.0	693	2.39	3.19	236	51	17.90	5.23	508.0	1,720		<5.00
	8/28/2012	<10.00	366.0	607	2.67	1.72	206	62	15.90	4.50	433.0	1,680		<10.00
	2/21/2013	<6.00	250.0	561	2.35	2.94	192	40	13.30	4.26	423.0	1,460		<6.00
	8/14/2013	<6.00	224.0	603	2.91	2.68	173	40	12.90	4.32	459.0	1,410		<6.00
	4/3/2014	<10.0	265.0	628	1.97	2.25	157	38	11.90	4.47	429.0	1,560		<10.00
	10/9/2014	<4.00	211.0	552	1.92	2.67 J	159	36	10.70	4.91	460.0	2,020		<4.00
	6/25/2015			676	2.59		184					1,890		
	10/6/2015			1,230	<40.0		170					2,430 J		
_	6/22/2016			1,070	1.84		184					2,080		
Dup	6/22/2016			1,060	1.82		186					2,510		
	10/06/2016			977	1.57		235					2,220		
	05/23/2017			560	1.32		254					1,780		
	10/13/2017			393	1.56		253					1,300		
	5/9/2018			251	1.59		223					1,200		
	10/9/2018			246	1.43		206					1,070		
	6/19/2019			205								988		
	11/25/2019			274	1.29		156					1,040		

Appendix C



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-10	10/14/2002	<0.10	204.0	71		-	145	42	22.80	7.77	87.3	593		<0.10
	12/27/2002	<0.10	196.0	70			149	68	23.10	7.69	92.8	529		<0.10
	2/18/2003	<0.10	184.0	65			159	67	22.80	3.04	90.7	552		<0.10
	6/2/2003	<1.00	198.0	56	1.60	4.31	134	76	22.40	4.95	80.4	624		<1.00
	8/26/2003	<1.00	188.0	56	1.58	4.10	125	71	23.40	6.29	72.3	688		<1.00
	11/7/2003	<1.00	200.0	71	1.69	4.19	131	70	23.50	5.80	69.3	638		<1.00
	2/5/2004	<1.00	196.0	101	1.68	4.22	121	76	25.70	6.29	73.8	674		<1.00
	5/7/2004	<1.00	174.0	186	1.40	3.80	111	93	30.10	6.34	78.3	736		<1.00
	8/3/2004	<0.10	144.0	328			118	106	49.50	7.70	106.0	796		<0.10
	2/11/2005	<1.00	112.0	1,110	3.44	5.86	93	357	115.00	14.00	157.0	2,295		<1.00
	8/4/2005	<1.00	112.0	1,500	1.32	4.02	95	419	139.00	11.50	186.0	3,420		<1.00
	2/22/2006	<10.00	89.0	2,000	<0.50	6.50	98	520	158.00	13.80	180.0	6,180		<10.00
	8/25/2006	<10.00	110.0	2,200	<2.5	3.24	97	660	201.00	13.70	253.0	7,520		<10.00
	2/28/2007	<10.00	360.0	2,200	0.80	4.20	100	601	168.00	16.90	224.0	6,140		<10.00
	8/22/2007	<10.00	74.9	2,200	0.50	6.00	110	585	189.00	<50	270.0	7,270		74.90
	2/20/2008	<5.00	253.0	1,930	0.75	3.30	109	551	186.00	17.80	280.0	4,620		<5.00
	8/12/2008	<1.53	0.008	1,700	1.75	3.16	108	430	154.00	15.40	271.0	4,540		<1.53
	2/20/2009	<5.00	370.0	1,600	0.76	2.70	130	410	150.00	15.00	300.0	4,300		<5.00
	7/29/2009	<5.00	250.0	2,000	0.67	3.10	140	470	170.00	19.00	300.0	5,800		<5.00
	2/24/2010	<5.00	126.0	2,840	0.46	3.26	126	670	228.00	12.70	399.0	5,720		<6.00
	7/28/2010	<5.00	89.1	2,260	0.82	2.48	86	842	292.00	12.10	501.0	6,840		<6.00
	2/16/2011	<2.00	112.0	3,880	0.47	3.66	1,670	884	307.00	17.00	586.0	7,790		<2.00
	8/18/2011	<5.00	110.0	3,990	0.63	4.30	172	1,000	298.00	15.90	671.0	8,290		<5.00
	2/22/2012	<5.00	122.0	4,590	0.70	4.89	185	1,050	330.00	19.00	857.0	14,000		<5.00
	8/29/2012	<5.00	127.0	4,110	0.57	4.00	176	1,010	322.00	19.30	897.0	12,400		<5.00
	2/21/2013	<6.00	123.0	3,940	0.48	4.61	204	909	274.00	17.20	860.0	7,100		<6.00
	8/14/2013	<6.00	133.0	4,260	0.61	4.05	226	806	271.00	18.30	991.0	9,470		<6.00
	4/3/2014	<10.00	175.0	3,320	0.81	4.42	270	774	237.00	18.90	930.0	9,500		<10.00
	10/9/2014	<4.00	154.0	2,730	0.19	3.96 J	292	618	200.00	18.00	963.0	7,930		<4.00
	6/25/2015			2,410	<2.00		625					5,740		
	10/6/2015			2,280	<40.0		338					5,610 J		
	6/22/2016			1,960	<0.0360		289					5,440		
	10/06/2016			2,070	0.72		321					5,220		
	05/23/2017			1,940	0.476 J		288					3,970		
	10/13/2017			1,920	0.51		290					2,320		
	5/9/2018			2,270	0.46		279					4,010		
	10/9/2018			2,720	7.49		319					4,520		
	6/19/2019				•	,		led, Insufficient W		,	•			
	11/25/2019			3,040	7.50		336					7,510		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-11	4/30/2002							DRY						
	10/11/2002							DRY						
	12/26/2002							DRY						
	2/17/2003							DRY						
	5/29/2003							DRY						
	8/22/2003							DRY						
	11/5/2003							DRY						
	2/3/2004							DRY						
	5/5/2004							DRY						
	8/2/2004							DRY						
	11/23/2004							DRY						
	2/9/2005							DRY						
	8/4/2005						NS - Ir	sufficient Water (Column					
	2/22/2006						NS - Ir	sufficient Water	Column					
	2/28/2007						NS - Ir	sufficient Water	Column					
	8/22/2007						NS - Ir	sufficient Water	Column					
	2/20/2008						NS - Ir	sufficient Water (Column					
	8/12/2008						NS - Ir	sufficient Water	Column					
	2/19/2009	<5.00	370.0	1,700	0.80	3.00	100	430	150.00	17.00	380.0	4,500		5.00
	7/29/2009	<5.00	490.0	1,800	0.72	3.80	120	420	140.00	19.00	340.0	5,000		<5.00
	2/16/2011	<2.00	115.0	1,720	0.61	3.40	760	365	116.00	9.65	336.0	3,420		<2.00
	8/18/2011						NS - Ir	sufficient Water	Column			•		
	2/22/2012	<5.00	131.0	2,240	0.65	3.64	145	588	176.00	12.20	456.0	6,470		<5.00
	8/28/2012	<5.00	146.0	2,450	0.67	2.14	128	563	169.00	12.60	460.0	7,980		<5.00
	2/20/2013	<6.00	128.0	2,540	0.52	3.20	137	711	208.00	13.20	502.0	5,420		<6.00
	8/14/2013	<6.00	117.0	3,070	0.59	3.22	140	779	260.00	15.10	579.0	6,620		<6.00
	4/3/2014	<10.00	151.0	2,940	0.79	3.74	161	820	252.00	16.20	576.0	9,080		<10.00
	10/10/2014						NS - Ir	sufficient Water	Column			•		
	6/24/2015			3,250	<2.0		200					7,810		
	10/6/2015				•		NS - Ir	sufficient Water	Column	•	•		•	•
	6/22/2016			2,740	< 0.0360		157					6,090		
	10/06/2016			3,000	< 0.0360		183					6,220		
	05/23/2017			•				sufficient Water	Column			•		
	10/12/2017						NS - Ir	sufficient Water	Column					
	5/8/2018						NS - Ir	sufficient Water	Column					
	10/8/2018								sufficient Water (Column				
	6/19/2019								sufficient Water					
	11/24/2019			816	1.46		269					6,390		

ARCADIS Design & Consultancy for natural and built assets

Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-12	5/2/2002	<1.00	88.0	1,120	1.37	4.09	45	431	153.00	17.70	123.0	-		<1.00
	10/11/2002	<0.10	93.0	1,370			48	438	161.00	15.40	127.0	2,860		<0.10
	12/27/2002	<0.10	78.0	1,520			49	507	181.00	14.10	151.0	3,460		<0.10
	2/17/2003	<0.10	68.0	1,530			52	461	170.00	13.30	136.0	3,980		<0.10
	6/2/2003	<1.00	72.0	1,380	<2.00	5.06	46	491	157.00	15.30	151.0	3,250		<1.00
	8/26/2003	<1.00	66.0	1,550	<2.00	4.94	46	525	178.00	14.80	156.0	3,855		<1.00
	11/6/2003	<1.00	80.0	1,610	2.25	4.81	50	568	189.00	20.10	159.0	3,860		<1.00
	2/5/2004	<1.00	74.0	1,680	2.19	5.13	46	525	181.00	21.60	160.0	2,910		<1.00
	5/7/2004	<1.00	70.0	1,620	<3.00	5.13	54	541	178.00	18.50	152.0	3,085		<1.00
	8/3/2004	<0.10	66.0	1,680			55	680	252.00	31.10	211.0	4,300		<0.10
	2/11/2005	<1.00	82.0	1,770	2.04	6.08	48	503	176.00	17.80	138.0	3,080		<1.00
	8/5/2005	<1.00	72.0	1,800	1.66	4.69	49	547	194.00	15.20	149.0	4,180		<1.00
	2/22/2006	<10.00	73.0	1,700	0.70	6.70	48	415	135.00	14.90	129.0	4,890		<10.00
	8/24/2006	<10.00	87.0	1,700	0.93	3.06	48	463	157.00	12.20	140.0	6,190		<10.00
	2/28/2007	<10.00	95.0	1,900	1.30	6.90	65	521	154.00	16.10	155.0	5,840		<10.00
	8/22/2007	<10.00	108.0	1,800	0.70	6.00	52	476	151.00	11.90	143.0	6,470		108.00
	2/20/2008	<5.00	83.8	2,020	0.93	3.99	71	589	211.00	18.10	179.0	4,580		<5.00
	8/12/2008	<1.53	77.0	2,140	1.68	3.84	86	647	221.00	17.90	212.0	5,160		<1.53
	2/19/2009	<5.00	120.0	2,600	0.97	3.20	120	810	280.00	23.00	340.0	5,400		<5.00
	7/29/2009	<5.00	94.0	2,700	1.20	3.80	120	700	270.00	28.00	330.0	7,000		<5.00
	2/24/2010	<5.00	89.1	2,120	0.61	3.74	69	626	218.00	12.90	214.0	4,290		<5.00
	7/28/2010	<5.00	83.0	1,560	1.47	2.84	164	681	240.00	14.20	279.0	5,680		<5.00
	2/16/2011	<2.00	84.6	2,430	0.75	3.91	74	528	184.00	11.10	190.0	4,390		<2.00
	8/18/2011	<5.00	85.5	2,110	0.91	4.08	63	560	183.00	10.50	169.0	5,000		<5.00
	2/22/2012	<5.00	91.2	2,270	0.99	4.36	67	650	217.00	13.40	209.0	4,110		<5.00
	8/28/2012	<10.00	98.0	2,040	0.84	2.52	58	589	190.00	12.20	173.0	5,690		<10.00
	2/20/2013	<6.00	88.2	2,060	0.77	3.81	59	658	204.00	12.90	186.0	3,790		<6.00
	8/14/2013	<6.00	86.9	1,930	0.79	3.82	65	596	203.00	13.30	180.0	4,550		<6.00
	4/3/2014	<10.00	110.0	2,130	1.18	4.21	60	650	194.00	13.00	177.0	1,300		<10.00
	10/10/2014	<4.00	83.6	1,890	0.27	3.92	55	595	208.00	13.50	180.0	6,290		<4.00
	6/24/2015			2,070	<2.0		74					5,730		
	10/6/2015			1,960	<40.0		118					4,650 J		
	6/22/2016			1,880	<0.0360		53					3,950		
_	10/06/2016			1,960	0.70		62					4,200		
Dup	10/06/2016			2,040	0.66		62					5,290		
	05/23/2017			550	0.369 J		51					4,080		
	10/12/2017			1,780	<0.0360		48					3,050		
	5/9/2018			1,810	1.95		53					2,830		
	10/10/2018			1,980	4.36		58					3,140		
	10/10/2018			1,980	4.48		59					3,390		
	6/19/2019			1,920								6,870		
	11/25/2019			1,950	<0.601		82					6,270		

Appendix C
Cumulative Summary of Groundwater Analytical Results

Chevron Environmental Management Company
G.L. Erwin "A B" Federal NCT-2 Tank Battery
Lea County, New Mexico



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-13	5/2/2002	<1.00	122.0	277	2.31	4.38	131	125	44.30	10.20	65.6	-		<1.00
	10/11/2002	<0.10	115.0	337			124	135	46.50	9.47	88.6	1,210		<0.10
	12/27/2002	<0.10	104.0	408			132	160	55.20	9.71	84.5	1,260		<0.10
	2/17/2003	<0.10	80.0	443			144	152	54.90	8.88	108.0	1,370		<0.10
	6/2/2003	<1.00	102.0	421	2.27	4.43	122	153	56.00	11.00	90.9	1,260		<1.00
	8/26/2003	<1.00	92.0	500	2.10	4.23	115	179	66.00	12.00	95.6	1,360		<1.00
	11/6/2003	<1.00	98.0	492	2.25	4.42	125	193	68.60	14.30	91.5	1,434		<1.00
	2/5/2004	<1.00	96.0	543	2.30	4.56	120	179	65.60	15.40	98.3	1,220		<1.00
	5/7/2004	<1.00	98.0	496	2.04	4.14	116	184	62.20	12.80	89.3	1,278		<1.00
	8/3/2004	<0.10	95.0	532			116	225	77.30	15.00	111.0	1,410		<0.10
	2/11/2005	<1.00	100.0	491	2.19	5.36	117	171	61.70	13.30	92.3	1,260		<1.00
	8/5/2005	<1.00	96.0	759	2.29	5.11	125	217	70.80	12.70	103.0	1,550		<1.00
	2/22/2006	<10.00	89.0	590	1.70	4.80	120	177	61.20	11.50	91.8	2,090		<10.00
	8/24/2006	<10.00	150.0	760	<2.5	3.58	120	228	78.70	10.90	107.0	2,590		<10.00
	2/28/2007	<10.00	90.0	880	2.00	5.20	140	262	84.80	14.60	113.0	3,060		<10.00
	8/22/2007	<10.00	129.0	980	1.60	4.00 4.02	130	279	94.70	11.60	122.0	3,480		129.00
	2/20/2008 8/13/2008	<5.00 <5.00	209.0 141.0	1,260 1,410	1.57 2.33	1.53	153 154	362 389	145.00 155.00	20.10 20.10	172.0 176.0	3,070 4,940		<5.00 <5.00
	2/19/2009	<5.00	130.0	1,800	1.50	3.10	180	580	200.00	24.00	240.0	4,940		5.00
	7/29/2009	<5.00 <5.00	120.0	1,800	1.40	4.10	400	540	220.00	27.00	240.0	5.900		<5.00
	2/24/2010	<5.00	91.1	1,570	1.05	3.53	150	452	139.00	13.00	160.0	3,400		<5.00
	7/28/2010	<5.00	89.1	4.340	1.08	3.01	921	468	136.00	12.10	156.0	4.420		<5.00
	2/16/2011	<2.00	82.7	1,630	1.36	3.88	1,680	392	150.00	14.00	170.0	4,440		<2.00
	8/18/2011	<5.00	87.7	1,640	1.57	4.04	166	404	138.00	11.80	156.0	4.100		<5.00
	2/22/2012	<5.00	88.9	1,580	1.46	4.21	120	478	154.00	14.10	174.0	3,930		<5.00
	8/28/2012	<10.00	119.0	1,570	1.49	2.50	155	455	154.00	14.40	179.0	4,130		<10.00
	2/20/2013	<6.00	113.0	1,400	1.26	3.78	150	428	139.00	13.40	165.0	3,300		<6.00
	8/18/2013	<6.00	103.0	1,420	1.43	3.75	156	386	150.00	14.90	176.0	3,930		<6.00
	4/3/2014	<10.00	130.0	1,160	1.92	3.98	156	370	125.00	13.10	154.0	4,360		<10.00
	10/10/2014	<4.00	101.0	1,020	0.83	3.78	148	326	117.00	12.60	143.0	3,500	-	<4.00
	6/25/2015			934	2.67		177					2,730		
	10/6/2015			937	<20.0		152					2,700 J		
	6/23/2016			866	1.78		123					2,370		
	10/06/2016			951	1.31		146					2,390		
	05/23/2017			832	0.91		127					1,800		
	10/12/2017			797	1.13		123					1,790		
	5/9/2018			770	0.100 U		134					1,590		
	10/10/2018			918	1.25		147					2,020		
	6/19/2019			817								3,000		
	11/25/2019			913	0.89		199					2,560		

Appendix C Cumulative Summary of Groundwater Analytical Results Chevron Environmental Management Company

G.L. Erwin "A B" Federal NCT-2 Tank Battery Lea County, New Mexico



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-14	11/5/2003	<1.00	100.0	3,500	<4.00	6.58	525	951	324.00	45.30	732.0	7,315		<1.00
	2/4/2004	<1.00	74.0	3,910	<3.00	6.01	559	966	320.00	46.10	840.0	7,720		<1.00
	5/6/2004	<1.00	86.0	3,970	<4.00	5.54	594	997	350.00	42.50	836.0	9,560		<1.00
	8/4/2004	<0.10	78.0	4,430			895	1,350	455.00	60.30	1,220.0	11,500		<0.10
	2/11/2005	<1.00	80.0	6,120	3.50	5.99	752	1,180	370.00	56.80	1,250.0	8,860		<1.00
	8/5/2005	<1.00	86.0	6,480	1.84	5.04	882	1,230	400.00	46.30	1,440.0	9,570		<1.00
	2/22/2006	<10.00	81.0	5,300	<0.50	11.00	700	914	253.00	34.10	885.0	12,100		<10.00
Dup	2/22/2006	<10.00	82.0	5,000	<0.50	<40	690	916	253.00	34.00	884.0	11,600		<10.00
	8/24/2006	<10.00	85.0	5,600	<5	3.74	690	942	266.00	27.80	1,370.0	11,300		<10.00
	2/28/2007	<10.00	95.0	5,200	<0.5	4.30	620	758	193.00	36.90	1,060.0	12,400		<10.00
	8/22/2007	<10.00	92.2	4,700	0.30	3.90	610	823	249.00	<50	1,420.0	11,700		92.20
	2/20/2008	<5.00	108.0	4,910	3.14	3.70	674	847	272.00	25.70	1,510.0	10,300		<5.00
	8/12/2008	<1.53	101.0	4,400	1.32	3.50	668	781	237.00	38.20	1,650.0	10,300		<1.53
_	2/19/2009	<5.00	100.0	4,200	1.20	2.50	760	780	230.00	38.00	1,600.0	9,000		<5.00
Dup	2/19/2009	<5.00	100.0	4,200	1.20	2.40	760	700	220.00	24.00	1,700.0	8,800		<5.00
	7/29/2009	<5.00	110.0	4,100	1.40	2.90	830	690	200.00	39.00	1,500.0	11,000		<5.00
	2/24/2010	<5.00	107.0 107.0	4,280	1.04	3.36	844 84	752 844	218.00	18.90	1,480.0	9,530		<5.00
	7/28/2010	<5.00		4,290		2.17	_		256.00	15.10	1,660.0	9,500		<5.00
	2/16/2011 8/18/2011	<2.00 <13.10	85.4 109.0	5,070 7.490	0.71 0.27	0.42 3.65	1,470 1,010	902 1.410	294.00 318.00	21.40 20.30	1,650.0 2,280.0	11,200		<2.00 <5.00
	2/22/2012	<5.00	109.0	7,490	0.27	4.17	597	1,410	423.00	26.20	2,280.0	12,800 18,000		<5.00
	8/28/2012	<10.00	113.0	7,730	0.46	2.48	816	1,390	389.00	23.00	2,330.0	22,100		<10.00
	2/20/2013	<6.00	103.0	8.420	0.74	3.76	819	1,390	368.00	28.00	2,330.0	14.300		<6.00
	8/14/2013	<6.00	103.0	8,030	1.08	4.53	708	1,470	423.00	28.40	2,890.0	15,900		<6.00
Dup	8/14/2013	<6.00	102.0	8,090	0.97	3.99	736	1,520	431.00	29.50	2,950.0	16,600		<6.00
Бир	4/3/2014	<10.00	133.0	8,710	1.25	4.52	721	1,470	393.00	27.00	3.030.0	8,460		<10.00
	4/3/2014	<10.00	133.0	9,430	0.73	3.63	668	1,520	394.00	28.70	2,940.0	19,900		<10.00
	10/10/2014	<4.00	103.0	7.610	1.77	4.28	<1.00	1,270	384.00	33.50	2,640.0	19,000		<4.00
	6/25/2015			7,870	<2.00		1.000					15,100		
Dup	6/25/2015			8,500	<2.00		1.050					17,200		
Sup	10/6/2015			8,320	<80.0		645					16,700 J		
	6/22/2016			7.950	0.64		534					15,700		
	10/06/2016			8,590	0.83		552					22,900		
	05/23/2017			8.000	0.54		486					15,600		
	10/12/2017			7,890	0.52		485					13,500		
	5/9/2018			8.730	0.100 U		437					17,500		
	10/10/2018			10,600	26.90		575					18,400		
	6/19/2019			10,700								26,500		
	11/25/2019			13,400	25.10		1.460					28,000		

Appendix C Cumulative Summary of Groundwater Analytical Results

Chevron Environmental Management Company G.L. Erwin "A B" Federal NCT-2 Tank Battery Lea County, New Mexico





Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-15	11/5/2003							DRY						
	2/3/2004							DRY						
	5/5/2004							DRY						
	8/2/2004							DRY						
	11/23/2004							DRY						
	2/9/2005							DRY						
	8/4/2005							nsufficient Water (
	2/22/2006							sufficient Water (
	2/28/2007	<10.00	170.0	90	2.20	2.20	71	57	19.80	6.03	52.9	575		<10.00
	8/22/2007	<10.00	146.0	150	1.80	2.10	65	66	24.10	5.98	60.2	652		146.00
	2/20/2008	<5.00	117.0	487	1.68	2.19	61	161	62.20	10.50	88.1	1,500		<5.00
	8/12/2008	<1.53	101.0	792	1.81	2.38	68	238	92.00	13.30	120.0	2,370		<1.53
	2/19/2009	<5.00	100.0	840	1.30	2.20	74	290	110.00	14.00	110.0	2,000		<5.00
	7/29/2009	<5.00	83.0	1,000	1.30	2.70	85	270	110.00	15.00	130.0	3,300		<5.00
	2/25/2010	<5.00	99.2	1,120	0.97	2.84	74	301	116.00	12.50	135.0	2,450		<5.00
	7/28/2010	<5.00	91.1	801	1.16	2.02	152	337	110.00	11.10	128.0	3,350		<5.00
	2/16/2011	<2.00	96.4	1,230	1.05	2.73	84	293	110.00	11.40	124.0	2,810		<2.00
	8/18/2011	<5.00	97.0	1,110	1.20	2.84	83	293	103.00	9.52	115.0	3,720		<5.00
	2/22/2012	<5.00	98.4	1,200	1.21	2.93	86	325	106.00	10.90	124.0	3,390		<5.00
	8/24/2012	<10.00	108.0	1,430	1.13	2.43	84	357	133.00	13.40	147.0	3,640		<10.00
Dup	8/24/2012	<5.00	107.0	1,420	1.11	2.42	85	361	131.00	13.20	148.0	4,160		<5.00
	2/20/2013	<6.00	101.0	1,170	1.04	2.65	86	330	117.00	12.10	135.0	2,790		<6.00
	8/15/2013	<6.00	96.9	1,010	1.19	2.92	93	237	121.00	12.70	143.0	3,180		<6.00
	4/3/2014	<10.00	128.0	1,790	1.43	2.76	85	289	104.00	11.00	127.0	3,620		<10.00
	4/3/2014	<10.00	127.0	1,030	0.93	2.01	79	293	99.80	11.80	123.0	3,560		<10.00
	10/10/2014	<4.00	98.5	896	0.61	2.58	81	293	108.00	11.90	129.0	1,830		<4.00
	6/24/2015			896	<2.00		101					2,420		
	10/6/2015			869	<20.0		99					2,400 J		
	6/22/2016			815	0.93		76					1,840		
	10/06/2016			840	1.14		87					2,030		
	05/23/2017			764	0.80		72					2,170		
	10/12/2017			692	0.94 1.40		69 73					1,410		
	5/9/2018			652			73 77					1,280		
	10/10/2018 6/19/2019			722 626	1.11							1,510 1,050		
	11/25/2019			626	2.84		73					1,050		
	11/25/2019			603	2.84		13					1,940		

Appendix C



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	tandard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-16	11/6/2003	<1.00	188.0	863	1.79	5.65	150	183	55.60	14.20	372.0	2,100	-	<1.00
	2/4/2004	<1.00	174.0	937	2.19	6.59	123	235	76.80	15.20	299.0	2,200	-	<1.00
	5/7/2004	<1.00	172.0	953	<2.00	5.91	123	240	73.80	12.70	313.0	2,280		<1.00
	8/3/2004	<0.10	158.0	1,010			159	250	87.50	13.50	382.0	2,560	-	<0.10
	2/11/2005	<1.00	180.0	944	2.40	7.24	151	198	62.40	10.90	344.0	2,260		<1.00
	8/5/2005	<1.00	230.0	568	1.99	5.14	146	134	46.90	8.70	249.0	1,420		<1.00
	2/22/2006	<10.00	180.0	590	1.30	5.20	110	120	39.10	7.17	207.0	1,770		<10.00
	8/24/2006	<10.00	490.0	500	<2.5	3.17	89	123	40.60	4.93	207.0	1,460		<10.00
	2/28/2007	<10.00	220.0	410	1.60	4.60	110	72	22.20	6.46	228.0	1,200		<10.00
	8/22/2007	<10.00	296.0	360	1.40	3.60	87	83	29.90	<5	215.0	1,280		296.00
	2/20/2008	<5.00	190.0	338	1.31	2.91	88	141	47.90	6.53	154.0	990		<5.00
	8/12/2008	<1.53	220.0	536	1.36	3.34	86	112	37.40	6.75	221.0	1,660		<1.53
	2/19/2009	<5.00	190.0	710	1.30	4.10	110	130	42.00	8.70	340.0	1,900		<5.00
	7/29/2009	<5.00	170.0	810	1.30	4.90	140	140	46.00	9.90	330.0	2,200		<5.00
	2/24/2010	<5.00	194.0	866	1.05	4.75	132	173	46.90	5.73	318.0	1,980		<5.00
	7/28/2010	<5.00	197.0	369	2.38	4.43	159	157	50.50	6.60	404.0	2,050		<5.00
	2/16/2011	<2.00	197.0	862	1.18	5.13	260	138	39.80	5.67	347.0	1,990		<2.00
	8/18/2011	<5.00	211.0	775	1.18	5.80	137	128	39.50	4.47	331.0	2,360		<5.00
	2/22/2012	<5.00	211.0	874	1.34	6.12	139	158	45.00	5.64	396.0	2,090		<5.00
	8/28/2012	<10.00	294.0	879	1.21	3.14	127	237	70.40	7.14	254.0	2,850		<10.00
	2/20/2013	<6.00	238.0	816	1.15	5.42	159	207	67.80	6.99	304.0	1,900		<6.00
	8/14/2013	<6.00	224.0	907	1.28	5.78	162	228	90.50	8.13	236.0	2,100		<6.00
	4/3/2014	<10.00	266.0	755	1.51	6.09	162	181	52.10	6.72	321.0	2,180		<10.00
	10/10/2014	<4.00	217.0	834	0.44	4.52	130	242	79.40	7.99	269.0	1,550		<4.00
	6/24/2015			747	<2.00		173					1,720		
	10/6/2015			803	<20.0		140					2,190 J		
	6/22/2016			819	0.83		102					2,170		
	10/06/2016			712	1.29		135					1,880		
	05/23/2017			448	1.59		150					1,520		
	10/12/2017			608	1.25		132					1,580		
	5/9/2018			390	1.83		144					1,200		
	10/10/2018			458	1.76		139					1,210		
	6/19/2019			365								1,060		
	11/25/2019			344	2.13		98					1,130		

Appendix C



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-17	11/5/2003	<1.00	154.0	587	2.06	3.85	104	177	58.20	12.50	184.0	1,556		<1.00
	2/4/2004	<1.00	158.0	650	2.01	3.93	93	158	52.50	12.20	205.0	1,416		<1.00
Dup	2/4/2004	<1.00	172.0	557	2.08	4.03	96	162	52.60	12.10	204.0	1,496		<1.00
	5/6/2004	<1.00	162.0	604	1.77	3.57	91	182	57.70	10.90	176.0	1,416		<1.00
	8/4/2004	<0.10	141.0	638			132	207	81.00	12.70	221.0	1,660		<0.10
	2/11/2005	<1.00	174.0	572	2.94	4.61	101	134	45.90	11.00	229.0	1,470		<1.00
	8/5/2005	<1.00	172.0	626	2.16	4.37	106	169	53.50	9.50	220.0	1,750		<1.00
	2/22/2006	<10.00	150.0	580	1.50	4.00	97	123	40.10	8.04	187.0	1,810		<10.00
	8/24/2006	<10.00	200.0	560	<2.5	3.06	100	140	46.10	5.94	178.0	1,700		<10.00
Dup	8/24/2006	<10.00	320.0	530	<2.5	2.94	100	135	46.50	5.76	175.0	1,700		<10.00
-	2/28/2007	<10.00	180.0	530	2.20	4.10	130	95	30.30	7.06	213.0	1,240		<10.00
	8/22/2007	<10.00	177.0	550	1.80	4.30	130	113	41.40	5.97	200.0	1,310		177.00
	2/20/2008	<5.00	147.0	622	2.10	3.45	130	169	59.90	8.35	155.0	1,550		<5.00
	8/12/2008	<1.53	173.0	519	1.86	3.37	125	124	43.00	7.92	222.0	1,660		<1.53
	2/19/2009	<5.00	180.0	460	2.40	3.60	170	70	21.00	7.50	320.0	1,300		<5.00
	7/29/2009	<5.00	190.0	440	2.40	4.00	180	76	24.00	7.40	270.0	1,300		<5.00
	2/24/2010	<5.00	182.0	512	1.85	3.60	148	91	30.90	5.36	265.0	1,380		<5.00
	7/28/2010	<5.00	217.0	4,840	0.80	3.09	513	88	28.80	4.88	245.0	1,390		<5.00
	2/16/2011	<2.00	177.0	401	2.14	3.64	253	55	15.20	4.20	248.0	1,060		<2.00
Dup	2/16/2011	<2.00	206.0	368	2.27	< 0.0300	259	53	16.40	4.18	238.0	1,060		<2.00
•	8/18/2011	<5.00	196.0	421	1.87	3.45	111	110	35.90	4.11	173.0	1,220		<5.00
	2/22/2012	<5.00	207.0	441	2.08	3.33	109	99	29.70	4.90	220.0	1,140		<5.00
	8/28/2012	<10.00	164.0	570	1.59	1.99	103	182	58.40	6.76	132.0	2,070		<10.00
	2/20/2013	<6.00	192.0	511	1.75	3.33	130	153	50.40	6.09	160.0	1,280		<6.00
	8/14/2013	<6.00	163.0	637	1.71	3.37	126	181	67.00	7.28	142.0	1,790		<6.00
	4/3/2014	<10.00	253.0	434	2.54	4.07	133	112	36.80	5.78	197.0	7,360		<10.00
	10/10/2014	<4.00	211.0	316	1.41	3.98	107	83	27.30	5.49	240.0	1,790		<4.00
	10/10/2014	<4.00	226.0	313	1.56	4.04	131	62	20.10	5.28	265.0	1.140		<4.00
	6/24/2015			587	<2.00		118					1,600		
	10/6/2015			461	<8.00		119					1,280 J		
	6/22/2016			544	1.21		98					1,600		
	10/06/2016			438	1.80		122					1,250		
	05/23/2017			362	1.71		121					1,560		
	10/12/2017			199	2.46		128					1,360		
	5/9/2018			339	1.42		123					980		
	10/10/2018			413	1.87		132					1,080		
	6/19/2019			367								1,050		
	11/25/2019			405	1.93		106					1,380		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-18	11/23/2004							DRY						
	2/9/2005							DRY						
	8/4/2005							DRY						
	2/22/2006 2/28/2007							DRY DRY						
	2/20/2008							DRY						
	8/12/2008							DRY						
	2/19/2009							DRY						
	7/29/2009							DRY						
	2/16/2011							DRY						
	8/18/2011							DRY						
	2/22/2012							DRY						
	8/28/2012							DRY						
	2/20/2013							DRY						
	8/14/2013 10/6/2015							DRY DRY						
	6/23/2016							DRY						
	10/6/2016							DRY						
	05/23/2017							DRY						
	10/12/2017							DRY						
	5/8/2018							DRY						
	10/8/2018							DRY						
	6/19/2019								ed, Insufficient V	ater in Well				
	11/25/2019							led, Insufficient W						
MW-19	11/23/2004	<1.00	86.0	7,000	<10.0	17.30	582	2,020	678.00	52.40	1,590.0	12,900		<1.00
	2/11/2005 8/5/2005	<1.00 <1.00	92.0 82.0	5,200 4,850	1.30 1.76	5.12 4.70	502 450	1,340 1,200	522.00 422.00	61.30 50.60	974.0 793.0	22,000 9,750		<1.00 <1.00
Dup	8/5/2005	<1.00	80.0	5,170	1.76	4.83	462	1,200	463.00	51.00	793.0 814.0	15,800		<1.00
Dup	2/22/2006	<10.00	75.0	3,900	<0.50	8.90	400	870	271.00	32.60	464.0	8,830		<10.00
	8/24/2006	<10.00	250.0	3,900	<5	3.01	390	902	293.00	28.80	582.0	10,900		<10.00
	2/28/2007	<10.00	92.0	5,500	<0.5	4.40	600	901	247.00	37.00	658.0	12,700		<10.00
	8/22/2007	<10.00	82.6	4,500	0.30	3.10	440	1,040	367.00	<50	686.0	11,600		82.60
	2/20/2008	<5.00	80.1	4,800	1.72	3.62	476	1,130	437.00	31.20	684.0	10,300		<5.00
	8/12/2008	<1.53	79.8	4,240	2.94	3.27	429	1,080	399.00	26.70	739.0	9,600		<1.53
	2/19/2009	<5.00	89.0	5,300	0.90	3.20	540	1,200	450.00	37.00	1,200.0	10,000		<5.00
	7/29/2009	<5.00	94.0	5,300	1.10	4.00	580	1,200	400.00	37.00	1,100.0	13,000		<5.00
	2/24/2010 7/28/2010	<5.00 <5.00	91.1 104.0	4,720 4,760	0.44 1.08	3.73 3.30	457 130	1,110 1,160	427.00 407.00	28.20 27.20	809.0 1.110.0	9,080 10,400		<5.00 <5.00
	2/16/2011	<2.00	81.4	4,180	0.62	2.01	3,010	1,130	370.00	27.30	972.0	9,980		<2.00
	8/18/2011	<5.00	97.6	4,550	0.75	3.95	383	1,020	345.00	24.00	676.0	11,100		<5.00
	2/22/2012	<5.00	101.0	542	0.91	4.38	30	1,300	425.00	29.20	1,040.0	14,800		<5.00
	8/28/2012	<10.0	107.0	4,240	0.79	2.64	416	1,020	348.00	24.80	682.0	13,300		<10.00
	2/20/2013	<6.00	94.0	4,310	0.70	3.76	424	1,130	344.00	27.10	673.0	7,740		<6.00
	8/14/2013	<6.00	94.5	3,780	0.90	3.84	382	1,050	376.00	28.10	710.0	8,740		<6.00
	4/3/2014	<10.00	122.0	3,740	1.07	4.22	439	1,050	362.00	26.30	680.0	13,100		<10.00
	10/10/2014	<4.00	95.6	3,440	0.13	3.86	416	965	369.00	29.20	663.0	7,560		<4.00
	6/25/2015 10/6/2015			3,570 3,780	<2.00 <80.0		809 480					8,110 10,700 J		
	6/22/2016			3,780	<80.0 0.88		373					7,370		
	10/06/2016			3,830	1.03		419					7,130		
	05/23/2017			3,280	0.300 J		356					7,440		
	10/12/2017			3,130	<0.0360		362					6,120		
	5/9/2018			3,290	0.34		363					6,410		
	10/10/2018			3,490	6.52		403					5,230		
	6/19/2019			2,990								9,720		
	11/25/2019			3,510	2.95		740					8,780		

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Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-20	11/23/2004	<1.00	82.0	606	2.49	2.90	80	176	62.60	13.60	104.0	985		<1.00
	2/11/2005	<1.00	88.0	745	1.86	4.34	74	227	77.50	15.00	117.0	1,480		<1.00
	8/5/2005 2/22/2006	<1.00 <10.00	80.0 110.0	1,170 1.100	1.76 0.98	4.55 5.50	85 83	326 295	116.00 103.00	14.70 13.50	162.0 145.0	2,640 3.000		<1.00 <10.00
	8/24/2006	<10.00	1,100.0	1,100	<2.5	3.39	84	288	103.00	11.20	160.0	3,590		<10.00
	2/28/2007	<10.00	1,100.0	1,300	1.40	5.10	95	332	107.00	14.60	165.0	4,500		<10.00
	8/22/2007	<10.00	419.0	1,400	0.80	5.70	100	346	119.00	11.90	203.0	4,100		419.00
	2/20/2008	<5.00	117.0	1,540	1.10	3.83	108	393	158.00	18.70	247.0	3,550		<5.00
	8/12/2008	<1.53	135.0	1,570	2.02	3.73	113	392	154.00	18.50	249.0	4,290		<1.53
	2/19/2009	<5.00	130.0	1,600	1.00	3.70	130	440	150.00	20.00	290.0	3,900		<5.00
	7/29/2009	<5.00	120.0	1,700	1.10	4.10	150	400	150.00	21.00	280.0	4,600		<5.00
	2/25/2010	<5.00	107.0	1,500	0.80	4.03	99	402	146.00	13.90	229.0	3,460		<5.00
	7/28/2010	<5.00	102.0	245	2.00	3.43	143	451	156.00	13.60	289.0	4,740		<5.00
	2/16/2011	<2.00	98.4	1,810	0.97	3.89	1,070	442	134.00	13.30	274.0	4,240		<2.00
	8/18/2011	<5.00	106.0	1,610	1.16	3.99	135	393	128.00	11.10	253.0	4,550		<5.00
	2/22/2012	<5.00	107.0	1,750	1.10	4.30	122	434	126.00	12.50	303.0	4,790		<5.00
	8/24/2012	<5.00	123.0	1,830	1.03	3.46	134	440	152.00	14.20	295.0	4,510		<5.00
	2/20/2013	<6.00	106.0	1,670	0.99	3.78	138	445	143.00	13.50	275.0	3,680		<6.00
	8/14/2013	<6.00	104.0	1,470	1.02	4.17	121	435	152.00	15.10	275.0	4,310		<6.00
	4/3/2014	<10.00	134.0	1,500	1.22	4.16	134	407	137.00	13.00	243.0	5,140		<10.00
	10/10/2014	<4.00	107.0	1,320	0.50	3.82	121	387	139.00	137.00	233.0	4,180		<4.00
	6/24/2015			1,340	<2.00		125					3,090		
	10/6/2015			1,290	<20.0		125					3,650 J		
	6/22/2016			1,220	0.75		90					2,400		
	10/06/2016			1,270	0.95		102					3,220		
	05/23/2017			1,170	0.68		95					3,030		
	10/12/2017			1,130	0.75		<0.460					2,340		
	5/9/2018			1,130	0.100 U		96					1,980		
	10/10/2018			1,240	0.68		104					2,180		
	6/19/2019			1,180								3,420		
	11/25/2019			1,120	<0.601		83					3,660		
MW-21	11/28/2007	<1.14	415.0	482			128	173	64.40	18.30	115.0	1,440		1.14
	2/20/2008	<5.00	115.0	606	1.90	5.15	159	205	71.30	14.40	110.0	1,740		<5.00
	8/12/2008	<1.53	126.0	544	2.00	4.68	147	193	64.70	12.50	116.0	2,060		<1.53
	2/19/2009	<5.00	190.0	400	2.10	4.30	140	150	46.00	11.00	120.0	1,200		<5.00
	7/29/2009	<5.00	210.0	330	2.20	4.40	150	120	38.00	10.00	96.0	1,200		<5.00
	2/24/2010 7/28/2010	<5.00 <5.00	184.0 168.0	280 2.970	1.79 0.61	4.04 3.41	143 150	123 109	37.80 34.30	7.93 7.78	100.0 95.8	1,030 1.010		<5.00 <5.00
	2/16/2011	<2.00	149.0	2,970	1.87	4.56	250	109	33.40	8.13	90.0	888		<2.00
	8/18/2011	<5.00	176.0	213	2.15	4.93	141	90	27.50	5.90	79.1	876		<5.00
	2/22/2012	<5.00 <5.00	176.0	208	2.15	4.93 5.50	118	89	24.80	6.82	79.1	894		<5.00 <5.00
	8/24/2012	<5.00	196.0	241	1.95	4.10	137	100	35.00	9.71	80.5	750		<5.00
	2/21/2013	<6.00	181.0	182	1.98	4.77	121	91	29.40	8.11	83.6	700		<6.00
	8/14/2013	<6.00	175.0	180	2.48	5.90	123	100	30.30	8.42	103.0	798		<6.00
	4/3/2014	<10.00	222.0	236	2.72	5.98	230	117	37.40	8.98	108.0	1,010		<10.00
	10/10/2014	<4.00	185.0	186	1.50	5.16	393	155	48.70	9.68	119.0	1,080		<4.00
	6/24/2015			195	2.49		413					1,190		
	10/6/2015			182	<8.00		365					1,170 J		
	6/22/2016			170	2.25		289					961		
	10/06/2016			185	2.01		279					957		
	05/23/2017			176	1.71		199					906		
	10/12/2017			176	1.94		194					849		
Dup	10/12/2017			176	1.81		193					814		
	5/9/2018			177	1.96		196					902		
	10/10/2018			192	1.83		213					941		
	6/19/2019		1	212		1		l	1	1		1,030		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
	11/25/2019			204	2.25		213					1,040		
MW-22	11/28/2007	<1.14	2,950.0	1,020			169	286	96.70	12.10	229.0	2,330		1.14
	2/20/2008	<5.00	374.0	1,060	0.93	2.70	171	291	102.00	11.10	244.0	2,560		<5.00
	8/12/2008	<1.53	143.0	1,370	1.70	2.73	167	359	129.00	12.90	272.0	3,670		<1.53
	2/20/2009	<5.00	270.0	2,000	0.74	2.40	180	570	190.00	17.00	380.0	5,300		<5.00
	7/29/2009	<5.00	310.0	3,000	0.85	2.60	200	730	260.00	25.00	570.0	6,700	-	<5.00
	2/25/2010	<5.00	142.0	3,630	0.27	2.92	166	802	251.00	15.40	590.0	7,060		<5.00
	7/28/2010	<5.00	136.0	3,640	0.64	2.17	204	982	309.00	15.90	865.0	8,760		<5.00
	2/16/2011	<2.00	138.0	3,650	0.57	1.90	1,530	834	252.00	14.90	830.0	7,490		<2.00
	8/18/2011	<5.00	142.0	4,020	0.59	2.94	206	745	232.00	13.70	974.0	8,900		<5.00
	2/22/2012	<5.00	152.0	3,980	0.73	2.93	236	732	233.00	15.80	1,060.0	11,100		<5.00
	8/29/2012	<10.00	171.0	3,210	0.79	1.79	258	603	195.00	15.00	1,080.0	9,460		<10.0
	2/20/2013	<6.00	174.0	2,700	0.63	3.02	298	512	153.00	13.00	922.0	5,360		<6.00
	8/14/2013	<6.00	183.0	2,660	0.84	2.55	294	437	129.00	12.70	996.0	5,450		<6.00
	4/3/2014	<10.00	238.0	2,420	0.76	2.40	320	316	96.40	10.60	841.0	4,660		<10.00
	10/9/2014	<4.00	183.0	2,030	0.40	2.72 J	257	349	108.00	12.70	907.0	5,150		<4.00
	6/25/2015			2,430	<2.00		660					6,130		
	10/6/2015			2,830	<40.0		260					6,340 J		
	6/22/2016			2,730	0.84		209					5,030		
	10/06/2016			3,010	0.67		244					6,440		
Dup	10/06/2016			3,030	0.66		249					6,120		
	05/23/2017			2,860	0.83		251					5,780		
	10/13/2017			2,850	<0.0360		267					10,900		
	5/9/2018			2,810	4.43		253					5,280		
	10/9/2018			3,960	0.37		361					6,210		
	6/19/2019			3,070								9,460		
	11/25/2019			4,040	2.16		399					8,840		
MW-23	2/22/2012								rilling completion a					
	8/24/2012	<5.00	152.0	592	1.19	<2.00	91	155	55.00	8.44	114.0	1,460		<5.00
	2/20/2013	<6.00	121.0	490	1.10	0.52	97	146	52.80	8.12	107.0	1,330		<6.00
	8/14/2013	<6.00	117.0	458	1.29	0.69	93	156	52.80	8.82	111.0	1,510		<6.00
	4/3/2014	<10.00	146.0	489	1.51	0.67	96	138	48.60	7.85	103.0	1,500		<10.00
	10/10/2014	<4.00	127.0	391	0.72	0.72	86	140	51.90	8.61	107.0	1,010		<4.00
	6/24/2015			394	<2.00		100					1,280		
	10/6/2015			379	<8.00		86					805		
	6/22/2016			363	1.03		81					1,110		
	10/06/2016			386	1.37		94					1,060		
	05/23/2017			360	1.10		77					768		
	10/12/2017			349	1.03		75					933		
	5/9/2018			323	1.22		79					824		
	10/10/2018			355	1.23		84					929		
	6/19/2019			359	4 ==							1,330		
	11/25/2019			341	1.77		70					1,190		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-24	2/22/2012	<5.00	101.0	2,910	1.71	3.11	309	806	254.00	24.40	263.0	9,240		<5.00
	8/24/2012	<5.00	118.0	3,140	1.05	3.18	309	866	263.00	25.10	291.0	9,160	-	<5.00
	2/20/2013	<6.00	97.4	2,500	0.99	3.41	277	826	233.00	22.70	263.0	4,780	-	<6.00
Dup	2/20/2013	<6.00	97.7	2,500	0.98	3.42	281	806	224.00	22.90	253.0	4,940		<6.00
	8/14/2013	<6.00	94.0	2,250	1.21	3.66	268	790	234.00	24.80	261.0	5,540		<6.00
	4/3/2014	<10.00	125.0	1,930	1.34	3.71	286	3,410	1,020.00	108.00	1,150.0	7,300		<10.00
	10/10/2014	<4.00	96.9	1,870	0.39	3.41	268	647	208.00	22.90	230.0	5,850		<4.00
	6/24/2015			1,970	<2.00		482					4,960		
	10/6/2015			1,820	<40.0		280					5,390 J		
	6/22/2016			1,680	1.29		223					4,920		
	10/06/2016			1,790	0.93		247					4,540		
	05/23/2017			1,610	0.66		231					2,420		
Dup	05/23/2017			1,610	0.61		231					3,740		
•	10/12/2017			1,540	0.59		229					3,270		
	5/9/2018			1,510	1.79		219					2.910		
	10/10/2018			1,640	0.100 U		286					3,520		
	6/19/2019			1,660								6,500		
	11/25/2019			1,710	< 0.601		242					5,510		
MW-25	5/24/2012	<5.00	158.0	4,390	0.12	3.56	307	890	272.00	19.20	1,150.0	10,200		<5.00
Dup	5/24/2012	<5.00	165.0	4,460	0.14	3.46	316	880	270.00	19.10	1,170.0	11,000		<5.00
	8/28/2012	<10.00	294.0	4,350	0.62	2.32	290	877	255.00	18.40	1,150.0	11,400		<10.00
	2/20/2013	<6.00	160.0	4,490	0.46	3.66	282	864	258.00	18.50	1,210.0	8,160		<6.00
	8/14/2013	<6.00	138.0	4.870	0.55	3.60	255	929	289.00	20.20	1,370.0	10.100		<6.00
Dup	8/14/2013	<6.00	150.0	5,160	0.65	3.87	268	900	287.00	20.20	1,340.0	11,400		<6.00
Zup	4/3/2014	<10.00	192.0	4,580	0.77	4.47	299	962	258.00	19.30	1,330.0	12,200		<10.00
	10/10/2014	<4.00	152.0	4,280	<0.100	4.10	299	870	270.00	22.50	1,250.0	11,400		<4.00
	6/24/2015			3,850	<2.00		751					8,080		
	10/6/2015			3,340	<80.0		349					6,200 J		
	6/22/2016			3,080	0.64		237					7,340		
	10/06/2016			3,210	0.55		262					6,470		
	05/23/2017			2,700	0.333 J		227					6,110		
	10/12/2017			2.540	0.74		228					4,980		
	5/9/2018			2,570	0.44		242					4,400		
	10/10/2018			2.750	0.38		329					3.800		
	6/19/2019			2,310								7,160		
	11/24/2019			890	1.77		127					5,790		
MW-26	5/24/2012	<5.00	200.0	2,320	0.86	2.45	236	241	75.30	11.40	1.000.0	5,020		<5.00
A111-20	8/29/2012	<5.00	205.0	2,200	0.93	1.57	225	267	72.90	11.30	1,140.0	4,940		<5.00
	2/21/2013	<6.00	213.0	1,950	0.69	2.65	240	210	58.70	9.82	944.0	3,640		<6.00
	8/14/2013	<6.00	215.0	1,930	0.94	2.46	244	174	59.90	10.60	913.0	3,700		<6.00
	4/3/2014	<10.00	270.0	1,380	1.02	2.31	273	173	51.00	8.78	838.0	3,300		<10.00
	10/9/2014	<4.00	223.0	1,390	0.56	2.71 J	272	158	45.30	9.50	794.0	3,920		<4.00
	6/25/2015			1,260	<2.00	2.710	445		43.30	9.50	7 94.0	2.970		
Dup	6/25/2015			1,340	<2.00		462					3,010		
Dup	10/6/2015			1,100	<20.0		270					2,310 J		
	6/22/2016			948	0.97		238					2,310 3		
	10/06/2016			944	1.22		266					2,290		
	05/23/2017			764	1.15		227					1,820		
	10/13/2017			747	1.35		240					1,960		
	5/9/2018			666	1.36		212					1,820		
	10/9/2018			767	1.43		236					1,810		
	6/19/2019			685	1.43		230					1,980		
	0/13/2013			789	0.79		218					1,840		



							2.15.1				- II	Total		
Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
MW-27	5/24/2012	<5.00	138.0	1,270	0.84	1.02	640	405	124.00	22.50	330.0	3,660	-	<5.00
	8/29/2012							DRY						
	2/21/2013							DRY						
	8/14/2013							DRY						
	4/3/2014							DRY						
	10/9/2014							DRY						
	10/6/2015							DRY						
	6/23/2016							DRY						
	10/6/2016							DRY						
	05/23/2017							DRY						
	10/12/2017							DRY						
	5/8/2018							DRY						
	10/8/2018 6/19/2019						Nat Carra	DRY led, Insufficient W	/:- \A/-!I					
	11/25/2019							led, insufficient W						
MW-28	08/01/2017			3,930	0.94	I	324					6,950		
Dup	08/01/2017			4,120	0.89		335					7,190		
Dup	10/13/2017			4,120	<0.0360		329					6,650		
Dup	10/13/2017			4,000	<0.0360		321					7,570		
Dup	5/9/2018			4,330	6.47		325					7,480		
Dup	5/9/2018			4,660	6.30		348					8.440		
Dup	10/10/2018			5,720	12.60		436					8,870		
Dup-1	6/19/2019			9,750								22,000		
	6/19/2019			4,820								14,000		
	1125/19			4,720	4.66		419					12,000		
MW-29	08/01/2017			1,760	1.13		332					3,980		
	10/13/2017			1,870	0.75		343					3,690		
	5/9/2018			2,390	0.41		279					4,390		
	10/9/2018			2,620	7.79		345					4,040		
Dup-2	6/19/2019			2,520								6,160		
-	6/19/2019			2,770								8,320		
	11/25/2019			1,120	5.58		164					4,920		
MW-30	08/01/2017			10,800	1.02		583					18,300		
	10/12/2017			10,500	17.9 J		584					17,900	-	
Dup	10/12/2017			10,700	<0.360 J		592					19,800	-	
	5/9/2018			11,200	0.96		568					19,200		
Dup	5/9/2018			9,210	0.100 U		476					18,300		
	10/9/2018			11,700	17.50		660					20,200		
	6/19/2019			10,500								26,800		
_	11/25/2019			10,600	17.40		657					16,900		
Dup	11/25/2019			9,540	3.01		627					18,700		
MW-31	08/01/2017			443	0.94		131					1,070		
	10/12/2017			385	0.91		129					1,070		
	5/9/2018			364	0.87		138					1,040		
	10/10/2018			507	0.90		135					1,070		
	6/19/2019		1	F42	4.55	1		led, Insufficient W		1	1	4.000		
MM 22	11/24/2019			543	1.55		139					1,600		
MW-32	08/01/2017			583	0.91		164					2,710		
	10/12/2017			1,290	0.75		161					2,850		
	5/9/2018 10/10/2018			1,250 1,390	1.31 0.47		152 233					2,480 2,990		
	6/19/2019	-		1,390	0.47			 led, Insufficient W	 later in Well			2,990		
	11/25/2019			1,440	<0.601		191	ied, insufficient vv				4,340		
	11/23/2019			1,440	~ 0.001		181					4,340		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
West	8/22/1997			250						-	-			
	2/17/1998	<2.00	370.0	237	-		134	-			-	975	96.00	
	2/7/2001	<1.00	236.0	340	2.00	4.50	120	40	12.50	33.20	264.0	1,000	-	
	5/3/2002	<1.00	214.0	329	1.39	4.36	116	42	11.90	40.90	234.0			<1.00
	10/14/2002	<0.10	210.0	337	-		127	39	9.37	35.60	290.0	986	-	<0.10
	12/27/2002	<0.10	198.0	337			134	43	12.50	33.20	263.0	997	-	<0.10
	2/18/2003	<0.10	190.0	354			141	34	9.78	23.90	152.0	1,010		<0.10
	5/30/2003	<1.00	202.0	353	1.54	4.16	116	48	13.30	35.10	283.0	1,050		<1.00
	8/25/2003	<1.00	194.0	351	1.50	4.08	112	49	13.20	38.40	265.0	1,066		<1.00
	11/7/2003	<1.00	204.0	327	1.65	3.98	115	51	13.80	38.80	235.0	1,100		<1.00
	2/5/2004	<1.00	196.0	345	1.66	4.09	112	52	14.60	41.40	235.0	1,074		<1.00
	5/6/2004	<1.00	200.0	339	1.44	3.83	115	54	14.00	37.30	241.0	1,040		<1.00
	8/3/2004	<0.10	186.0	337			147	42	20.10	49.10	297.0	717		<0.10
	2/11/2005	<1.00	186.0	417	2.44	4.47	117	76	21.40	43.90	241.0	1,128		<1.00
	8/4/2005	<1.00	150.0	526	1.54	4.16	129	87	23.60	42.20	280.0	1,104		<1.00
	2/23/2006	<10.00	150.0	800	0.76	4.00	110	149	44.30	47.10	257.0	2,390		<10.00
	8/25/2006	<10.00	150.0	1,500	<2.5	2.78	97	315	87.60	67.70	400.0	4,840		<10.00
	2/28/2007	<10.00	120.0	2,500	0.86	6.60	120	515	130.00	98.70	410.0	7,600		<10.00
	8/21/2007	<10.00	99.8	3,700	0.20	4.31	180	844	251.00	72.70	665.0	12,700	-	99.80
	2/20/2008	<5.00	119.0	2,780	0.54	3.43	202	662	189.00	81.80	564.0	5,850	-	<5.00
	8/13/2008	<5.00	175.0	1,940	1.57	3.89	227	387	119.00	61.80	588.0	5,570		<5.00
	2/19/2009	<5.00	180.0	1,700	0.67	2.80	230	330	100.00	51.00	550.0	4,300		<5.00
	7/29/2009	<5.00	190.0	1,200	0.81	3.40	240	230	74.00	37.00	400.0	3,200		<5.00
	7/28/2010	<5.00	238.0	541	0.99	2.69	224	128	36.60	26.00	345.0	1,760		<5.00
	2/16/2011	<2.00	193.0	417	1.10	3.56	329	91	24.80	20.00	263.0	1,300		<2.00
	8/18/2011	<5.00	247.0	322	1.36	3.66	205	69	18.10	15.10	232.0	1,220		<5.00
	2/22/2012	<5.00	246.0	312	1.34	3.28	183	68	18.50	15.40	221.0	1,080		<5.00
	8/29/2012	<5.00	241.0	249	1.78	2.46	169	64	18.60	16.20	225.0	988		<5.00
	2/21/2013	<6.00	243.0	226	1.34	3.78	175	57	16.70	14.60	212.0	872		<6.00
	8/14/2013	<6.00	227.0	262	1.75	3.68	190	59	16.40	15.30	218.0	892		<6.00
	4/3/2014	<10.00	281.0	235	1.41	3.07	159	49	15.30	14.20	201.0	680		<10.00
	10/9/2014	<4.00	232.0	200	0.91	0.40	158	55	15.40	13.90	201.0	861		<4.00
	6/25/2015			244	<2.00		183					796		
	10/6/2015			215	<8.00		141					624		
	6/23/2016			248	1.26		132					889		
	10/06/2016			274	1.43		146					886		
	05/23/2017			225	1.30		140					820		
	10/13/2017			184	1.25		148					757		
	5/9/2018			133	1.23		146					778		
	10/9/2018			140	1.40		154					720		
	6/19/2019			117								726		
	11/24/2019			124	1.30		153					728		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
Southwest	8/22/1997			3,300			1				-		1	
	2/17/1998	<2.00	420.0	2,170			255				-	4,719	712.00	
	2/7/2001	<1.00	326.0	1,900	2.20	5.00	350	197	59.10		1,078.0	4,100		
	5/3/2002	<1.00	272.0	1,490	1.38	4.51	301	200	65.00	46.40	744.0		-	<1.00
	10/14/2002	<0.10	330.0	1,330			360	110	32.50	61.50	929.0	3,020	-	<0.10
	12/27/2002	<0.10	308.0	1,280			319	107	31.90	66.80	980.0	3,040	-	<0.10
	2/18/2003	<0.10	289.0	1,290			300	104	31.30	63.00	918.0	2,910		<0.10
Dup	2/18/2003	<0.10	298.0	1,310			299	108	32.20	58.30	812.0	3,040		<0.10
	6/2/2003	<1.00	304.0	1,420	2.34	5.83	282	161	45.70	49.10	935.0	4,070		<1.00
Dup	6/2/2003	<1.00	290.0	1,370	2.12	5.65	287	169	54.50	45.00	899.0	3,420		<1.00
	8/25/2003	<1.00	310.0	1,190	2.25	6.10	272	117	33.60	49.70	774.0	3,205		<1.00
Dup	8/25/2003	<1.00	200.0	1,260	<2.00	5.61	76	159	41.80	79.00	591.0	3,270		<1.00
	11/7/2003	<1.00	300.0	1,240	2.29	5.77	255	129	35.40	48.50	727.0	3,275		<1.00
	2/5/2004	<1.00	300.0	1,240	2.37	6.17	238	109	33.10	52.20	716.0	2,860		<1.00
	5/6/2004	<1.00	294.0	1,310	<3.00	6.38	231	158	30.80	53.20	780.0	3,180		<1.00
	8/3/2004	<0.10	276.0	1,400			264	75	45.20	82.40	1,660.0	2,550		<0.10
	2/11/2005	<1.00	260.0	2,920	1.33	9.61	230	323	94.50	84.40	1,240.0	5,575		<1.00
	8/4/2005	<1.00	226.0	5,290	1.55	11.70	325	691	201.00	101.00	1,980.0	12,000		<1.00
	2/23/2006	<10.00	300.0	3,000		11.00	450	373	108.00	77.10	896.0	6,300		<10.00
	8/25/2006	<10.00	300.0	3,100	<5.0	5.99	600	415	117.00	74.90	1,240.0	7,600		<10.00
	2/28/2007	<10.00	310.0	4,500	0.51	8.80	670	511	130.00	93.70	994.0	9,120		<10.00
	8/21/2007	<10.00	265.0	5,500	0.10	11.70	860	879	242.00	82.60	2,040.0	14,900		265.00
	2/20/2008	<5.00	278.0	5,940	0.63	9.30	896	1,010	281.00	120.00	2,300.0	13,100		<5.00
	8/13/2008	<5.00	268.0	5,670	4.18	8.14	775	934	237.00	112.00	2,110.0	13,700		<5.00
	2/19/2009	<5.00	280.0	5,200	0.78	5.40	870	920	240.00	120.00	2,300.0	13,000		<5.00
	7/29/2009	<5.00	260.0	5,300	0.96	6.10	810	790	240.00	110.00	2,200.0	12,000		<5.00
	7/28/2010	<5.00	254.0	3,890	0.96	5.17	565	758	190.00	67.60	1,770.0	8,850		<5.00
Dup	7/28/2010	<5.00	274.0	4,050	0.89	3.98	591	667	184.00	67.90	1,730.0	7,250		<5.00
	2/16/2011	<2.00	228.0	3,360	0.88	0.81	2,450	538	156.00	63.30	1,470.0	8,320		<2.00
	8/18/2011	<5.00	319.0	3,370	1.04	5.10	643	401	98.90	48.60	1,310.0	5,170		<5.00
	2/22/2012	<5.00	324.0	2,800	1.19	5.63	502	365	99.80	48.60	1,280.0	6,860		<5.00
	8/29/2012	<5.00	323.0	2,670	1.14	2.96	524	304	90.80	44.30	1,270.0	5,940		<5.00
	2/21/2013	<6.00	359.0	1,750	1.08	4.43	498	323	86.70	36.30	1,120.0	4,020		<6.00
	8/13/2013	<6.00	342.0	1,710	1.44	4.09	525	295	86.20	35.70	1,110.0	3,200		<6.00
	4/3/2014	<10.00	417.0	1,430	1.28	3.40	405	139	39.80	32.40	845.0	2,760		<10.00
	10/9/2014	<4.00	346.0	1,190	0.82	3.79 J	363	145	40.20	33.30	818.0	5,210		<4.00
	6/25/2015			1,360	<2.00		489					3,450		
	10/6/2015			1,760	<40.0		408					2,860 J		
	6/23/2016			2,390	1.14		358					5,620		
	10/06/2016			1,310	1.44		323					2,550		
	05/23/2017			1,260	1.31		273					2,320		
	10/13/2017			1,200	1.28		254					2,800		
	5/9/2018			1,090	1.16		234					2,630		
	10/9/2018			1,050	1.18		253					2,220		
	6/19/2019 11/24/2019			919 772	2.22		260					2,460 2.050		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
WW-1	5/1/2002	<1.00	172.0	97	1.64	4.05	137	51	23.40	8.23	84.9			<1.00
	10/10/2002	<0.10	168.0	106			124	53	22.20	9.99	106.0	605		<0.10
	12/27/2002	<0.10	157.0	111			134	55	22.50	5.30	96.0	572		<0.10
	2/18/2003	<0.10	152.0	115			137	54	22.10	6.38	93.5	601		<0.10
	6/2/2003	<1.00	154.0	127	1.69	3.77	119	60	24.10	7.14	118.0	621		<1.00
	8/25/2003	<1.00	148.0	136	1.70	3.72	111	63	24.00	8.43	104.0	652		<1.00
	11/7/2003	<1.00	156.0	149	1.80	3.62	111	62	24.40	8.30	95.5	669		<1.00
	2/4/2004	<1.00	156.0	185	1.81	3.79	102	68	25.50	8.70	92.4	709		<1.00
	5/5/2004	<1.00	148.0	204	1.54	3.48	100	72	26.50	8.25	120.0	695		<1.00
	8/4/2004	<0.10	132.0	222			114	92	37.90	9.89	139.0	471		<0.10
	8/4/2005				•			NS						•
	2/23/2006							NS						
	3/1/2007	<10.00	130.0	360	1.50	3.20	77	101	30.70	5.94	103.0	1,060		<10.00
	8/21/2007							NS						•
	2/21/2008	<5.00	106.0	461	1.22	2.90	84	112	41.40	6.82	118.0	1,310		<5.00
	8/12/2008							NS						
	2/20/2009	<5.00	150.0	320	1.30	2.80	100	97	33.00	6.40	110.0	1,100		<5.00
	7/29/2009							NS				, , , ,		
	2/24/2010	<5.00	128.0	246	1.23	2.89	115	80	27.20	4.93	107.0	804		<5.00
	7/28/2010							NS						
	2/16/2011	<2.00	127.0	232	1.21	2.80	232	83	26.80	5.40	101.0	822		<2.00
	8/18/2011							NS						
	2/22/2012	<5.00	163.0	229	1.40	2.92	103	81	27.00	5.51	102.0	834		<5.00
	8/29/2012	<5.00	166.0	213	1.42	1.63	119	88	28.30	5.34	118.0	756		<5.00
	2/20/2013	<6.00	165.0	218	1.16	2.55	134	83	28.60	5.58	108.0	724		<6.00
	8/14/2013	<6.00	157.0	231	1.28	2.60	146	92	31.80	6.22	119.0	840		<6.00
	4/3/2014	<10.00	207.0	228	1.43	2.69	145	93	31.00	6.16	116.0	792		<10.00
	10/9/2014	<4.00	165.0	205	0.73	2.46 J	145	90	31.80	6.01	115.0	916		<4.00
	6/24/2015			220	<2.00		153					903		
Dup	6/24/2015			224	<2.00		156					888		
- •	10/6/2015			230	<4.00		145					527		
Dup	10/6/2015			228	<4.00		141					724		
	6/22/2016			220	0.96		138					873		
Dup	6/22/2016			207	0.95		131					813		
	10/06/2016			237	1.14		155					950		
	05/23/2017			218	0.96		149					744		
Dup	05/23/2017			221	0.96		149					722		
	10/12/2017			212	0.96		149					845		
	5/9/2018			206	0.82		143					828		
	10/10/2018			264	0.99		156					781		
	6/19/2019			207	0.00			ed. Insufficient W				701		
	11/26/2019			259	1.58		142					1,140		
Dup	11/26/2019			263	1.61		143					1.050		



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC St	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
RW-1	10/20/2000	<1.00	330.0	1,500	1.70	5.20	330	107	29.60	50.00	843.0	3,200	-	
	10/14/2002	<0.10	327.0	1,150			340	60	25.50	64.30	820.0	2,720	-	<0.10
	12/27/2002	<0.10	294.0	1,300			330	123	40.30	56.80	933.0	3,190		<0.10
	2/18/2003	<0.10	300.0	1,150			316	80	25.70	53.00	721.0	2,690		<0.10
	6/2/2003	<1.00	276.0	1,500	2.05	5.34	275	194	67.21	40.80	923.0	4,070		<1.00
	8/25/2003	<1.00	298.0	1,190	2.01	6.15	278	117	32.70	46.10	705.0	2,940		<1.00
	11/7/2003	<1.00	298.0	1,300	2.13	5.56	266	166	48.10	51.70	106.0	3,240		<1.00
	2/5/2004	<1.00	292.0	1,270	2.22	5.92	246	148	44.70	53.80	704.0	2,780		<1.00
	5/6/2004	<1.00	310.0	1,100	<3.00	6.62	235	104	28.30	53.80	635.0	2,840		<1.00
Dup	5/6/2004	<1.00	288.0	1,040	<3.00	6.64	243	90	24.10	44.50	642.0	2,705		<1.00
	8/4/2004	<0.10	284.0	1,120			290	45	33.00	86.90	785.0	2,250		<0.10
Dup	8/4/2004	<0.10	288.0	1,130			274	45	31.60	84.00	961.0	2,550		<0.10
	2/11/2005	<1.00	262.0	1,730	3.59	8.93	217	172	51.50	84.00	910.0	3,995		<1.00
Dup	2/11/2005	<1.00	268.0	1,690	2.00	8.59	224	159	46.40	81.00	813.0	3,170		<1.00
	8/4/2005	<1.00	252.0	2,470	1.26	5.80	188	262	76.10	87.50	1,090.0	5,120		<1.00
	2/23/2006	<10.00	290.0	2,400	<2.5	8.90	350	234	67.60	70.40	762.0	4,680		<10.00
	8/25/2006	<10.00	290.0	2,300	<5	4.41	440	281	77.30	68.50	1,040.0	5,610	-	<10.00
Dup	8/25/2006	<10.00	300.0	2,300	<5	4.60	450	272	77.30	67.10	1,030.0	5,570	-	<10.00
	2/28/2007	<10.00	300.0	3,100	<0.5	3.50	590	353	97.70	82.20	848.0	7,400		<10.00
Dup	2/28/2007	<10.00	290.0	3,200	<0.5	3.50	600	416	115.00	83.40	878.0	7,280		<10.00
	8/21/2007	<10.00	265.0	4,100	0.30	3.54	620	656	193.00	72.60	1,640.0	11,300		265.00
Dup	8/21/2007	<10.00	263.0	4,100	0.10	3.38	600	655	192.00	72.50	1,630.0	11,400		263.00
	2/20/2008	<5.00	473.0	5,130	0.56	6.80	677	892	255.00	126.00	1,810.0	11,000		<5.00
Dup	2/20/2008	<5.00	231.0	5,120	0.55	6.78	674	888	252.00	126.00	1,800.0	10,800		<5.00
	8/12/2008	<1.53	255.0	4,650	1.06	6.43	628	816	232.00	107.00	1,770.0	11,000		<1.53
Dup	8/12/2008	<1.53	229.0	4,600	1.05	6.37	612	778	222.00	105.00	1,740.0	10,900		<1.53
	2/20/2009	<5.00	260.0	4,600	0.69	1.40	690	680	200.00	84.00	1,700.0	11,000		<5.00
Dup	2/20/2009	<5.00	240.0	4,400	0.65	4.20	630	660	190.00	83.00	1,600.0	11,000		<5.00
	7/29/2009	<5.00	240.0	4,300	0.73	3.30	620	650	220.00	94.00	1,700.0	10,000		<5.00
Dup	7/29/2009	<5.00	240.0	4,200	0.72	3.70	600	640	220.00	95.00	1,700.0	9,900		<5.00
	2/25/2010	<5.00	263.0	4,890	0.34	4.28	650	680	180.00	75.60	1,650.0	8,870		<5.00
	7/28/2010	<5.00	254.0	2,920	0.77	4.98	455	442	132.00	59.50	1,310.0	7,200		<5.00
	2/22/2012	<5.00	314.0	2,030	1.03	6.05	449	256	69.00	43.80	1,020.0	4,860		<5.00
Dup	2/22/2012	<5.00	317.0	2,080	0.96	5.39	400	239	69.20	43.70	943.0	4,300		<5.00
	8/29/2012							NS						



Monitoring Well ID	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Total Dissolved Solids (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Sta	andard (mg/L)	NA	NA	250	1.60	10	600	NA	NA	NA	NA	1,000	NA	NA
	2/21/2013	<6.00	339.0	1,340	0.94	5.18	411	172	48.20	36.80	876.0	3,120		<6.00
Dup	2/21/2013	<6.00	341.0	1,340	0.93	5.15	432	172	46.90	34.80	827.0	3,110		<6.00
	8/14/2013	<6.00	298.0	1,170	1.22	4.52	389	127	34.60	30.80	724.0	2,400		<6.00
Dup	8/14/2013	<6.00	311.0	1,230	1.36	4.79	416	126	35.50	31.10	704.0	2,480		<6.00
Dup	4/3/2014	<10.00	382.0	1,120	1.25	4.12	345	111	30.50	28.40	667.0	2,300		<10.00
	4/3/2014	<10.00	427.0	1,280	1.23	0.58	375	114	30.10	29.90	652.0	1,840		<10.00
	10/9/2014	<4.00	318.0	867	0.84	4.32 J	293	101	28.10	29.90	645.0	2,190		<4.00
Dup	10/9/2014	<4.00	317.0	847	0.73	4.30 J	295	101	27.80	29.60	640.0	2,290		<4.00
	6/25/2015			908	<2.00		326					2,550		
	10/6/2015			920	<20.0		282					2,230 J		
	6/22/2016						Unabl	e to sample due t	o pump					
	10/06/2016						Unabl	e to sample due t	o pump					
	05/23/2017						Unabl	e to sample due t	o pump					
	10/12/2017						Unabl	e to sample due t	o pump					
	5/9/2018							e to sample due t						
	10/9/2018							e to sample due t						
	6/19/2019						Unabl	e to sample due t	o pump					
	11/25/2019						Unabl	e to sample due t	o pump					

Notes

- 1. mg/L: Milligrams per liter
- 2. <: Concentration below test method detection limit
- 3. --: No data available
- 4. NS: Not Sampled
- 5. RW: Recovery well
- 6. WW: Water well
- 7. Detected concentrations exceeding the NMWQCC standard are bolded
- 8. DUP: Duplicate Sample
- 9. J: Estimated Concentration
- 10. B: This Qualifier indicates that the analyte is an estimated value between the RL and the MDL
- 11. All analyses prior to 10/14/02 conducted by Trace Analysis, Inc., Lubbock, TX
- 12. Analyses from 10/14/02 conducted by Environmental Lab of Texas, Odessa, TX
- 13. Analyses from 5/30/03 through 08/2005 conducted by Trace Analysis Inc., Lubbock, TX
- 14. Analyses from 02/2006 through 08/2007, conducted by Pace Analytical, St. Rose, LA and Greenbay, WI Laboratories
- 15. Analyses from 02/2008 through 08/2009, conducted by Test America, Houston, TX
 16. Analyses from 02/2010 through 10/2013, conducted by ALS Environmental, Houston, TX
- 17. Analyses from 04/2014 to present conducted by Xenco Laboratories, Odessa, TX
- 18. U: Not detected above the associated reporting limit 19. NA: Not applicable

APPENDIX D

Analytical Reports

Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-187355-1 Client Project/Site: GL Erwin

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Mr. Brett Krehbiel

Janton

Authorized for release by: 7/3/2019 2:03:38 PM
Jasmine Turner, Project Management Assistant I (713)690-4444

jasmine.turner@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

Review your project results through

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Released to Imaging: 8/17/2023 3:40:54 PM

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 600-187355-1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

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Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

This data package is for Eurofins TestAmerica, Houston job number 600-187355-1 and consists of:

- ☑ R1 Field chain-of-custody documentation;
- ☑ R2 Sample identification cross-reference;
- ☑ R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- ☑ R5 Test reports/summary forms for blank samples;
- ☑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- ☑ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- ☑ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Jasmine Turner, for Sachin Kudchadkar

Name (printed)

Signature

7/3/2019

Date

Senior Project Manager

Official Title (printed)

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Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:Eurofins TestAmerica, HoustonLRC Date:7/3/2019Project Name:GL ErwinLaboratory Job Number:600-187355-1Reviewer Name:Jasmine Turner, for Sachin Kudchadkar

# ¹	A^2	Page 1911 and	V	N -	ALA3	ND4	ER#
		Description Observed to (2.0.0)	Yes	No	NA	NR⁴	ER#
1 (_	Chain-of-custody (C-O-C)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
<u>. I.</u>	<u> </u>	Were all departures from standard conditions described in an exception report?	Х				
2 (Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Х				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Х				
3 (Test reports					
		Were all samples prepared and analyzed within holding times?	Х				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?	Х				
		Were all analyte identifications checked by a peer or supervisor?	Х				
		Were sample detection limits reported for all analytes not detected?	Х				
		Were all results for soil and sediment samples reported on a dry weight basis?			Χ		
		Were % moisture (or solids) reported for all soil and sediment samples?			Χ		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			Χ		
		If required for the project, are TICs reported?			Χ		
1 (_	Surrogate recovery data					
		Were surrogates added prior to extraction?			Χ		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			Χ		
5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	Х				
		Were blanks analyzed at the appropriate frequency?	Х				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup					
		procedures?	Х				
		Were blank concentrations < MQL?	Х				
6 (OI	Laboratory control samples (LCS):					
-		Were all COCs included in the LCS?	Х				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?	Х				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Х				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used					
		to calculate the SDLs?	Х				
		Was the LCSD RPD within QC limits?			Х		
7 (OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	Х				
		Were MS/MSD analyzed at the appropriate frequency?	Х				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		Х			R07C
		Were MS/MSD RPDs within laboratory QC limits?	Х				
3 (_	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	Х				
		Were analytical duplicates analyzed at the appropriate frequency?	Х				
		Were RPDs or relative standard deviations within the laboratory QC limits?	Х				
9 (_	Method quantitation limits (MQLs):	 ``				
		Are the MQLs for each method analyte included in the laboratory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
10	-	Other problems/anomalies	 ^`			\vdash	
. 0		Are all known problems/anomalies/special conditions noted in this LRC and ER?	Х			\vdash	
			+^			\vdash	
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the					
		sample results?	Х			\vdash	
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	l x				

- . Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- ${\it 2.}\quad {\it O}={\it organic analyses; I=inorganic analyses (and general chemistry, when applicable);}\\$
- 3. NA = Not applicable;
- 4. NR = Not reviewed;
- 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:Eurofins TestAmerica, HoustonLRC Date:7/3/2019Project Name:GL ErwinLaboratory Job Number:600-187355-1Reviewer Name:Jasmine Turner, for Sachin Kudchadkar

#1 A2 Descri S1 OI Initial calibration (ICAL) Were response factors and/or relative response factors for Were percent RSDs or correlation coefficient criteria met? Was the number of standards recommended in the method Were all points generated between the lowest and highest Are ICAL data available for all instruments used? Has the initial calibration curve been verified using an appropriate to the method required frequency? Were percent differences for each analyte within the method Was the ICAL curve verified for each analyte? Was the absolute value of the analyte concentration in the Was the absolute value of the analyte concentration in the Was the appropriate compound for the method used for tu Were ion abundance data within the method-required QC I S4 O Internal standards (IS) Were IS area counts and retention times within the method Were lata associated with manual integrations flagged on Were data associated with manual integrations flagged on Did dual column confirmation Did dual column confirmation Did dual column confirmation results meet the method-req Interference Check Sample (ICS) results Were percent recoveries within method QC limits? S9 I Serial dilutions, post digestion spikes, and method of Were percent differences, recoveries, and the linearity with S10 OI Method detection limit (MDL) studies Was a MDL study performed for each reported analyte? Is the MDL either adjusted or supported by the analysis of S11 OI Proficiency test reports Was the laboratory's performance acceptable on the applic S12 OI Standards documentation Are all standards used in the analyses NIST-traceable or constant of the procedures for compound/analyte identification documentation Are the procedures for compound/analyte identification documentation	each analyte within QC limits? X I used for all analytes? Standard used to calculate the curve? X Opriate second source standard? X CCV) and continuing calibration blank (CCB): X d-required QC limits? X inorganic CCB < MDL? X ining? mits? A claim of the curve? X X X X X X X X X X X X X	No N.		ER#°
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Was DOC conducted consistent with NELAC Chapter 5?	umented? X			
Is documentation of the analyst's competency up-to-date a	umented? X X			
S15 OI Verification/validation documentation for methods (NE	X			
	x and on file? X			
Are all the methods used to generate the data documented	nd on file? X LAC Chapter 5)			
S16 OI Laboratory standard operating procedures (SOPs)	nd on file? X LAC Chapter 5)			
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- identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- 3. NA = Not applicable;
- 4. NR = Not reviewed;
- 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	Eurofins TestAmerica, Houston	LRC Date:	7/3/2019
Project Name:	GL Erwin	Laboratory Job Number:	600-187355-1
Reviewer Name:	Jasmine Turner, for Sachin Kudchadkar		

ER # ¹	Description
R07C	Method 300.0: 600-187355-17 MS and 600-187355-17 MSD recovered below QC limits for the following analyte:Chloride. Method 300.0: 600-187355-2 MS and 600-187355-2 MSD recovered below QC limits for the following analyte:Chloride. Method 300.0: 600-187355-24 MS and 600-187355-24 MSD recovered below QC limits for the following analyte:Chloride.
1.	Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2.	O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3.	NA = Not applicable;
4.	NR = Not reviewed;
5.	ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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Detection Check Standard Tes

TestAmerica Houston

 Matrix:
 Water

 Method:
 EPA 300/SW-846 9056A

 Date Analyzed:
 2/19/2019

 Job #:
 600-178696

 TALS Batch:
 258669

 Units:
 mg/L

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Bromide	CHWC11	0.101	0.200	0.318	0.4
Chloride	CHWC11	0.053	0.200	0.278	0.4
Fluoride	CHWC11	0.060	0.200	0.237	0.2
Nitrate as N	CHWC11	0.025	0.200	0.291	0.2
Nitrite as N	CHWC11	0.030	0.400	0.235	0.2
Sulfate	CHWC11	0.096	0.400	0.762	0.5

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Detection Check Standard TestAmerica Houston

Matrix: Water Method: SM 2540C Date Analyzed: 1/15/2019 Job #: 600-174067 TALS Batch: 256205

Units: mg/L

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Total Dissolved Solids	NOEQUIP	10.000	10.800	8.000	10

Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin

Job ID: 600-187355-1

Job ID: 600-187355-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-187355-1

Comments

No additional comments.

Receipt

The samples were received on 6/20/2019 10:04 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.6° C, 3.3° C and 3.9° C.

 ${\it All\ applicable\ analytical\ narratives\ can\ be\ found\ in\ the\ TRRP\ Checklist\ section\ of\ this\ report.}$

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Method Summary

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-187355-1

10.000-107000-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

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Sample Summary

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-187355-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-187355-1	MW - 29	Water	06/19/19 13:26	06/20/19 10:04
600-187355-2	MW - 4	Water	06/19/19 13:20	06/20/19 10:04
600-187355-3	SW - MW	Water	06/19/19 13:15	06/20/19 10:04
600-187355-4	MW - 1	Water	06/19/19 13:04	06/20/19 10:04
600-187355-5	MW - 2	Water	06/19/19 12:53	06/20/19 10:04
600-187355-6	MW - 5	Water	06/19/19 12:47	06/20/19 10:04
600-187355-7	MW - 3	Water	06/19/19 12:41	06/20/19 10:04
600-187355-8	MW - 6	Water	06/19/19 12:36	06/20/19 10:04
600-187355-9	MW - 16	Water	06/19/19 12:28	06/20/19 10:04
600-187355-10	MW - 8	Water	06/19/19 12:21	06/20/19 10:04
600-187355-11	DUP - 2	Water	06/19/19 00:00	06/20/19 10:04
600-187355-12	MW - 7	Water	06/19/19 12:12	06/20/19 10:04
600-187355-13	MW - 13	Water	06/19/19 12:05	06/20/19 10:04
600-187355-14	MW - 30	Water	06/19/19 12:00	06/20/19 10:04
600-187355-15	MW - 19	Water	06/19/19 11:39	06/20/19 10:04
600-187355-16	MW -14	Water	06/19/19 11:22	06/20/19 10:04
600-187355-17	MW - 17	Water	06/19/19 11:19	06/20/19 10:04
600-187355-18	MW - 12	Water	06/19/19 10:09	06/20/19 10:04
600-187355-19	MW - 15	Water	06/19/19 10:02	06/20/19 10:04
600-187355-20	MW - 20	Water	06/19/19 09:53	06/20/19 10:04
600-187355-21	MW - 21	Water	06/19/19 09:42	06/20/19 10:04
600-187355-22	DUP - 1	Water	06/19/19 00:00	06/20/19 10:04
600-187355-23	MW - 24	Water	06/19/19 09:34	06/20/19 10:04
600-187355-24	MW - 23	Water	06/19/19 09:23	06/20/19 10:04
600-187355-25	MW - 25	Water	06/19/19 09:01	06/20/19 10:04
600-187355-26	EB - 1	Water	06/19/19 09:03	06/20/19 10:04
600-187355-27	W - MW	Water	06/19/19 08:39	06/20/19 10:04
600-187355-28	MW - 9	Water	06/19/19 08:32	06/20/19 10:04
600-187355-29	MW - 22	Water	06/19/19 08:24	06/20/19 10:04
600-187355-30	MW - 26	Water	06/19/19 08:14	06/20/19 10:04
600-187355-31	MW - 28	Water	06/19/19 08:03	06/20/19 10:04

Client: ARCADIS U.S., Inc.

Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: MW - 29 Lab Sample ID: 600-187355-1

Date Collected: 06/19/19 13:26 Matrix: Water

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, lo	n Chromatogra	aphy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2770		0.400	0.0534	mg/L			06/28/19 00:54	100
General Chemistry									
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8320		10.0	10.0	mg/L			06/25/19 14:43	1

Client Sample ID: MW - 4

Date Collected: 06/19/19 13:20

Lab Sample ID: 600-187355-2

Matrix: Water

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography								
Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2550	0.400	0.0534 mg/L			06/28/19 01:54	100	

General Chemistry
Analyte Result Qualifier MQL MDL Unit Dissolved Solids 6390 10.0 10.0 mg/L Departed Dissolved Solids Dissolved Solids 10.0 Department Dissolved Solids 10.0 Department Dissolved Solids Dissolved Solids 10.0 Department Dissolved Solids Dissolved Solids 10.0 Department Dissolved So

Client Sample ID: SW - MW

Date Collected: 06/19/19 13:15

Lab Sample ID: 600-187355-3

Matrix: Water

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion	Chromatography							
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	919	0.400	0.0534	mg/L			06/28/19 02:54	100
General Chemistry	Beaut Ouglifier	MOI	MDI	l lmi4	Б	Duamawad	Amalumad	Dil Faa

Analyte Result Qualifier MQL MDL Unit D Prepared Analyzed Dil Fac
Total Dissolved Solids 2460 10.0 10.0 mg/L D Prepared 06/25/19 14:43 1

Client Sample ID: MW - 1

Date Collected: 06/19/19 13:04

Date Received: 06/20/19 10:04

Lab Sample ID: 600-187355-4

Matrix: Water

Method: 300.0 - Anions, Ion Ch	romatogra	phy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	412		0.400	0.0534	mg/L			06/28/19 03:14	20
General Chemistry									

Analyte Result Qualifier MQL MDL Unit Dissolved Solids 1340 10.0 10.0 10.0 mg/L Prepared Analyzed Dil Fac 06/25/19 14:43 1

Client Sample ID: MW - 2

Date Collected: 06/19/19 12:53

Lab Sample ID: 600-187355-5

Matrix: Water

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography								
Analyte	Result Qualif	ifier MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	726	0.400	0.0534	mg/L			06/28/19 03:34	50
Conoral Chamistry								

General Chemistry
Analyte Result Qualifier MQL MDL Unit D Prepared Analyzed Dil Fac
Total Dissolved Solids 1910 10.0 10.0 mg/L D Prepared 06/25/19 14:43 1

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: MW - 5 Lab Sample ID: 600-187355-6

Date Collected: 06/19/19 12:47 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	romatography							
Analyte	Result Qualif	fier MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	464	0.400	0.0534	mg/L			06/28/19 03:54	50
<u> </u>								

General Chemistry Analyte Result Qualifier MQL **MDL** Unit Prepared Analyzed **Total Dissolved Solids** 10.0 10.0 mg/L 06/25/19 14:43 1360

Client Sample ID: MW - 3 Lab Sample ID: 600-187355-7

Date Collected: 06/19/19 12:41 Date Received: 06/20/19 10:04

Method: 300.0 - Anions	, Ion Chromatography		
Analyte	Result Qualifier	MQL	MDL Unit

Prepared Analyzed Dil Fac 0.400 Chloride 521 0.0534 mg/L 06/28/19 04:14

General Chemistry Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1250		10.0	10.0	mg/L			06/25/19 14:43	1

Lab Sample ID: 600-187355-8 Client Sample ID: MW - 6

Date Collected: 06/19/19 12:36 **Matrix: Water** Date Received: 06/20/19 10:04

Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	335	0.400	0.0534	mg/L			06/28/19 04:34	20
General Chemistry								

General Chemistry Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1250	10.0	10.0 mg/L			06/25/19 14:43	1

Client Sample ID: MW - 16 Lab Sample ID: 600-187355-9 Date Collected: 06/19/19 12:28 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	romatography						
Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	365	0.400	0.0534 mg/L			06/28/19 04:54	20
Canaral Chamiatm							

General Chemistry							
Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1060	10.0	10.0 mg/L			06/25/19 14:43	1

Client Sample ID: MW - 8 Lab Sample ID: 600-187355-10 Date Collected: 06/19/19 12:21 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography								
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	353	0.400	0.0534	mg/L			06/28/19 07:14	50

General Chemistry	Decult Ovelifier	MOI	MDI IInit	D	Duamanad	Amalumad	Dil Faa
Analyte	Result Qualifier	MQL	MDL Unit	U	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1250	10.0	10.0 mg/L			06/25/19 14:43	1

Eurofins TestAmerica, Houston

Dil Fac

Matrix: Water

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: DUP - 2 Lab Sample ID: 600-187355-11

Date Collected: 06/19/19 00:00 **Matrix: Water**

Date Received: 06/20/19 10:04

	Method: 300.0 - Anions, Ion Ch	romatography							
	Analyte	Result Qualifi	fier MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	2520	0.400	0.0534	mg/L			06/28/19 07:34	200
ì	_								

General Chemistry

Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	6160		10.0	10.0	mg/L			06/25/19 14:43	1	

Client Sample ID: MW - 7 Lab Sample ID: 600-187355-12 **Matrix: Water**

Date Collected: 06/19/19 12:12 Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Cl	hromatography								
Analyte	Result Qualifier	MQL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Chloride	147	0.400	0.0534	mg/L				06/28/19 07:54	20

General Chemistry Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	806	10.0	10.0 mg/L			06/25/19 14:43	1

Client Sample ID: MW - 13 Lab Sample ID: 600-187355-13

Date Collected: 06/19/19 12:05 **Matrix: Water** Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography Analyte Result Qualifier

Chloride	817	0.400	0.0534 mg/L	<u> </u>	06/28/19 08:14	50
General Chemistry						

MQL

MDL Unit

Prepared

Analyzed

Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Anaiyzed	DII Fac
Total Dissolved Solids	3000		10.0	10.0	mg/L			06/25/19 14:43	1
Client Sample ID: MW - 30						Lab	Sample I	D: 600-1873	55-14

Client Sample ID: MW - 30

Date Collected: 06/19/19 12:00 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography								
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10500	0.400	0.0534	mg/L			06/28/19 08:34	500
_								

General Chemistry

	Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
L	Total Dissolved Solids	26800	10.0	10.0 mg/L			06/25/19 14:43	1

Client Sample ID: MW - 19

Lab Sample ID: 600-187355-15 Date Collected: 06/19/19 11:39 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	ıromatography							
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2990	0.400	0.0534	mg/L			06/28/19 08:54	200
General Chemistry								

General Chemistry

Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	9720	10.0	10.0 mg/L			06/25/19 14:43	1

Eurofins TestAmerica, Houston

Dil Fac

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: MW -14 Lab Sample ID: 600-187355-16

Date Collected: 06/19/19 11:22 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion	Chromatography							
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10700	0.400	0.0534	mg/L			06/28/19 13:37	500
General Chemistry								
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26500	10.0	10.0	mg/L			06/25/19 14:43	1

Client Sample ID: MW - 17 Lab Sample ID: 600-187355-17 **Matrix: Water**

Date Collected: 06/19/19 11:19 Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	romatography						
Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	367	0.400	0.0534 mg/L			06/28/19 13:57	20
Γο του τ.							

General Chemistry Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1050	10.0	10.0 mg/L			06/25/19 14:43	1

Lab Sample ID: 600-187355-18 Client Sample ID: MW - 12 Date Collected: 06/19/19 10:09 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion	Chromatogra	phy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1920		0.400	0.0534	mg/L			06/28/19 14:57	100
General Chemistry									
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6870		10.0	10.0	mg/L			06/25/19 14:43	1

Client Sample ID: MW - 15 Lab Sample ID: 600-187355-19 **Matrix: Water**

Date Collected: 06/19/19 10:02

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	romatogra	ohy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	626		0.400	0.0534	mg/L			06/28/19 15:17	50
General Chemistry									

General Chemistry							
Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1050	10.0	10.0 mg/L			06/25/19 14:43	1

Client Sample ID: MW - 20 Lab Sample ID: 600-187355-20 Date Collected: 06/19/19 09:53 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography											
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	1180	0.400	0.0534	mg/L			06/28/19 15:37	50			
General Chemistry											

General Chemistry								
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3420	10.0	10.0	mg/L			06/25/19 14:43	1

Client: ARCADIS U.S., Inc.

Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: MW - 21 Lab Sample ID: 600-187355-21

Date Collected: 06/19/19 09:42 Matrix: Water

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	romatogra	aphy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	212		0.400	0.0534	mg/L			06/28/19 15:57	20
General Chemistry									
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1030		10.0	10.0	mg/L			06/25/19 14:33	1

Client Sample ID: DUP - 1

Date Collected: 06/19/19 00:00

Lab Sample ID: 600-187355-22

Matrix: Water

Date Collected: 06/19/19 00:00 Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chro	omatogra	phy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9750		0.400	0.0534	mg/L			06/28/19 16:58	1000

General Chemistry Analyte Total Dissolved Solids	Result Qualifier 22000	MQL 10.0	MDL Unit mg/L	<u>D</u> .	Prepared	Analyzed 06/26/19 15:14	Dil Fac
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Client Sample ID: MW - 24

Date Collected: 06/19/19 09:34

Lab Sample ID: 600-187355-23

Matrix: Water

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, lor Analyte	_	ı <mark>phy</mark> Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1660		0.400	0.0534	mg/L			06/28/19 17:18	200
General Chemistry									
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6500		10.0	10.0	mg/L			06/26/19 15:14	1

Client Sample ID: MW - 23 Lab Sample ID: 600-187355-24

Date Collected: 06/19/19 09:23 Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography									
	Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	359	0.400	0.0534	mg/L			06/28/19 17:38	20
	General Chemistry								
	Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

 Total Dissolved Solids
 1330
 10.0
 10.0
 mg/L
 06/26/19 15:14
 1

 Client Sample ID: MW - 25

Date Collected: 06/19/19 09:01 Date Received: 06/20/19 10:04

Method: 300.0 - Anions, lor	n Chromatography							
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2310	0.400	0.0534	mg/L			06/28/19 18:38	200
General Chemistry	- " - ""				_			

General ChemistryAnalyteResultQualifierMQLMDLUnitDPreparedAnalyzedDil FacTotal Dissolved Solids716010.010.0mg/L06/26/19 15:141

Eurofins TestAmerica, Houston

Matrix: Water

Matrix: Water

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: EB - 1 Lab Sample ID: 600-187355-26

Date Collected: 06/19/19 09:03 **Matrix: Water**

Date Received: 06/20/19 10:04

	Method: 300.0 - Anions, Ion Chror	natogra	ıphy							
	Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	0.0534	U	0.400	0.0534	mg/L			07/01/19 15:41	1
	General Chemistry									
	Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Total Dissolved Solids	564		10.0	10.0	mg/L			06/26/19 15:14	1

Client Sample ID: W - MW Lab Sample ID: 600-187355-27

Date Collected: 06/19/19 08:39

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Chromatography									
	Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	117	0.400	0.0534	mg/L			06/28/19 19:18	20
									

General Chemistry Analyte	Result (Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	726		10.0	10.0	mg/L			06/26/19 15:14	1

Client Sample ID: MW - 9 Lab Sample ID: 600-187355-28 Date Collected: 06/19/19 08:32 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion	flethod: 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	205		0.400	0.0534	mg/L			06/28/19 19:38	50		
General Chemistry											
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Total Dissolved Solids	988		10.0	10.0	mg/L			06/26/19 15:14	1		

Client Sample ID: MW - 22 Lab Sample ID: 600-187355-29 **Matrix: Water**

Date Collected: 06/19/19 08:24

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion Ch	romatogra	aphy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3070		0.400	0.0534	mg/L			06/28/19 19:58	200
General Chemistry									

Contra Chomicaly								
Analyte	Result Qualifier	MQL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	9460	10.0	10.0 mg/L			06/26/19 15:14	1	

Lab Sample ID: 600-187355-30 Client Sample ID: MW - 26 Date Collected: 06/19/19 08:14 **Matrix: Water**

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, lo	n Chromatography							
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	685	0.400	0.0534	mg/L			06/28/19 20:58	100

General Chemistry								
Analyte	Result Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1980	10.0	10.0	mg/L			06/26/19 15:14	1

Eurofins TestAmerica, Houston

Matrix: Water

Client: ARCADIS U.S., Inc.

Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: MW - 28 Lab Sample ID: 600-187355-31

Date Collected: 06/19/19 08:03 East Sample 15: 000-107-353-31

Date Received: 06/20/19 10:04

Method: 300.0 - Anions, Ion	Chromatogra	phy							
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4820		0.400	0.0534	mg/L			06/28/19 21:18	500
General Chemistry									
Analyte	Result	Qualifier	MQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14000		10.0	10.0	mg/L			06/26/19 15:14	1

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Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Qualifiers

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Qualifier **Qualifier Description**

N1 MS, MSD: Spike recovery exceeds upper or lower control limits.

Analyte was not detected at or above the SDL.

General Chemistry

Qualifier **Qualifier Description**

Analyte was not detected at or above the SDL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) **TEF** Toxicity Equivalent Quotient (Dioxin) **TEQ**

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW - 4

Client Sample ID: MW - 4

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW - 17

Client Sample ID: MW - 17

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-268164/35

Matrix: Water

Analysis Batch: 268164

MB MB

Analyte Result Qualifier MQL **MDL** Unit Analyzed Dil Fac Prepared Chloride 0.0534 U 0.400 0.0534 mg/L 06/28/19 00:14

Lab Sample ID: LCS 600-268164/36

Matrix: Water

Analysis Batch: 268164

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 20.0 Chloride 19.30 mg/L 96 90 - 110

Lab Sample ID: 600-187355-2 MS

Matrix: Water

Analysis Batch: 268164

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 2550 1000 3170 N1 80 - 120 mg/L 62

Lab Sample ID: 600-187355-2 MSD

Matrix: Water

Analysis Batch: 268164

Spike MSD MSD %Rec. **RPD** Sample Sample Added RPD Analyte Result Qualifier Result Qualifier %Rec Limits Limit Unit D Chloride 2550 1000 3172 N1 62 80 - 120 mq/L

Lab Sample ID: MB 600-268268/4

Matrix: Water

Analysis Batch: 268268

MB MB MQL **MDL** Unit **Analyte** Result Qualifier D Prepared Analyzed Dil Fac Chloride 0.0534 U 0.400 0.0534 mg/L 06/28/19 12:57

Lab Sample ID: LCS 600-268268/5

Matrix: Water

Analysis Batch: 268268

Spike LCS LCS %Rec. %Rec Analyte Added Result Qualifier Unit Limits Chloride 20.0 19.60 mg/L 90 - 110

Lab Sample ID: 600-187355-17 MS

Matrix: Water

Analysis Batch: 268268

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chloride 367 200 522.9 N1 78 80 - 120 mg/L

Lab Sample ID: 600-187355-17 MSD

Matrix: Water

Analysis Batch: 268268

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Limits RPD Analyte Unit %Rec Limit 200 Chloride 367 525.2 N1 mg/L 80 - 120 20

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Client: ARCADIS U.S., Inc. Job ID: 600-187355-1 Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: MW - 23 Lab Sample ID: 600-187355-24 MS Prep Type: Total/NA

Matrix: Water

Analysis Batch: 268268

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 359 200 511.8 N1 80 - 120 mg/L

Lab Sample ID: 600-187355-24 MSD Client Sample ID: MW - 23 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 268268

RPD Spike MSD MSD %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit 359 200 Chloride 512.5 N1 mg/L 80 - 120 0

Lab Sample ID: MB 600-268404/4 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 268404

MB MB

Analyte Result Qualifier MQL MDL Unit ח Analyzed Dil Fac Prepared Chloride 0.0534 U 0.400 0.0534 mg/L 07/01/19 14:01

Lab Sample ID: LCS 600-268404/5 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 268404

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier D %Rec Unit Chloride 20.0 19.30 mg/L 96 90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 600-267963/1 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 267963

MB MB

MQL Dil Fac Analyte Result Qualifier MDI Unit D Prepared Analyzed Total Dissolved Solids 10.0 U 10.0 10.0 mg/L 06/25/19 14:33

Lab Sample ID: LCS 600-267963/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 267963

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit D %Rec Limits 1800 1705 Total Dissolved Solids mg/L 90 - 110

Lab Sample ID: MB 600-267965/1 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 267965

MR MR Result Qualifier MQL MDL Unit Prepared Analyzed Dil Fac **Total Dissolved Solids** 10.0 Ū 10.0 10.0 mg/L 06/25/19 14:43

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 600-187355-6 DU Client Sample ID: MW - 5 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 267965

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit D RPD Limit Total Dissolved Solids 1360 1422 mg/L

Client Sample ID: MW - 7 Lab Sample ID: 600-187355-12 DU Prep Type: Total/NA

Matrix: Water

Analysis Batch: 267965

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit D RPD Limit 806 **Total Dissolved Solids** 796.0 mg/L

Lab Sample ID: MB 600-268092/1 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 268092

MB MB

Analyte Result Qualifier MQL **MDL** Unit ח Prepared Analyzed Dil Fac Total Dissolved Solids 10.0 U 10.0 10.0 mg/L 06/26/19 15:14

Lab Sample ID: LCS 600-268092/2 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 268092

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec D **Total Dissolved Solids** 1800 1789 mg/L 99 90 - 110

Lab Sample ID: 600-187355-27 DU

Matrix: Water

Analysis Batch: 268092

Sample Sample DU DU **RPD** Result Qualifier RPD Analyte Result Qualifier Unit D Limit **Total Dissolved Solids** 726 774.0 mg/L

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Client Sample ID: W - MW

Prep Type: Total/NA

Default Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography

A	nalyte	MQL	MDL	Units
	hloride	0.400	0.0534	mg/L

General Chemistry

ĺ	Analyte	MQL	MDL	Units	
	Total Dissolved Solids	10.0	10.0	mg/L	

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QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin

Job ID: 600-187355-1

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Analysis Batch: 268164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187355-1	MW - 29	Total/NA	Water	300.0	
600-187355-2	MW - 4	Total/NA	Water	300.0	
600-187355-3	SW - MW	Total/NA	Water	300.0	
600-187355-4	MW - 1	Total/NA	Water	300.0	
600-187355-5	MW - 2	Total/NA	Water	300.0	
600-187355-6	MW - 5	Total/NA	Water	300.0	
600-187355-7	MW - 3	Total/NA	Water	300.0	
600-187355-8	MW - 6	Total/NA	Water	300.0	
600-187355-9	MW - 16	Total/NA	Water	300.0	
600-187355-10	MW - 8	Total/NA	Water	300.0	
600-187355-11	DUP - 2	Total/NA	Water	300.0	
600-187355-12	MW - 7	Total/NA	Water	300.0	
600-187355-13	MW - 13	Total/NA	Water	300.0	
600-187355-14	MW - 30	Total/NA	Water	300.0	
600-187355-15	MW - 19	Total/NA	Water	300.0	
MB 600-268164/35	Method Blank	Total/NA	Water	300.0	
LCS 600-268164/36	Lab Control Sample	Total/NA	Water	300.0	
600-187355-2 MS	MW - 4	Total/NA	Water	300.0	
600-187355-2 MSD	MW - 4	Total/NA	Water	300.0	

Analysis Batch: 268268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187355-16	MW -14	Total/NA	Water	300.0	
600-187355-17	MW - 17	Total/NA	Water	300.0	
600-187355-18	MW - 12	Total/NA	Water	300.0	
600-187355-19	MW - 15	Total/NA	Water	300.0	
600-187355-20	MW - 20	Total/NA	Water	300.0	
600-187355-21	MW - 21	Total/NA	Water	300.0	
600-187355-22	DUP - 1	Total/NA	Water	300.0	
600-187355-23	MW - 24	Total/NA	Water	300.0	
600-187355-24	MW - 23	Total/NA	Water	300.0	
600-187355-25	MW - 25	Total/NA	Water	300.0	
600-187355-27	W - MW	Total/NA	Water	300.0	
600-187355-28	MW - 9	Total/NA	Water	300.0	
600-187355-29	MW - 22	Total/NA	Water	300.0	
600-187355-30	MW - 26	Total/NA	Water	300.0	
600-187355-31	MW - 28	Total/NA	Water	300.0	
MB 600-268268/4	Method Blank	Total/NA	Water	300.0	
LCS 600-268268/5	Lab Control Sample	Total/NA	Water	300.0	
600-187355-17 MS	MW - 17	Total/NA	Water	300.0	
600-187355-17 MSD	MW - 17	Total/NA	Water	300.0	
600-187355-24 MS	MW - 23	Total/NA	Water	300.0	
600-187355-24 MSD	MW - 23	Total/NA	Water	300.0	

Analysis Batch: 268404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187355-26	EB - 1	Total/NA	Water	300.0	
MB 600-268404/4	Method Blank	Total/NA	Water	300.0	
LCS 600-268404/5	Lab Control Sample	Total/NA	Water	300.0	

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1 Project/Site: GL Erwin

General Chemistry

Analysis Batch: 267963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187355-21	MW - 21	Total/NA	Water	SM 2540C	
MB 600-267963/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-267963/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 267965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187355-1	MW - 29	Total/NA	Water	SM 2540C	
600-187355-2	MW - 4	Total/NA	Water	SM 2540C	
600-187355-3	SW - MW	Total/NA	Water	SM 2540C	
600-187355-4	MW - 1	Total/NA	Water	SM 2540C	
600-187355-5	MW - 2	Total/NA	Water	SM 2540C	
600-187355-6	MW - 5	Total/NA	Water	SM 2540C	
600-187355-7	MW - 3	Total/NA	Water	SM 2540C	
600-187355-8	MW - 6	Total/NA	Water	SM 2540C	
600-187355-9	MW - 16	Total/NA	Water	SM 2540C	
600-187355-10	MW - 8	Total/NA	Water	SM 2540C	
600-187355-11	DUP - 2	Total/NA	Water	SM 2540C	
600-187355-12	MW - 7	Total/NA	Water	SM 2540C	
600-187355-13	MW - 13	Total/NA	Water	SM 2540C	
600-187355-14	MW - 30	Total/NA	Water	SM 2540C	
600-187355-15	MW - 19	Total/NA	Water	SM 2540C	
600-187355-16	MW -14	Total/NA	Water	SM 2540C	
600-187355-17	MW - 17	Total/NA	Water	SM 2540C	
600-187355-18	MW - 12	Total/NA	Water	SM 2540C	
600-187355-19	MW - 15	Total/NA	Water	SM 2540C	
600-187355-20	MW - 20	Total/NA	Water	SM 2540C	
MB 600-267965/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-267965/2	Lab Control Sample	Total/NA	Water	SM 2540C	
600-187355-6 DU	MW - 5	Total/NA	Water	SM 2540C	
600-187355-12 DU	MW - 7	Total/NA	Water	SM 2540C	

Analysis Batch: 268092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-187355-22	DUP - 1	Total/NA	Water	SM 2540C	
600-187355-23	MW - 24	Total/NA	Water	SM 2540C	
600-187355-24	MW - 23	Total/NA	Water	SM 2540C	
600-187355-25	MW - 25	Total/NA	Water	SM 2540C	
600-187355-26	EB - 1	Total/NA	Water	SM 2540C	
600-187355-27	W - MW	Total/NA	Water	SM 2540C	
600-187355-28	MW - 9	Total/NA	Water	SM 2540C	
600-187355-29	MW - 22	Total/NA	Water	SM 2540C	
600-187355-30	MW - 26	Total/NA	Water	SM 2540C	
600-187355-31	MW - 28	Total/NA	Water	SM 2540C	
MB 600-268092/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-268092/2	Lab Control Sample	Total/NA	Water	SM 2540C	
600-187355-27 DU	W - MW	Total/NA	Water	SM 2540C	

Job ID: 600-187355-1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: MW - 29

Lab Sample ID: 600-187355-1

Matrix: Water

Date Collected: 06/19/19 13:26 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			268164	06/28/19 00:54	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 4 Lab Sample ID: 600-187355-2

Date Collected: 06/19/19 13:20 Matrix: Water

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			268164	06/28/19 01:54	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: SW - MW

Lab Sample ID: 600-187355-3

Matrix: Water

Date Collected: 06/19/19 13:15
Date Received: 06/20/19 10:04

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Type Run **Factor** Analyst Lab Total/NA 268164 Analysis 300.0 100 06/28/19 02:54 SKR TAL HOU Total/NA Analysis SM 2540C 50 mL 100 mL 267965 06/25/19 14:43 DTN TAL HOU 1

Client Sample ID: MW - 1

Date Collected: 06/19/19 13:04

Lab Sample ID: 600-187355-4

Matrix: Water

Date Collected: 06/19/19 13:04 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			268164	06/28/19 03:14	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 2

Date Collected: 06/19/19 12:53

Lab Sample ID: 600-187355-5

Matrix: Water

Date Collected: 06/19/19 12:53 Date Received: 06/20/19 10:04

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268164	06/28/19 03:34	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 5 Lab Sample ID: 600-187355-6

Date Collected: 06/19/19 12:47

Date Received: 06/20/19 10:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268164	06/28/19 03:54	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

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JU-187355-6 Matrix: Water

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-187355-1

Client Sample ID: MW - 3

Lab Sample ID: 600-187355-7

Matrix: Water

Matrix: Water

TAL HOU

Matrix: Water

Date Collected: 06/19/19 12:41 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268164	06/28/19 04:14	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 6 Lab Sample ID: 600-187355-8

Date Collected: 06/19/19 12:36 **Matrix: Water**

Date Received: 06/20/19 10:04

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			268164	06/28/19 04:34	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 16 Lab Sample ID: 600-187355-9 **Matrix: Water**

Date Collected: 06/19/19 12:28 Date Received: 06/20/19 10:04

Batch Batch Dil Initial Final Batch Prepared Method Amount Amount Number or Analyzed **Prep Type** Type Run **Factor** Analyst Lab 268164 Total/NA Analysis 300.0 20 06/28/19 04:54 SKR TAL HOU Total/NA Analysis SM 2540C 50 mL 267965 06/25/19 14:43 DTN TAL HOU

1

1

Lab Sample ID: 600-187355-10 Client Sample ID: MW - 8

100 mL

100 mL

267965

06/25/19 14:43 DTN

Date Collected: 06/19/19 12:21 Date Received: 06/20/19 10:04

Batch Batch Dil Initial Final **Batch** Prepared Method Number or Analyzed **Prep Type** Туре Factor Amount Amount Run Analyst Lab 300.0 06/28/19 07:14 SKR Total/NA Analysis 50 268164 TAL HOU

Client Sample ID: DUP - 2 Lab Sample ID: 600-187355-11 **Matrix: Water**

50 mL

Date Collected: 06/19/19 00:00 Date Received: 06/20/19 10:04

Analysis

SM 2540C

Total/NA

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			268164	06/28/19 07:34	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 7 Lab Sample ID: 600-187355-12

Date Collected: 06/19/19 12:12 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			268164	06/28/19 07:54	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 13

Date Collected: 06/19/19 12:05 Date Received: 06/20/19 10:04

Lab Sample ID: 600-187355-13

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268164	06/28/19 08:14	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 30 Lab Sample ID: 600-187355-14

Date Collected: 06/19/19 12:00 Date Received: 06/20/19 10:04

Matrix: Water

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			268164	06/28/19 08:34	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 19 Lab Sample ID: 600-187355-15 **Matrix: Water**

Date Collected: 06/19/19 11:39 Date Received: 06/20/19 10:04

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Type Run **Factor** Analyst Lab 268164 Total/NA Analysis 300.0 200 06/28/19 08:54 SKR TAL HOU Total/NA Analysis SM 2540C 10 mL 100 mL 267965 06/25/19 14:43 DTN TAL HOU 1

Client Sample ID: MW -14 Lab Sample ID: 600-187355-16 Date Collected: 06/19/19 11:22 **Matrix: Water**

Date Received: 06/20/19 10:04

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			268268	06/28/19 13:37	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 17 Lab Sample ID: 600-187355-17 **Matrix: Water**

Date Collected: 06/19/19 11:19 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			268268	06/28/19 13:57	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 12 Lab Sample ID: 600-187355-18 Date Collected: 06/19/19 10:09 Matrix: Water

Date Received: 06/20/19 10:04

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			268268	06/28/19 14:57	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 15 Lab Sample ID: 600-187355-19

Matrix: Water

Date Collected: 06/19/19 10:02 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268268	06/28/19 15:17	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 20 Lab Sample ID: 600-187355-20

Date Collected: 06/19/19 09:53 **Matrix: Water**

Date Received: 06/20/19 10:04

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268268	06/28/19 15:37	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	267965	06/25/19 14:43	DTN	TAL HOU

Client Sample ID: MW - 21 Lab Sample ID: 600-187355-21

Date Collected: 06/19/19 09:42 **Matrix: Water** Date Received: 06/20/19 10:04

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Type Run **Factor** Analyst Lab Total/NA 268268 Analysis 300.0 20 06/28/19 15:57 SKR TAL HOU

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Client Sample ID: DUP - 1 Lab Sample ID: 600-187355-22 **Matrix: Water**

50 mL

100 mL

267963

06/25/19 14:33 DTN

Date Collected: 06/19/19 00:00 Date Received: 06/20/19 10:04

Analysis

SM 2540C

Total/NA

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1000			268268	06/28/19 16:58	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Client Sample ID: MW - 24 Lab Sample ID: 600-187355-23 **Matrix: Water**

Date Collected: 06/19/19 09:34 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			268268	06/28/19 17:18	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Lab Sample ID: 600-187355-24 Client Sample ID: MW - 23

Date Collected: 06/19/19 09:23

Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			268268	06/28/19 17:38	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Eurofins TestAmerica, Houston

Matrix: Water

TAL HOU

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-187355-1

Client Sample ID: MW - 25

Date Collected: 06/19/19 09:01 Date Received: 06/20/19 10:04

Lab Sample ID: 600-187355-25

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			268268	06/28/19 18:38	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Client Sample ID: EB - 1 Lab Sample ID: 600-187355-26

Date Collected: 06/19/19 09:03 Date Received: 06/20/19 10:04

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0	· 	1			268404	07/01/19 15:41	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Client Sample ID: W - MW Lab Sample ID: 600-187355-27 Date Collected: 06/19/19 08:39

Matrix: Water

Date Received: 06/20/19 10:04

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Type Run **Factor** Analyst Lab 268268 Total/NA Analysis 300.0 20 06/28/19 19:18 SKR TAL HOU Total/NA Analysis SM 2540C 50 mL 268092 06/26/19 15:14 DTN TAL HOU 1 100 mL

Lab Sample ID: 600-187355-28 Client Sample ID: MW - 9

Date Collected: 06/19/19 08:32 Date Received: 06/20/19 10:04

Matrix: Water

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			268268	06/28/19 19:38	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Client Sample ID: MW - 22 Lab Sample ID: 600-187355-29

Date Collected: 06/19/19 08:24 Date Received: 06/20/19 10:04

Matrix: Water

Batch Batch Dil Initial Final Batch Prepared Number Method **Amount** or Analyzed **Prep Type** Type Run **Factor** Amount Analyst Lab Total/NA Analysis 300.0 200 268268 06/28/19 19:58 SKR TAL HOU Total/NA Analysis SM 2540C 1 10 mL 100 mL 268092 06/26/19 15:14 DTN TAL HOU

Client Sample ID: MW - 26 Lab Sample ID: 600-187355-30

Date Collected: 06/19/19 08:14 Date Received: 06/20/19 10:04

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			268268	06/28/19 20:58	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc.

Job ID: 600-187355-1

Project/Site: GL Erwin

Client Sample ID: MW - 28 Lab Sample ID: 600-187355-31

Matrix: Water

Date Collected: 06/19/19 08:03 Date Received: 06/20/19 10:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			268268	06/28/19 21:18	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	268092	06/26/19 15:14	DTN	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-187355-1

Project/Site: GL Erwin

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Turner, Jasmine M.

From:

Kudchadkar, Sachin

Sent:

Thursday, June 20, 2019 4:10 PM

To:

Turner, Jasmine M.

Subject:

FW: Signed GL Erwin COCs

Attachments:

GL Erwin COCs.pdf

Follow Up Flag: Flag Status:

Follow up Flagged

Sachin G. Kudchadkar

Phone: 713.690.4444 Ext 114

Direct: 713.358.2004

E-mail: Sachin.Kudchadkar@testamericainc.com

From: Foord, Scott [mailto:William.Foord@arcadis.com]

Sent: Thursday, June 20, 2019 10:48 AM

To: Kudchadkar, Sachin

Cc: Grant, Russell; Longwell, Jerry **Subject:** Signed GL Erwin COCs

-External Email-

Sachin,

I hope all is well. Please see attached signed COCs for GL Erwin, samples were shipped yesterday I believe and we forgot to sign, please let me know if you need any additional information.

Thanks, Scott

Scott Foord, PG, RSO | AFS Group Service Leader – CPM | william.foord@arcadis.com Arcadis | Arcadis U.S., Inc. 10205 Westheimer Road Suite 800 Houston TX | 77042 | USA T. +1 713 953 4853 | M. +1 281 725 7477

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Please consider the environment before printing this email

Released to Imaging: 8/17/2023 3:40:54 PM

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Client information	1200	LB	78	Cat PM. Kudchadkar, Sechin G		4	the Parching Note;		COC No.	
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6310 Rothway Street Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646	O	Chain	f Cus	n of Custody Record	ecord	#264	3 .		
Client Information	Sampler:			Kudch Kudch	M: hadkar, Sachir		Carrier Tracking No(s):	COC No: 600-68939-18801.1	01.1
Client Contact: Trudy Rodriquez	Phone:			E-Ma	i. in.kudchadkar(E-Mail: sachin.kudchadkar@testamericainc.com		Page: Page 1 of 4	
Company: ARCADIS U.S., Inc.						Analysis Requested	ted	Job #:	
Address: 1004 North Big Spring Suite 121	Due Date Requested;	#						Preservation Codes	des:
City. Midland	TAT Requested (days):	:(s):						B - NaOH C - Zn Acetate	N - Hexane N - None O - AsNaO2
State, 2.p. TX, 79701								E - NaHSO4 F - MeOH	Q - Na2SO3
Phone: 916-786-5382(Tel)	Po#: Purchase Order not required	not required			(0)			G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydra
Email: trudy.rodriquez@arcadis-us.com	,#OM				(oN			11770	U - Acetone V - MCAA
Project Name: Midland - Chevron / Keyan 30yer	Project #: 60003622				10 29			MATERIAL PROPERTY.	Z - other (specify)
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Possible Hazard Identification Non-Hazard Elammahis Chin Imitant	Poison B Hoknown		Radiological		Sample Di	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client	assessed if samples are ret	tained longer than	1 month)
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Eurofins TestAmerica, Houston			,			Mid	Midland			14.
6310 Rothway Street Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646	O	hain	f Cus	tody F	Chain of Custody Record	#2	#264			. 1
Client Information	Sampler	2		Lab PM Kudch	Lab PM: Kudchadkar, Sachin G	chin G	Carner Tracking No(s):		COC No: 600-68939-18801 1	
Client Contact:				E-Mail.					Page	
Trudy Rodriquez	-			sac	in.kudchadi	sachin kudchadkar@testamencainc.com			Page 2 of 4	
ARCADIS U.S., Inc.						Analysis Requested	equested		100 #:	
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Phone: 916-786-5382(Tel)	PO #: Purchase Order not	not required			(0					J3 decahudrate
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MW - 30		1200	F	Water	-					
MW - 19	10/19/19	1139	G	Water	1					
MM - 14	10/19/19	1122	Ġ	Water	-					
1		1119	G	Water	1					
MW - 12	16/19/19	10 09	C	Water	1					
MW -15	11/11/11	2001	G	Water	1					
mw - 20	10/19/19	853	Ŋ	Water	-					
mw -21	10/19/19	0942	S	Water	-					
Duck - 1	10/10/19		CI	Water	-					
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison B Unknown		Radiological		Sample	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For	e assessed if sample Disposal By Lab	es are retained Archive	d longer than 1 month) e For Months	
Deliverable Requested: I, II, III, IV, Other (specify)					Special	Special Instructions/QC Requirements:	nents:			
Empty Kit Relinquished by:	3	Date:			Time;		Method of Shipment	nent:		
Relinquished by:	Date/Time:			Сотрапу	Rece	Received by World	Date	Date/Time:	10 10 Company	44
Relinquished by:	DateTime:			Company	Rece	Received.fb;/	DaterTime	ringe:	Company	
Reinquished by:	Date/Time			Company	Rece	Received by:	Date/	Date/Time:	Сотрасу	
03					Coole	Cooler Temperature(s) °C and Other Remarks	Remarks			
A Yes A No					-					

Sample Date Requested (byp): Continued	Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Phone (713) 690-4444 Fax (713) 690-5646		Chain	of Cus	Chain of Custody Record	ecol	Þ	Š,	Midland #264	O			
Sample Substituted by. Substitute Substituted by.	Client Information	12	148		Kudo	hadkar.	Sachin G	88	Certier Ita	scking No(s):		COC No: 600-68939-18801.1	1.10
15Inc. Due Date Requested (days): Inc. Inc. Due Date Requested (days): Inc. Due Date Date te Due Date Date Due Date Date Date Date Date Date Date Dat	Client Contact: Trudy Rodriquez	Phone:			E-Mail	n.kudch	adkar@test	americainc.co	F			Page:	
Big Spring Suite 121	Company: ARCADIS U.S., Inc.							Analysis	Requested			Job #:	
Post Post	Address: 1004 North Bia Spring Suite 121	Due Date Request	ed:									Preservation Codes:	ō
Post Post	City: Midland State: Zip: TY 70704	TAT Requested (d	ays):									A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSOA	
Vote Vote	Phone: 916-786-5382(Tel)	PO#:	r not require			(F - MeOH G - Amchlor	
	Email: trudy.rodriquez@arcadis-us.com	WO#:				of the contract of	G8					1 - Ice J - Di Water	U - Acetone V - MCAA
Sample Date Sample Sampl	Iregan	Project #: 60003622				-	GFM_2				-	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Sample Date Sample Sample Sample Sample Sample Sample Caconp. Type Sample Caconp. Type Sample Caconp. Type Sample Caconp. Sample Caconp. Sample Caconp. Sample Caconp. Sample Caconp. Sample Caconp. Caconp. Sample	SHE: CIL ÉMUIN	SSOW#:				BILL STORY OF THE	BO_00					Other:	
### Preservation Code: X ### D/14/14 6434 G1 Water ###################################	Sample identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=westatioli, 8T=Tissue, A=Air)	The second secon	2540C_Calcd, 3				Total Number	Special	Special Instructions/Note:
### CANON CA		$\langle \rangle$	X	Preserva	tion Code:	X	7	18 S 28 S 18 S			X		V
Water Up 19 19 09 0.3 G Water Up 19 19 09 0.3 G Water Up 19 19 06 3.4 G Water Up 19 19 06 3.4 G Water Up 19 19 06 3.4 G Water Up 19 19 06 0.3 G Water Up 19 10 06 0.3 G Water Up 10 10 07 0.3	- 6	10/14/14	PE 190	G	Water		_						
## Company Letting Go of of of of of of of of of of of of of	7 -	10/19/19	0923	b	Water		1						
Let 19 19 OG 34 C1 Water Let 19 19 OG 34 C1 Water Let 19 19 OG 24 C1 Water Water Water Water Water Let 19 14 OG 14 C1 Water Water Water Water In Water Let 19 14 OG 15 Water In Water Let 19 14 OG 15 Water In Water Let 19 14 OG 15 Water In Water Let 19 14 OG 16 Water In Water Date: Time: Date: Company Company Date: Time: Company	1-	119/19	1 060	G	Water		,				54		
### Company VIII. IV, Other (Specify) Date: Company		10/19/19	0903	G	Water		1						
### Timesher Company		11/11/19	48.30	C	Water								
## Company Letter Letter Company	mw -9	10/19/19	0831	G	Water		-						
### CE 14 14 CE 14 CR Water ### CE 03 C1 Water ### Water	MW-11	119/19	6824	CI	Water		1						
ation mable Skin Inflant Poison B Unknown Radiological Till, IV, Other (specify) Date: Date: Date: CAS (1 Water Water Tim Dater Tim Dater Time: Company Company Company DaterTime: aterTime: DaterTime:	MW-26	4114/14	1120	C	Water								
water mable Skin Irritant Poison B Unknown Radiological Till, IV, Other (specify) Date: Company Date/Time: Company Date/Time: Company Date/Time: Company		11/11/11	0803	Ŋ	Water		-						
mable Skin Irritant Poison B Unknown Radiological Till, IV, Other (specify) Date: Date: Company Date/Time: Date/Time: Company Date/Time: Date/Time: Company			000		Water								
Timesble Skin Irritant Poison B Unknown Radiological Special Instructions/QC Requirements: III. IV, Other (specify) Date: Date: Date: Date: Date: Company Received by: Date:Time: Date: Company Received by: Conjugny Received by: Conjugny Received by: Conjugny Received by: Date:Time: Date	Possible Hazard Identification					Sam	ple Disposi	al (A fee may	be assessed	if samples	are retaine	ed longer than	1 month)
Date: Time: Company Received by: Conference: Company Received by: Cand Other Remarks: Color Temperature(s) °C and Other Remarks: Color Temperature(s) °C a	Non-Hazard Flammable Skin Irritant			Radiological		Can	Return To	Client	Disposal E	3y Lab	Archi	ve For	Months
Date/Time: Company Received by: Date/Time: D	Emoto Kit Relinenished by		Date:			Time.	Son age in look	000000000000000000000000000000000000000	. [semont Shipmen	14.		
Date/Time: Company Received by: Date/Time: D	Relinquished by:	Date/Time:			Company		Received by	06		Date/T	100/10	10.01	Company
Date/Time: Company Received by: Cooler Temperature(s) °C and Other Remarks:	Relinquished by:	DateTime:			Company		Received by:			Date	me.	-	
Custody Seal No.:	Reinquished by:	Date/Time;			Company		Received by:			Date/T	me		Company
						Ĭ	Cooler Tempera	ature(s) °C and O	ther Remarks:				

TestAmerica Houston

Loc: 600 187355

Sample Receipt Checklist

THE LEADER IN ENVIRONMENTAL TESTING

JOB NUMBER:			Date/Time Received	: <u> </u>	rcac	19 JUN 20 18	Į Ģ:
UNPACKED BY:	12		CARRIER/DRIVER:	-	FIS		
7/	YES [NO	Number of Coolers F	Received: _	3		
Cooler ID	Temp Blank Y / N	Trip Blank	Observed Temp (℃)	Therm ID	Them CF	Corrected Temp	7
SiVIF	Y / N Y / N Y / N	Y / N Y / N Y / N	3.5			3.3	
	Y / N Y / N Y / N	Y / N Y / N Y / N			VF 61	20/19	
CF = correction factor	Y / N Y / N	Y / N Y / N]
LABORATORY PRESER Base samples are>pH 12: pH paper Lot #	□YES [_NO	Acid preserved are<		☐ YES	□NO	
VOA headspace acceptab	le (5-6mm):	YES	NO NA			VES / NO	
Did samples meet the lab	oratory's standa	ard conditions	of sample acceptability	upon receipt	?	YES NO]
COMMENTS:							
							-
				nn.	2010	alia]
					6/21	9/19	

HS-SA-WI-013

Rev. 3; 07/01/2014

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 600-187355-1

List Source: Eurofins TestAmerica, Houston Login Number: 187355

List Number: 1 Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9,2.6,3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the ${\sf COC}.$	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston 6310 Rothway Street Houston, TX 77040 Tel: (713)690-4444

Laboratory Job ID: 600-196673-1 Client Project/Site: GL Erwin

For:

ARCADIS U.S., Inc. 1004 North Big Spring Suite 121 Midland, Texas 79701

Attn: Mr. Russell Grant

Jank

Authorized for release by: 12/20/2019 4:29:57 PM Jasmine Turner, Project Management Assistant I (713)690-4444 jasmine.turner@testamericainc.com

Designee for

Sachin Kudchadkar, Senior Project Manager (713)690-4444

sachin.kudchadkar@testamericainc.com

Review your project

·····LINKS ······

results through
Total Access

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Released to Imaging: 8/17/2023 3:40:54 PM

Laboratory Job ID: 600-196673-1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

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Appendix A

Laboratory Data Package Cover Page - Page 1 of 4

This data package is for Eurofins TestAmerica, Houston job number 600-196673-1 and consists of:

- ☑ R1 Field chain-of-custody documentation;
- ☑ R2 Sample identification cross-reference;
- ☑ R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a. Items consistent with NELAC Chapter 5,
 - b. dilution factors,
 - c. preparation methods,
 - d. cleanup methods, and
 - e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
 - a. Calculated recovery (%R), and
 - b. The laboratory's surrogate QC limits.
- ☑ R5 Test reports/summary forms for blank samples;
- ☑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a. LCS spiking amounts,
 - b. Calculated %R for each analyte, and
 - c. The laboratory's LCS QC limits.
- ☑ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a. Samples associated with the MS/MSD clearly identified,
 - b. MS/MSD spiking amounts,
 - c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d. Calculated %Rs and relative percent differences (RPDs), and
 - e. The laboratory's MS/MSD QC limits
- ☑ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a. The amount of analyte measured in the duplicate,
 - b. The calculated RPD, and
 - c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Jasmine Turner, for Sachin Kudchadkar 12/20/2019 Name (printed)

Senior Project Manager

Official Title (printed)

Page 3 of 52

12/20/2019

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name: Eurofins TestAmerica, Houston LRC Date: 12/20/2019

Project Name: GL Erwin Laboratory Job Number: 600-196673-1

Reviewer Name: Jasmine Turner, for Sachin Kudchadkar

¹ A ²	Description	Yes	No	NA ³	NR ⁴	ER#
I OI	Chain-of-custody (C-O-C)					
	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	Х				
	Were all departures from standard conditions described in an exception report?	Х				
2 01	Sample and quality control (QC) identification					
Į.	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	Х				
	Are all laboratory ID numbers cross-referenced to the corresponding QC data?	Х				
3 OI	Test reports					
	Were all samples prepared and analyzed within holding times?		Х			R03A
	Other than those results < MQL, were all other raw values bracketed by calibration standards?	Х				
	Were calculations checked by a peer or supervisor?	Х				
	Were all analyte identifications checked by a peer or supervisor?	Х				
	Were sample detection limits reported for all analytes not detected?	Х				
	Were all results for soil and sediment samples reported on a dry weight basis?			Х		
	Were % moisture (or solids) reported for all soil and sediment samples?			Х		
	Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			Х		
	If required for the project, are TICs reported?			X		
1 0	Surrogate recovery data		Н	- `		
	Were surrogates added prior to extraction?		\vdash	Х		
	Were surrogate percent recoveries in all samples within the laboratory QC limits?			Х		
O I	Test reports/summary forms for blank samples					
, _{[Oi}	Were appropriate type(s) of blanks analyzed?	Х				
	Were blanks analyzed at the appropriate frequency?	X				
		^				
	Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Х				
	Were blank concentrations < MQL?	X				R05D
6 O I		_ ^				KUSD
5 [OI	Laboratory control samples (LCS): Were all COCs included in the LCS?	V				
		X				
	Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
	Were LCSs analyzed at the required frequency?	X				
	Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	Х				
	Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used	.,				
	to calculate the SDLs?	Х		.,		
	Was the LCSD RPD within QC limits?			Х		
7 01	Matrix spike (MS) and matrix spike duplicate (MSD) data					
	Were the project/method specified analytes included in the MS and MSD?	Х				
	Were MS/MSD analyzed at the appropriate frequency?	Х				
	Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		Х			R07C
	Were MS/MSD RPDs within laboratory QC limits?	Х				
3 OI	Analytical duplicate data					
	Were appropriate analytical duplicates analyzed for each matrix?	Х	lacksquare			
	Were analytical duplicates analyzed at the appropriate frequency?	Х				
	Were RPDs or relative standard deviations within the laboratory QC limits?	Х				
	Method quantitation limits (MQLs):					
	Are the MQLs for each method analyte included in the laboratory data package?	Χ				
	Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	Χ				
	Are unadjusted MQLs and DCSs included in the laboratory data package?	Х				
10 OI	Other problems/anomalies					
•	Are all known problems/anomalies/special conditions noted in this LRC and ER?	Х				
	Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the					
	sample results?		Х			R10B
	Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices		H			

- 1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- ${\it 2.}\quad {\it O}={\it organic analyses; I=inorganic analyses (and general chemistry, when applicable);}\\$
- 3. NA = Not applicable;
- 4. NR = Not reviewed;
- 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	Eurofins TestAmerica, Houston	LRC Date:	12/20/2019
Project Name:	GL Erwin	Laboratory Job Number:	600-196673-1
Reviewer Name:	Jasmine Turner, for Sachin Kudchadkar		

$\#^1$ A^2	Description	Yes	No	NA ³	NR ⁴	ER#
31 OI	Initial calibration (ICAL)					
•	Were response factors and/or relative response factors for each analyte within QC limits?	Х				
	Were percent RSDs or correlation coefficient criteria met?	Х				
	Was the number of standards recommended in the method used for all analytes?	Х				
	Were all points generated between the lowest and highest standard used to calculate the curve?	Х				
	Are ICAL data available for all instruments used?	Х				
	Has the initial calibration curve been verified using an appropriate second source standard?	Х				
S2 OI	Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
	Was the CCV analyzed at the method-required frequency?	X				
	Were percent differences for each analyte within the method-required QC limits?	X				
	Was the ICAL curve verified for each analyte?	Х				
	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	Х				
3 0	Mass spectral tuning					
_	Was the appropriate compound for the method used for tuning?			Χ		
	Were ion abundance data within the method-required QC limits?			Χ		
64 0	Internal standards (IS)					
	Were IS area counts and retention times within the method-required QC limits?			Χ		
55 OI	Raw data (NELAC Section 5.5.10)					
	Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	Х				
	Were data associated with manual integrations flagged on the raw data?	Х				
6 0	Dual column confirmation					
	Did dual column confirmation results meet the method-required QC?			Х		
57 O	Tentatively identified compounds (TICs)					
	If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			Х		
88 I	Interference Check Sample (ICS) results					
, <u> </u>	Were percent recoveries within method QC limits?	-		Х		
S9 I	Serial dilutions, post digestion spikes, and method of standard additions	_				
, _I ,	Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			Х		
310 IOI	Method detection limit (MDL) studies		\vdash			
710 O1	Was a MDL study performed for each reported analyte?	X				
	Is the MDL either adjusted or supported by the analysis of DCSs?	X				
244 101	Proficiency test reports	^				
511 01						
240 101	Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X	\vdash			
512 01	Standards documentation					
10 10:	Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Х	\vdash		\vdash	
513 OI	Compound/analyte identification procedures	.,	\vdash		igwdow	
	Are the procedures for compound/analyte identification documented?	X	<u> </u>		igdash	
514 OI	Demonstration of analyst competency (DOC)		$ldsymbol{\sqcup}$			
	Was DOC conducted consistent with NELAC Chapter 5?	X	Ш			
	Is documentation of the analyst's competency up-to-date and on file?	Х	lacksquare			
15 OI	Verification/validation documentation for methods (NELAC Chapter 5)					
	Are all the methods used to generate the data documented, verified, and validated, where applicable?	Х				
16 OI	Laboratory standard operating procedures (SOPs)					
-	Are laboratory SOPs current and on file for each method performed?	Х				
1.	Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required	report(s). I	tems			
	identified by the letter "S" should be retained and made available upon request for the appropriate retention period					
2.						
3.	NA = Not applicable;					

- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Eurofins TestAmerica, Houston LRC Date: 12/20/2019 Project Name: GL Erwin Laboratory Job Number: 600-196673-1

Reviewer	Name:	Jasmine Turner, for Sachin Kudchadkar
	<u> </u>	
ER # ¹		Description
R03A	remaining holding tim	M 2540C: The following samples were received with less than 2 days remaining on the holding time or less than one shift (8 hours) on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within the: MW-25 (600-196673-1), MW-31 (600-196673-2), MW-11 (600-196673-3), MW-5 (600-196673-4), Southwest-MW (600-196673-5), West 196673-6) and MW-4 (600-196673-7).
R05D	concentrati Method 30 concentrati Method 30 concentrati Method 30 concentrati Method 30 concentrati Method 30 concentrati Method 30 concentrati Method 30 concentrati Method 30 concentrati	0.0: The method blank for analytical batch 600-282115 contained Chloride above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282259 contained Chloride above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282259 contained chloride and sulfate above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282368 contained chloride and sulfate above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282587 contained chloride above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282642 contained Chloride above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282782 contained Chloride above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. 0.0: The method blank for analytical batch 600-282960 contained chloride above the method detection limit. This target analyte ion was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
R07C	interferenc Method 30 suspected. Method 30 suspected Method 30 suspected Method 30	0.0: 600-196673-16 MS and 600-196673-16 MSD recovered below QC limits for the following analytes: Chloride, Sulfate. Matrix the is suspected. 0.0: 600-196673-9 MS and 600-196673-9 MSD recovered below QC limits for the following analytes: Fluoride. Matrix interference is control limits. Sample matrix interference is because the associated laboratory control sample (LCS) recovery was within acceptance limits. 0.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Fluoride were outside control limits. Sample matrix interference is because the associated laboratory control sample (LCS) recovery was within acceptance limits. 0.0: The matrix spike / matrix spike duplicate (MS/MSD) recovery was within acceptance limits. 0.0: The matrix spike duplicate (MSD) recovery for analytical batch 600-282782 was above QC limits for Fluoride. Sample matrix are is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.
R10B	MW-32 (60	0.0: The following samples were diluted due to the abundance of non-target analytes: DUP-1 (600-196673-23), MW-24 (600-196673-25), D0-196673-26), MW-20 (600-196673-28) and MW-12 (600-196673-30). Elevated reporting limits (RLs) are provided for Fluoride. tified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items
	identified b	when by the letter "S" should be retained and made available upon request for the appropriate retention period.

- 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- 3. NA = Not applicable;
- 4. NR = Not reviewed;

12/20/2019

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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Detection Check Standard

EuroFins TestAmerica, Houston

Matrix: Water

SW-846 9056 / EPA 300 Method:

Date Analyzed: 8/23/2019 Job #: 600-188237 TALS Batch: 272774 Units: mg/L

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Bromide	CHWC16	0.101	0.200	0.306	0.4
Chloride	CHWC16	0.053	0.200	0.305	0.4
Fluoride	CHWC16	0.060	0.200	0.296	0.2
Nitrate as N	CHWC16	0.025	0.200	0.306	0.2
Nitrite as N	CHWC16	0.030	0.400	0.384	0.2
Sulfate	CHWC16	0.096	0.400	0.482	0.5

Detection Check Standard

EuroFins TestAmerica, Houston

Matrix: Water Method: SM 2540C **Date Analyzed:** 8/20/2019 Job #: 600-188237 **TALS Batch:** 272376 Units: mg/L

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Total Dissolved Solids	NOEQUIP	10.000	29.880	86.000	10

DCS = Detection Check Standard MQL = Method Quantitation Limit

Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin

Job ID: 600-196673-1

Job ID: 600-196673-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative 600-196673-1

Comments

No additional comments.

Receipt

The samples were received on 11/27/2019 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.4° C, 0.7° C and 1.1° C.

All applicable analytical narratives can be found in the TRRP Checklist section of this report.

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Method Summary

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-196673-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

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Sample Summary

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-196673-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
600-196673-1	MW-25	Water	11/24/19 13:08	11/27/19 10:15	
00-196673-2	MW-31	Water	11/24/19 13:21	11/27/19 10:15	
600-196673-3	MW-11	Water	11/24/19 14:49	11/27/19 10:15	
00-196673-4	MW-5	Water	11/24/19 14:55	11/27/19 10:15	
600-196673-5	Southwest-MW	Water	11/24/19 15:05	11/27/19 10:15	
600-196673-6	West-MW	Water	11/24/19 15:08	11/27/19 10:15	
600-196673-7	MW-4	Water	11/24/19 15:20	11/27/19 10:15	
600-196673-8	MW-10	Water	11/25/19 09:01	11/27/19 10:15	
600-196673-9	MW-29	Water	11/25/19 09:11	11/27/19 10:15	
600-196673-10	MW-3	Water	11/25/19 09:19	11/27/19 10:15	
600-196673-11	MW-6	Water	11/25/19 09:23	11/27/19 10:15	
00-196673-12	MW-28	Water	11/25/19 09:33	11/27/19 10:15	
600-196673-13	MW-26	Water	11/25/19 09:40	11/27/19 10:15	
600-196673-14	MW-22	Water	11/25/19 09:46	11/27/19 10:15	
600-196673-15	MW-9	Water	11/25/19 09:52	11/27/19 10:15	
00-196673-16	MW-1	Water	11/25/19 10:09	11/27/19 10:15	
00-196673-17	MW-2	Water	11/25/19 10:25	11/27/19 10:15	
00-196673-18	MW-7	Water	11/25/19 10:41	11/27/19 10:15	
0-196673-19	MW-13	Water	11/25/19 10:56	11/27/19 10:15	
0-196673-20	MW-30	Water	11/25/19 11:50	11/27/19 10:15	
00-196673-21	MW-14	Water	11/25/19 12:29	11/27/19 10:15	
00-196673-22	MW-19	Water	11/25/19 12:36	11/27/19 10:15	
00-196673-23	DUP-1	Water	11/25/19 00:00	11/27/19 10:15	
00-196673-24	MW-21	Water		11/27/19 10:15	
00-196673-25	MW-24	Water		11/27/19 10:15	
00-196673-26	MW-32	Water		11/27/19 10:15	
00-196673-27	MW-23	Water		11/27/19 10:15	
600-196673-28	MW-20	Water		11/27/19 10:15	
600-196673-29	MW-15	Water	11/25/19 13:54		
00-196673-30	MW-12	Water		11/27/19 10:15	
600-196673-31	MW-16	Water		11/27/19 10:15	
00-196673-32	MW-17	Water		11/27/19 10:15	
00-196673-33	MW-8	Water	11/25/19 14:39		
00-196673-34	WW-1	Water	11/26/19 10:33		

Water

11/26/19 00:00 11/27/19 10:15

Eurofins TestAmerica, Houston

600-196673-35

DUP-2

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: MW-25 Lab Sample ID: 600-196673-1

Date Collected: 11/24/19 13:08 Matrix: Water

Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion C	hromatogra	ıphy							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	890	b	100	13.4	mg/L			12/05/19 13:09	250
Fluoride	1.77		1.00	0.301	mg/L			12/06/19 09:50	5
Sulfate	127		125	23.9	mg/L			12/05/19 13:09	250

General ChemistryAnalyteResultQualifierMQL (Adj)SDLUnitDPreparedAnalyzedDil FacTotal Dissolved Solids5790H100100mg/L12/03/19 13:501

Client Sample ID: MW-31

Date Collected: 11/24/19 13:21

Lab Sample ID: 600-196673-2

Matrix: Water

Date Collected: 11/24/19 13:21 Date Received: 11/27/19 10:15

Sulfate

Method: 300.0 - Anions, Ion Chromatography Result Qualifier Dil Fac Analyte MQL (Adj) SDL Unit D Prepared Analyzed Chloride 543 b 40.0 5.34 mg/L 12/05/19 13:41 100 1.00 0.301 mg/L 12/06/19 10:23 5 **Fluoride** 1.55

General Chemistry
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac
Total Dissolved Solids 1600 H 20.0 20.0 mg/L 12/03/19 13:50 1

50.0

9.57 mg/L

139

Client Sample ID: MW-11 Lab Sample ID: 600-196673-3

Date Collected: 11/24/19 14:49

Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion Chromatography Result Qualifier SDL Unit Analyte MQL (Adj) D Prepared Dil Fac Analyzed Chloride 100 13.4 mg/L 12/05/19 14:13 250 816 b 1.00 **Fluoride** 1.46 0.301 mg/L 12/06/19 10:55 5 **Sulfate** 269 25.0 4.79 mg/L 12/19/19 16:15 50

General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac **Total Dissolved Solids** 100 100 mg/L 12/03/19 13:50 6390 H

Client Sample ID: MW-5

Date Collected: 11/24/19 14:55

Lab Sample ID: 600-196673-4

Matrix: Water

Date Collected: 11/24/19 14:55 Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion Chromatography Analyte Result Qualifier SDL Unit D Dil Fac MQL (Adj) Prepared Analyzed 2.67 mg/L 12/05/19 14:24 Chloride 289 b 20.0 1.00 12/06/19 11:06 **Fluoride** 0.301 mg/L 5 1.77 **Sulfate** 25.0 4.79 mg/L 12/05/19 14:24 193 50

General ChemistryAnalyteResult Total Dissolved SolidsResult HQualifier Qualifier DubberMQL (Adj) Dubber Dubbe

Eurofins TestAmerica, Houston

12/05/19 13:41

100

Matrix: Water

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: Southwest-MW Lab Sample ID: 600-196673-5

Date Collected: 11/24/19 15:05

Matrix: Water

Date Collected: 11/24/19 15:05 Matrix: Wate Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion Chromatography									
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	772 b	40.0	5.34	mg/L			12/05/19 14:35	100	
Fluoride	2.22	1.00	0.301	mg/L			12/06/19 11:16	5	
Sulfate	260	50.0	9.57	mg/L			12/05/19 14:35	100	

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2050	Н	40.0	40.0	mg/L			12/03/19 13:50	1

Client Sample ID: West-MW Lab Sample ID: 600-196673-6

Date Collected: 11/24/19 15:08 Matrix: Water Date Received: 11/27/19 10:15

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124 b	8.00	1.07	mg/L			12/06/19 11:42	20
Fluoride	1.30	0.200	0.0601	mg/L			12/09/19 09:16	1
Sulfate	153	10.0	1.91	mg/L			12/06/19 11:42	20

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	728 H	20.0	20.0 mg/L			12/03/19 13:50	1

Client Sample ID: MW-4 Lab Sample ID: 600-196673-7

Date Collected: 11/24/19 15:20 Matrix: Water Date Received: 11/27/19 10:15

Method: 300.0 - Anions, lo	n Chromatograp	phy							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1180	b	100	13.4	mg/L			12/06/19 11:53	250
Fluoride	4.85		0.200	0.0601	mg/L			12/09/19 09:27	1
Sulfate	251		125	23.9	mg/L			12/06/19 11:53	250
General Chemistry	Result	Qualifier	MOL (Adi)	SDI	Unit	n	Prenared	Analyzed	Dil Fac

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2090	H	100	100	mg/L			12/03/19 13:50	1

Client Sample ID: MW-10

Date Collected: 11/25/19 09:01

Lab Sample ID: 600-196673-8

Matrix: Water

Date Received: 11/27/19 10:15

Method: 300.0 - Anions	, Ion Chromatogra	phy							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3040	b	200	26.7	mg/L			12/06/19 12:03	500
Fluoride	7.50		0.200	0.0601	mg/L			12/09/19 09:37	1
Sulfate	336		250	47.9	mg/L			12/06/19 12:03	500

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	7510	40.0	40.0	mg/L			12/02/19 22:01	1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Lab Sample ID: 600-196673-9 **Client Sample ID: MW-29**

Date Collected: 11/25/19 09:11 **Matrix: Water**

Date Received: 11/27/19 10:15

Analyte	Result C	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120 k	b	100	13.4	mg/L			12/06/19 12:14	250
Fluoride	5.58		0.200	0.0601	mg/L			12/09/19 10:10	1
Sulfate	164		125	23.9	mg/L			12/06/19 12:14	250

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4920	40.0	40.0 mg/L			12/02/19 22:01	1

Client Sample ID: MW-3 Lab Sample ID: 600-196673-10 **Matrix: Water**

Date Collected: 11/25/19 09:19 Date Received: 11/27/19 10:15

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	486 b	40.0	5.34	mg/L			12/06/19 12:47	100
Fluoride	3.43	1.00	0.301	mg/L			12/09/19 10:42	5
Sulfate	202	50.0	9.57	mg/L			12/06/19 12:47	100

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1540	20.0	20.0 mg/L		<u>-</u>	12/02/19 22:01	1

Client Sample ID: MW-6 Lab Sample ID: 600-196673-11 **Matrix: Water**

Date Collected: 11/25/19 09:23

Date Received: 11/27/19 10:15

Analyte	Result C	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	487 b	b	40.0	5.34	mg/L			12/06/19 13:19	100
Fluoride	3.55		1.00	0.301	mg/L			12/09/19 10:53	5
Sulfate	186		50.0	9.57	mg/L			12/06/19 13:19	100

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500	20.0	20.0 mg/L			12/02/19 22:01	1

Client Sample ID: MW-28 Lab Sample ID: 600-196673-12 Date Collected: 11/25/19 09:33 **Matrix: Water**

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4720	b	200	26.7	mg/L			12/06/19 13:51	500
Fluoride	4.66		1.00	0.301	mg/L			12/09/19 11:04	5
Sulfate	419		250	47.9	mg/L			12/06/19 13:51	500

General Chemistry								
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	12000	100	100	mg/L			12/02/19 22:01	1

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Lab Sample ID: 600-196673-13 **Client Sample ID: MW-26 Matrix: Water**

Date Collected: 11/25/19 09:40 Date Received: 11/27/19 10:15

Method: 300.0 - Anions, I	on Chromatography							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	789 b	40.0	5.34	mg/L			12/06/19 14:02	100
Fluoride	0.792	0.200	0.0601	mg/L			12/09/19 11:14	1
Sulfate	218	50.0	9.57	mg/L			12/06/19 14:02	100

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1840	40.0	40.0 mg/L			12/02/19 14:19	1

Client Sample ID: MW-22 Lab Sample ID: 600-196673-14 **Matrix: Water**

Date Collected: 11/25/19 09:46 Date Received: 11/27/19 10:15

Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4040 b	200	26.7	mg/L			12/06/19 14:13	500
Fluoride	2.16	1.00	0.301	mg/L			12/09/19 11:25	5
Sulfate	399	250	47.9	mg/L			12/06/19 14:13	500

	General Chemistry Analyte Total Dissolved Solids	Result Qualifier	MQL (Adj)	SDL Unit	<u>D</u> .	Prepared	Analyzed 12/02/19 14:19	Dil Fac
l	Total Dissolved Solids	8840	100	100 mg/L			12/02/19 14:19	1

Client Sample ID: MW-9 Lab Sample ID: 600-196673-15 **Matrix: Water**

Date Collected: 11/25/19 09:52

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274	b	20.0	2.67	mg/L			12/09/19 15:23	50
Fluoride	1.29		0.200	0.0601	mg/L			12/10/19 12:07	1
Sulfate	156	b	25.0	4.79	mg/L			12/09/19 15:23	50

Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1040	20.0	20.0 mg/L			12/02/19 14:19	1

Client Sample ID: MW-1 Lab Sample ID: 600-196673-16 Date Collected: 11/25/19 10:09 **Matrix: Water**

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	470	b	20.0	2.67	mg/L			12/10/19 19:02	50
Fluoride	1.42		0.200	0.0601	mg/L			12/12/19 02:48	1
Sulfate	89.5		25.0	4.79	mg/L			12/10/19 19:02	50
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200	-	20.0	20.0	mg/L			12/02/19 14:19	1

Matrix: Water

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Client Sample ID: MW-2 Lab Sample ID: 600-196673-17

Date Collected: 11/25/19 10:25 **Matrix: Water**

Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion Chromatography								
Analyte	Result Qualifie	r MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	525 b	40.0	5.34	mg/L			12/10/19 19:22	100
Fluoride	1.17	0.200	0.0601	mg/L			12/12/19 10:35	1
Sulfate	210	50.0	9.57	mg/L			12/10/19 19:22	100

General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac **Total Dissolved Solids** 20.0 20.0 mg/L 12/02/19 14:19 1210

Client Sample ID: MW-7 Lab Sample ID: 600-196673-18

Date Collected: 11/25/19 10:41 Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion (Chromatography							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221 b	8.00	1.07	mg/L			12/10/19 19:43	20
Fluoride	1.67	0.200	0.0601	mg/L			12/13/19 08:56	1
Sulfate	134	10.0	1.91	mg/L			12/10/19 19:43	20

General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Analyzed Dil Fac **Prepared Total Dissolved Solids** 20.0 20.0 mg/L 12/02/19 14:19 780

Client Sample ID: MW-13 Lab Sample ID: 600-196673-19 **Matrix: Water**

Date Collected: 11/25/19 10:56

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	913	b	40.0	5.34	mg/L			12/10/19 20:03	100
Fluoride	0.888		0.200	0.0601	mg/L			12/13/19 09:07	1
Sulfate	199		50.0	9.57	mg/L			12/10/19 20:03	100

Analyte Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac **Total Dissolved Solids** 40.0 40.0 mg/L 12/02/19 14:19 2560

Client Sample ID: MW-30 Lab Sample ID: 600-196673-20 Date Collected: 11/25/19 11:50 **Matrix: Water**

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10600	b	200	26.7	mg/L			12/10/19 21:04	500
Fluoride	17.4		1.00	0.301	mg/L			12/11/19 11:40	5
Sulfate	657		250	47.9	mg/L			12/10/19 21:04	500

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	16900	200	200 mg/L			12/02/19 14:19	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Client Sample ID: MW-14 Lab Sample ID: 600-196673-21

Date Collected: 11/25/19 12:29 **Matrix: Water**

Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion Ch	romatography							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13400 b	400	53.4	mg/L			12/10/19 21:25	1000
Fluoride	25.1	1.00	0.301	mg/L			12/11/19 11:51	5
Sulfate	1460	500	95.7	mg/L			12/10/19 21:25	1000
_								

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28000	500	500 mg/L			12/02/19 14:19	1

Lab Sample ID: 600-196673-22 **Client Sample ID: MW-19 Matrix: Water**

Date Collected: 11/25/19 12:36 Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion Chromatography Result Qualifier Analyte MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Chloride 3510 b 200 26.7 mg/L 12/10/19 21:45 500 **Fluoride** 2.95 1.00 0.301 mg/L 12/11/19 12:23 5 250 47.9 mg/L 12/10/19 21:45 500 **Sulfate** 740

General Chemistry Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8780		100	100	mg/L			12/02/19 14:19	1

Lab Sample ID: 600-196673-23 **Client Sample ID: DUP-1 Matrix: Water**

Date Collected: 11/25/19 00:00

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9540	b	400	53.4	mg/L			12/12/19 06:59	1000
Fluoride	3.01	U	10.0	3.01	mg/L			12/17/19 07:21	50
Sulfate	627		500	95.7	mg/L			12/12/19 06:59	1000

Analyte	Result Qualifier	MQL (Adj)	SDL Un	nit D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18700	200	200 mg	g/L		12/02/19 14:19	1
Client Sample ID: MW 21				Lab	Sample I	D: 600 1066	72 24

Client Sample ID: WW-21	Lab Sample 1D: 600-196673-24
Date Collected: 11/25/19 12:44	Matrix: Water
Date Received: 11/27/19 10:15	
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Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204	b	20.0	2.67	mg/L			12/12/19 07:32	50
Fluoride	2.25		0.400	0.120	mg/L			12/17/19 07:32	2
Sulfate	213		25.0	4.79	mg/L			12/12/19 07:32	50

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1040		20.0	20.0	mg/L			12/02/19 14:19	1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-196673-1

Client Sample ID: MW-24
Date Collected: 11/25/19 12:50

Lab Sample ID: 600-196673-25

Matrix: Water

Date Received: 11/27/19 10:15

Analyte	Result C	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1710 b	<u> </u>	80.0	10.7	mg/L			12/12/19 08:04	200
Fluoride	0.601 L	J	2.00	0.601	mg/L			12/17/19 08:04	10
Sulfate	242		100	19.1	mg/L			12/12/19 08:04	200

General ChemistryAnalyteResultQualifierMQL (Adj)SDLUnitDPreparedAnalyzedDil FacTotal Dissolved Solids5510100100mg/L12/02/19 14:191

Client Sample ID: MW-32

Date Collected: 11/25/19 13:06

Lab Sample ID: 600-196673-26

Matrix: Water

Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion C	hromatography							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1440 b	80.0	10.7	mg/L			12/12/19 08:15	200
Fluoride	0.601 U	2.00	0.601	mg/L			12/17/19 08:15	10
Sulfate	191	100	19.1	mg/L			12/12/19 08:15	200

General Chemistry
AnalyteResult
Total Dissolved SolidsQualifierMQL (Adj)
40.0SDL
40.0Unit
mg/LDPrepared
mg/LAnalyzed
12/02/19 14:19Dil Fac
12/02/19 14:19

Client Sample ID: MW-23

Date Collected: 11/25/19 13:40

Lab Sample ID: 600-196673-27

Matrix: Water

Date Received: 11/25/19 10:15

Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	341	b	20.0	2.67	mg/L			12/12/19 08:26	50
Fluoride	1.77		0.400	0.120	mg/L			12/17/19 08:26	2
Sulfate	69.8		25.0	4.79	mg/L			12/12/19 08:26	50

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1190	20.0	20.0 mg/L			12/02/19 14:19	1

Client Sample ID: MW-20

Date Collected: 11/25/19 13:46

Lab Sample ID: 600-196673-28

Matrix: Water

Date Received: 11/23/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120	b	40.0	5.34	mg/L			12/12/19 08:36	100
Fluoride	0.601	U	2.00	0.601	mg/L			12/17/19 08:37	10
Sulfate	82.6		50.0	9.57	mg/L			12/12/19 08:36	100

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3660	40.0	40.0 mg/L			12/02/19 14:19	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Lab Sample ID: 600-196673-29 **Client Sample ID: MW-15**

Date Collected: 11/25/19 13:54 **Matrix: Water**

Date Received: 11/27/19 10:15

Method: 300.0 - Anions, Ion C	hromatogra	phy							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	603	b	40.0	5.34	mg/L			12/12/19 08:47	100
Fluoride	2.84		1.00	0.301	mg/L			12/17/19 09:09	5
Sulfate	72.7		50.0	9.57	mg/L			12/12/19 08:47	100
-									

General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1940		20.0	20.0	mg/L			12/02/19 14:19	1

Lab Sample ID: 600-196673-30 Client Sample ID: MW-12 **Matrix: Water**

Date Collected: 11/25/19 14:00 Date Received: 11/27/19 10:15

Analyte	Result C	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1950 b	<u> </u>	80.0	10.7	mg/L			12/12/19 08:58	200
Fluoride	0.601 L	J	2.00	0.601	mg/L			12/17/19 09:20	10
Sulfate	82.2 J	J	100	19.1	mg/L			12/12/19 08:58	200

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6270	100	100 mg/L			12/02/19 14:19	1

Client Sample ID: MW-16 Lab Sample ID: 600-196673-31

Date Collected: 11/25/19 14:10 **Matrix: Water** Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	344	b	40.0	5.34	mg/L			12/12/19 09:09	100
Fluoride	2.13		0.400	0.120	mg/L			12/17/19 09:31	2
Sulfate	98.3		50.0	9.57	mg/L			12/12/19 09:09	100

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1130	20.0	20.0 mg/L			12/02/19 14:19	1

Client Sample ID: MW-17 Lab Sample ID: 600-196673-32 Date Collected: 11/25/19 14:19 **Matrix: Water**

Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	405	b	40.0	5.34	mg/L			12/12/19 09:41	100
Fluoride	1.93		0.400	0.120	mg/L			12/17/19 09:42	2
Sulfate	106		50.0	9.57	mg/L			12/12/19 09:41	100

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1380	20.0	20.0 mg/L			12/02/19 14:19	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Client Sample ID: MW-8 Lab Sample ID: 600-196673-33

Date Collected: 11/25/19 14:39 **Matrix: Water**

Date Received: 11/27/19 10:15

Method: 300.0 - Anior	ns, Ion Chromatography							
Analyte	Result Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	350 b	40.0	5.34	mg/L			12/12/19 09:52	100
Fluoride	3.17	0.400	0.120	mg/L			12/17/19 09:52	2
Sulfate	168	50.0	9.57	mg/L			12/12/19 09:52	100
_								

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1310	100	100 mg/L			12/02/19 12:59	1

Client Sample ID: WW-1 Lab Sample ID: 600-196673-34

Date Collected: 11/26/19 10:33 Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	259	b	20.0	2.67	mg/L			12/12/19 10:03	50
Fluoride	1.58		0.400	0.120	mg/L			12/17/19 10:25	2
Sulfate	142		25.0	4.79	mg/L			12/12/19 10:03	50

General Chemistry Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1140	100	100 mg/L			12/02/19 12:59	1

Client Sample ID: DUP-2 Lab Sample ID: 600-196673-35 **Matrix: Water**

Date Collected: 11/26/19 00:00 Date Received: 11/27/19 10:15

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	263	b	20.0	2.67	mg/L			12/12/19 10:13	50
Fluoride	1.61		0.400	0.120	mg/L			12/17/19 10:35	2
Sulfate	143		25.0	4.79	mg/L			12/12/19 10:13	50

General Chemistry							
Analyte	Result Qualifier	MQL (Adj)	SDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1050	100	100 mg/L			12/02/19 12:59	1

Eurofins TestAmerica, Houston

Matrix: Water

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1 Project/Site: GL Erwin

Qualifiers

HPLC/IC Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
b	The compound was found in the blank and sample
E	Result is greater then the UQL and the concentration is an estimated value.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
Н	Sample was prepped or analyzed beyond the specified holding time
U	Analyte was not detected at or above the SDL.

Glossary

Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
a	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)

NC ND

Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Not Calculated

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Client: ARCADIS U.S., Inc.

Job ID: 600-196673-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-282115/37

Matrix: Water

Analysis Batch: 282115

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: MW-31

Client Sample ID: MW-31

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

	N	IB I	MB							
Α	nalyte Res	ult (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C	hloride 0.31	60	J	0.400	0.0534	mg/L			12/05/19 12:47	1
FI	uoride 0.06	01	U	0.200	0.0601	mg/L			12/05/19 12:47	1
Sı	ulfate 0.09	57	U	0.500	0.0957	mg/L			12/05/19 12:47	1

Lab Sample ID: LCS 600-282115/38

Matrix: Water

Analysis Batch: 282115

Client Sample ID: Lab Control Sample Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	20.0	19.64		mg/L		98	90 - 110	
Fluoride	7.50	7.751		mg/L		103	90 - 110	
Sulfate	20.0	19.14		mg/L		96	90 - 110	

Lab Sample ID: 600-196673-2 MS

Matrix: Water

Analysis Batch: 282115

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	543	b	1000	1514		mg/L		97	80 - 120	
Sulfate	139		1000	1060		mg/L		92	80 - 120	

Lab Sample ID: 600-196673-2 MSD

Matrix: Water

Analysis Batch: 282115

_	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	543	b	1000	1519		mg/L		98	80 - 120	0	20
Sulfate	139		1000	1063		mg/L		92	80 - 120	0	20

Lab Sample ID: MB 600-282259/37

Matrix: Water

Analysis Batch: 282259									
_	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.3035	J	0.400	0.0534	mg/L			12/06/19 12:25	1
Fluoride	0.0601	U	0.200	0.0601	mg/L			12/06/19 12:25	1

0.0957 U

Lab Sample ID: MB 600-282259/6

Matrix: Water

Sulfate

Analysis Batch: 282259

		Client Sample ID: Method BI	ank
0.500	0.0957 mg/L	12/06/19 12:25	1

MB MB MQL (Adj) SDL Unit Prepared Dil Fac Analyzed

Analyte Result Qualifier Chloride 0.3184 J 0.400 0.0534 mg/L 12/06/19 04:59 Fluoride 0.0601 U 0.200 0.0601 mg/L 12/06/19 04:59 1 0.500 0.0957 mg/L Sulfate 0.0957 U 12/06/19 04:59

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: MW-25

Client Sample ID: MW-25

Client Sample ID: MW-6

Client Sample ID: MW-6 Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-282259/38

Matrix: Water

Analysis Batch: 282259

_	Spik	e LCS	LCS			%Rec.	
Analyte	Adde	d Result	Qualifier Unit	D	%Rec	Limits	
Chloride		0 19.70	mg/L		98	90 - 110	
Fluoride	7.5	0 8.063	mg/L	_	108	90 - 110	
Sulfate	20.	0 19.46	mg/L	_	97	90 - 110	

Lab Sample ID: LCS 600-282259/7

Matrix: Water

Analysis Batch: 282259

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 20.0	19.63		mg/L		98	90 - 110	
Fluoride	7.50	7.347		mg/L		98	90 - 110	
Sulfate	20.0	18.98		mg/L		95	90 - 110	

Lab Sample ID: 600-196673-1 MS

Matrix: Water

Analysis Batch: 282259

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Fluoride	1.77		10.0	9.882		ma/L		81	80 - 120	_

Lab Sample ID: 600-196673-1 MSD

Matrix: Water

Analysis Ratch: 282250

Alialysis Dalcii. 202255									
	Sample	Sample	Spike	MSD	MSD			%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D %Rec	Limits	

RPD Fluoride 1.77 10.0 10.11 mg/L 83 80 - 120

Lab Sample ID: 600-196673-11 MS

Matrix: Water

Analysis Ratch: 282259

Alialysis Datcii. 202259										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	487	b	1000	1453		mg/L		97	80 - 120	
Sulfate	186		1000	1117		mg/L		93	80 - 120	

Lab Sample ID: 600-196673-11 MSD

Matrix: Water

Analysis Batch: 282259

7 mar j 0.0 Zatom 202200	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	487	b	1000	1475		mg/L		99	80 - 120	2	20
Sulfate	186		1000	1139		mg/L		95	80 - 120	2	20

Lab Sample ID: MB 600-282368/35

Matrix: Water

Analysis Batch: 282368

M	0	MB
IVI	•	IVID

Analyte	Result (Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.3145	J	0.400	0.0534	mg/L			12/09/19 13:13	1
Fluoride	0.0601 l	U	0.200	0.0601	mg/L			12/09/19 13:13	1

Eurofins TestAmerica, Houston

Client Sample ID: Method Blank

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RPD

Limit

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-282368/35 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 282368

MB MB Result Qualifier SDL Unit Analyte MQL (Adj) Prepared Analyzed Dil Fac Sulfate 0.2333 J 0.500 0.0957 mg/L 12/09/19 13:13

Client Sample ID: Method Blank Lab Sample ID: MB 600-282368/6 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 282368

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.3134	J	0.400	0.0534	mg/L			12/09/19 02:21	1
Fluoride	0.0601	U	0.200	0.0601	mg/L			12/09/19 02:21	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			12/09/19 02:21	1
	Chloride Fluoride	Analyte Result Chloride 0.3134 Fluoride 0.0601	Analyte Result Qualifier Chloride 0.3134 J Fluoride 0.0601 U	Analyte Result Qualifier MQL (Adj) Chloride 0.3134 J 0.400 Fluoride 0.0601 U 0.200	Analyte Result Oualifier MQL (Adj) SDL Outcome Chloride 0.3134 J 0.400 0.0534 Fluoride 0.0601 U 0.200 0.0601	Analyte Result Older Qualifier Qualifier MQL (Adj) MQL (Adj) SDL MIT MQL (Adj) Unit MQL (Adj) MQL (Adj) Chloride 0.3134 J 0.400 0.0534 mg/L Fluoride 0.0601 U 0.200 0.0601 mg/L	Analyte Result Chloride Qualifier 0.3134 MQL (Adj) 0.400 SDL 0.0534 mg/L Unit mg/L D Fluoride 0.0601 U 0.200 0.0601 mg/L	Chloride 0.3134 J 0.400 0.0534 mg/L Fluoride 0.0601 U 0.200 0.0601 mg/L	Analyte Result Chloride Qualifier Duoride MQL (Adj) MQL (Adj) SDL Unit MQL (Adj) D MPrepared Manalyzed Analyzed Manalyzed Fluoride 0.3134 J 0.400 0.0534 mg/L 12/09/19 02:21 Fluoride 0.0601 U 0.200 0.0601 mg/L 12/09/19 02:21

Lab Sample ID: LCS 600-282368/36 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 282368

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit D	%Rec	Limits	
Chloride	 20.0	18.67		mg/L	93	90 - 110	
Fluoride	7.50	7.979		mg/L	106	90 - 110	
Sulfate	20.0	18.49		mg/L	92	90 - 110	

Lab Sample ID: LCS 600-282368/7 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 282368

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 20.0	19.79		mg/L		99	90 - 110	
Fluoride	7.50	7.278		mg/L		97	90 - 110	
Sulfate	20.0	19.33		mg/L		97	90 - 110	

Client Sample ID: MW-29 Lab Sample ID: 600-196673-9 MS **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 282368

Spike MS MS %Rec. Sample Sample Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits 80 - 120 2.00 Fluoride 5.58 6.049 N1 24 mg/L

Lab Sample ID: 600-196673-9 MSD Client Sample ID: MW-29 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 282368

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluoride	5.58	-	2.00	6.142	N1	ma/L		28	80 - 120	2	20

Lab Sample ID: MB 600-282587/4 **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA

Analysis Batch: 282587

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.1827	J	0.400	0.0534	mg/L			12/10/19 14:37	1
Fluoride	0.0601	U	0.200	0.0601	mg/L			12/10/19 14:37	1

Prep Type: Total/NA

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-282587/4 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 282587

MB MB

SDL Unit Analyte Result Qualifier MQL (Adj) D Prepared Analyzed Dil Fac Sulfate 0.0957 U 0.500 0.0957 mg/L 12/10/19 14:37

Lab Sample ID: LCS 600-282587/5

Matrix: Water

Analysis Batch: 282587

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Chloride 20.0 20.38 mg/L 102 90 - 110 Fluoride 7.50 7.564 mg/L 101 90 - 110 Sulfate 20.0 20.13 mg/L 101 90 - 110

Lab Sample ID: 600-196673-19 MS

Analysis Batch: 282587

Client Sample ID: MW-13 **Matrix: Water** Prep Type: Total/NA

MS MS %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Limits Unit D %Rec Chloride 913 h 1000 1996 mg/L 108 80 - 120 Fluoride 6.01 U 200 196.1 mg/L 98 80 - 120 Sulfate 1000 80 - 120 199 1100 mg/L 90

Lab Sample ID: 600-196673-19 MSD

Matrix: Water

Analysis Batch: 282587

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit D Chloride 2025 20 913 b 1000 mg/L 80 - 120 111 Fluoride 6.01 200 200.8 20 U mg/L 100 80 - 120 2 1000 92 20 Sulfate 199 1118 mg/L 80 - 1202

Lab Sample ID: MB 600-282589/6

Matrix: Water

Analysis Batch: 282589

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: MW-13

Prep Type: Total/NA

MB MB

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.3038	J	0.400	0.0534	mg/L			12/10/19 05:03	1
Fluoride	0.0601	U	0.200	0.0601	mg/L			12/10/19 05:03	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			12/10/19 05:03	1

Lab Sample ID: LCS 600-282589/7

Matrix: Water

Analysis Batch: 282589

Analyte

Chloride

Fluoride

Sulfate

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits 20.0 18.96 mg/L 95 90 - 110 7.50 7.814 mg/L 104 90 - 110 20.0 18.89 mg/L 94 90 - 110

Dil Fac

MQL (Adj)

Spike

Added

7.50

Spike

Added

20.0

7.50

20.0

MQL (Adj)

Spike

Added

20.0

7.50

20.0

0.400

0.200

0.500

0.200

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Job ID: 600-196673-1

Prep Type: Total/NA

Client Sample ID: Method Blank

Analyzed

12/11/19 12:01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-282642/37

Matrix: Water

Matrix: Water

Analysis Batch: 282642

MB MB

Analyte Result Qualifier

Fluoride 0.0601 U

Lab Sample ID: MB 600-282642/6

Analysis Batch: 282642

MB MB

MB MB

0.1779 J

0.0601 U

0.0957 U

Result Qualifier

Analyte Result Qualifier

Chloride 0.3077 J Fluoride 0.0601 U Sulfate 0.0957 U

Lab Sample ID: LCS 600-282642/38 **Matrix: Water**

Analysis Batch: 282642

Analyte

Fluoride

Chloride

Analyte

Lab Sample ID: LCS 600-282642/7 **Matrix: Water**

Analysis Batch: 282642

Analyte

Fluoride Sulfate

Lab Sample ID: MB 600-282645/35 **Matrix: Water**

Analysis Batch: 282645

Chloride Fluoride Sulfate

Lab Sample ID: LCS 600-282645/36 **Matrix: Water**

Analysis Batch: 282645

Analyte Chloride

Fluoride Sulfate

Client Sample ID: Method Blank Prep Type: Total/NA

SDL Unit

0.0601 mg/L

LCS LCS

LCS LCS

Result Qualifier

SDL Unit

0.0534 mg/L

0.0601 mg/L

0.0957 mg/L

LCS LCS

20.22

7.586

20.07

Result Qualifier

7.948

19.14

7.525

19.03

MQL (Adj) SDL Unit D Prepared Analyzed Dil Fac 0.400 0.0534 mg/L 12/11/19 04:35 0.200 0.0601 mg/L 12/11/19 04:35 0.500 0.0957 mg/L 12/11/19 04:35

Unit

mg/L

mg/L

mg/L

mg/L

Client Sample ID: Lab Control Sample Prep Type: Total/NA

%Rec.

Prepared

Result Qualifier Limits Unit D %Rec 106 90 - 110 mg/L

> D %Rec

Client Sample ID: Lab Control Sample Prep Type: Total/NA

%Rec.

96 90 - 110 100 90 - 110 95 90 - 110

Client Sample ID: Method Blank

Limits

Prep Type: Total/NA

D Dil Fac Prepared Analyzed 12/12/19 00:25 12/12/19 00:25

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

90 - 110

12/12/19 00:25

%Rec. Unit %Rec Limits mg/L 90 - 110 101 mg/L 101 90 - 110

100

Client: ARCADIS U.S., Inc.

Job ID: 600-196673-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography (Continued)

0.0957 U

Lab Sample ID: 600-196673-16 MS

Matrix: Water

Analysis Batch: 282645

Client Sample ID: MW-1 Prep Type: Total/NA

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	441	E b	10.0	402.6	E 4	mg/L		-384	80 - 120	
Fluoride	1.42		2.00	3.186		mg/L		89	80 - 120	
Sulfate	71.7	E	10.0	75.36	E 4	mg/L		36	80 - 120	

Lab Sample ID: 600-196673-16 MSD

Matrix: Water

Analysis Batch: 282645

Client Sample ID: MW-1 Prep Type: Total/NA

7 man , 0.0 2 a c m 2 0 2 0 1 0	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	441	E b	10.0	402.3	E 4	mg/L		-387	80 - 120	0	20
Fluoride	1.42		2.00	3.185		mg/L		88	80 - 120	0	20
Sulfate	71.7	E	10.0	75.07	E 4	mg/L		34	80 - 120	0	20

Lab Sample ID: MB 600-282782/6

Matrix: Water

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 282782

Client Sample ID: Method Blank Prep Type: Total/NA

12/12/19 05:23

MB MB Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.0534 mg/L 0.3039 J 0.400 12/12/19 05:23 0.0601 U 0.200 0.0601 mg/L 12/12/19 05:23

0.0957 mg/L

Lab Sample ID: LCS 600-282782/7

Matrix: Water

Analysis Batch: 282782

Client Sample ID: Lab Control Sample	•
Pren Type: Total/NA	A

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit Limits D %Rec Chloride 20.0 19.30 90 - 110 mg/L 96 Fluoride 7.50 7.629 mg/L 102 90 - 110 Sulfate 20.0 19.04 mg/L 95 90 - 110

0.500

Lab Sample ID: 600-196673-24 MS

Matrix: Water

Analysis Batch: 282782

Client Sample ID: MW-21

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	204	b	500	676.2		mg/L		94	80 - 120	
Fluoride	3.01	U	100	116.7		mg/L		117	80 - 120	
Sulfate	213		500	685.7		mg/L		94	80 - 120	

Lab Sample ID: 600-196673-24 MSD

Matrix: Water

Analysis Batch: 282782											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	204	b	500	687.1		mg/L		97	80 - 120	2	20
Fluoride	3.01	U	100	120.8	N1	mg/L		121	80 - 120	4	20
Sulfate	213		500	693.4		mg/L		96	80 - 120	1	20

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Prep Type: Total/NA

Client Sample ID: MW-21

Prep Type: Total/NA

Client: ARCADIS U.S., Inc.

Job ID: 600-196673-1

Project/Site: GL Erwin

Analysis Batch: 282960

Matrix: Water

Analyte

Chloride

Fluoride

Sulfate

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-282960/6

0.0957 U

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.3108 J 0.400 0.0534 mg/L 12/13/19 03:26 0.0601 mg/L 0.0601 U 0.200 12/13/19 03:26 0.0957 U 0.500 0.0957 mg/L 12/13/19 03:26

Lab Sample ID: LCS 600-282960/7

Matrix: Water

Analysis Batch: 282960

Client Sample ID:	Lab Control Sample
	Prep Type: Total/NA

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	20.0	19.44		mg/L	_	97	90 - 110	
Fluoride	7.50	7.318		mg/L		98	90 - 110	
Sulfate	20.0	20.74		mg/L		104	90 - 110	

Lab Sample ID: MB 600-283213/6

Matrix: Water

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 283213

Client Sample ID: Method Blank
Prep Type: Total/NA

MB MB Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac 0.3135 J 0.400 0.0534 mg/L 12/17/19 05:06 0.0601 U 0.200 0.0601 mg/L 12/17/19 05:06

0.0957 mg/L

Lab Sample ID: LCS 600-283213/7

Matrix: Water							Prep Type: Total/NA
Analysis Batch: 283213							
•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits

0.500

		_						
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 20.0	19.35		mg/L	_	97	90 - 110	
Fluoride	7.50	7.271		mg/L		97	90 - 110	
Sulfate	20.0	19.05		mg/L		95	90 - 110	

Lab Sample ID: 600-196673-24 MS Client Sample ID: MW-21

Matrix: Water

Analysis Batch: 283213

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Fluoride	2.25		4.00	5.702		mg/L		86	80 - 120	

Lab Sample ID: 600-196673-24 MSD Prep Type: Total/NA **Matrix: Water**

Analysis Ratch: 202242

Released to Imaging: 8/17/2023 3:40:54 PM

Analysis batch: 200210											
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluoride	2.25		4.00	5.722		mg/L		87	80 - 120	0	20

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Prep Type: Total/NA

12/17/19 05:06

Client Sample ID: Lab Control Sample

Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-196673-33 MS Client Sample ID: MW-8 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 283213

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Fluoride 3.17 4.00 92 80 - 120 6.861 mg/L

Lab Sample ID: 600-196673-33 MSD Client Sample ID: MW-8 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 283213

RPD MSD MSD %Rec. Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Fluoride 3.17 4.00 6.890 mg/L 93 80 - 120 0

Lab Sample ID: MB 600-283465/4 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 283465

MB MB Analyte Result Qualifier MQL (Adj) SDL Unit ח Prepared Analyzed Dil Fac Chloride 12/19/19 11:15 0.1912 J 0.400 0.0534 mg/L Fluoride 0.0601 U 0.200 0.0601 mg/L 12/19/19 11:15 0.0957 U 0.0957 mg/L 12/19/19 11:15 Sulfate 0.500

Lab Sample ID: LCS 600-283465/5 Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 283465

-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 20.0	20.51		mg/L		103	90 - 110	
Fluoride	7.50	7.535		mg/L		100	90 - 110	
Sulfate	20.0	19.69		mg/L		98	90 - 110	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 600-281803/1 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 281803

MB MB

Result Qualifier MQL (Adj) SDL Unit Dil Fac Analyte Prepared Analyzed Total Dissolved Solids 50.0 U 50.0 50.0 mg/L 12/02/19 12:59

Lab Sample ID: LCS 600-281803/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 281803

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 1800 1836 mg/L 102 90 - 110

Lab Sample ID: MB 600-281816/1 **Client Sample ID: Method Blank**

Matrix: Water

Analysis Batch: 281816

7 maryolo Batom 201010	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			12/02/19 14:19	1

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Prep Type: Total/NA

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 600-281816/2 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 281816

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 1800 1733 96 90 - 110 mg/L

Lab Sample ID: 600-196673-13 DU Client Sample ID: MW-26 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 281816

DU DU RPD Sample Sample Result Qualifier Result Qualifier Unit D RPD Limit **Total Dissolved Solids** 1840 1900 mg/L 3

Lab Sample ID: 600-196673-24 DU Client Sample ID: MW-21 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 281816

Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit ח RPD Limit Total Dissolved Solids 1040 1060 mg/L

Lab Sample ID: MB 600-281865/1 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 281865

MB MB Analyte Result Qualifier MQL (Adj) SDL Unit Dil Fac D Prepared Analyzed

Total Dissolved Solids 10.0 U 10.0 10.0 mg/L 12/02/19 22:01

Lab Sample ID: LCS 600-281865/2

Matrix: Water

Analysis Batch: 281865

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Total Dissolved Solids 1800 1782 99 90 - 110 mg/L

Lab Sample ID: 600-196673-8 DU Client Sample ID: MW-10 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 281865

DU DU **RPD** Sample Sample Result Qualifier Result Qualifier Unit RPD Limit mg/L Total Dissolved Solids 7510 7156

Lab Sample ID: MB 600-281950/1 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 281950

MB MB Result Qualifier MQL (Adj) SDL Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10.0 П 10.0 10.0 mg/L 12/03/19 13:50

Lab Sample ID: LCS 600-281950/2 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 281950

Spike LCS LCS %Rec. Result Qualifier Added Analyte Unit %Rec Limits Total Dissolved Solids 1800 1746 mg/L 97 90 - 110

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Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: 600-196673-4 DU **Client Sample ID: MW-5** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 281950

DU DU RPD Sample Sample Analyte **Result Qualifier** Result Qualifier Unit RPD Limit Total Dissolved Solids 1120 H 2 1094 mg/L 10

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Method: 300.0 - Anions, Ion Chromatography

Analyte	MQL	MDL	Units
Chloride	0.400	0.0534	mg/L
Fluoride	0.200	0.0601	mg/L
Sulfate	0.500	0.0957	mg/L

General Chemistry

Analyte	MQL	MDL	Units
Total Dissolved Solids	10.0	10.0	mg/L

Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin

Job ID: 600-196673-1

HPLC/IC

Analysis Batch: 282115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-1	MW-25	Total/NA	Water	300.0	
600-196673-2	MW-31	Total/NA	Water	300.0	
600-196673-3	MW-11	Total/NA	Water	300.0	
600-196673-4	MW-5	Total/NA	Water	300.0	
600-196673-5	Southwest-MW	Total/NA	Water	300.0	
MB 600-282115/37	Method Blank	Total/NA	Water	300.0	
LCS 600-282115/38	Lab Control Sample	Total/NA	Water	300.0	
600-196673-2 MS	MW-31	Total/NA	Water	300.0	
600-196673-2 MSD	MW-31	Total/NA	Water	300.0	

Analysis Batch: 282259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-1	MW-25	Total/NA	Water	300.0	
600-196673-2	MW-31	Total/NA	Water	300.0	
600-196673-3	MW-11	Total/NA	Water	300.0	
600-196673-4	MW-5	Total/NA	Water	300.0	
600-196673-5	Southwest-MW	Total/NA	Water	300.0	
600-196673-6	West-MW	Total/NA	Water	300.0	
600-196673-7	MW-4	Total/NA	Water	300.0	
600-196673-8	MW-10	Total/NA	Water	300.0	
600-196673-9	MW-29	Total/NA	Water	300.0	
600-196673-10	MW-3	Total/NA	Water	300.0	
600-196673-11	MW-6	Total/NA	Water	300.0	
600-196673-12	MW-28	Total/NA	Water	300.0	
600-196673-13	MW-26	Total/NA	Water	300.0	
600-196673-14	MW-22	Total/NA	Water	300.0	
MB 600-282259/37	Method Blank	Total/NA	Water	300.0	
MB 600-282259/6	Method Blank	Total/NA	Water	300.0	
LCS 600-282259/38	Lab Control Sample	Total/NA	Water	300.0	
LCS 600-282259/7	Lab Control Sample	Total/NA	Water	300.0	
600-196673-1 MS	MW-25	Total/NA	Water	300.0	
600-196673-1 MSD	MW-25	Total/NA	Water	300.0	
600-196673-11 MS	MW-6	Total/NA	Water	300.0	
600-196673-11 MSD	MW-6	Total/NA	Water	300.0	

Analysis Batch: 282368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-6	West-MW	Total/NA	Water	300.0	
600-196673-7	MW-4	Total/NA	Water	300.0	
600-196673-8	MW-10	Total/NA	Water	300.0	
600-196673-9	MW-29	Total/NA	Water	300.0	
600-196673-10	MW-3	Total/NA	Water	300.0	
600-196673-11	MW-6	Total/NA	Water	300.0	
600-196673-12	MW-28	Total/NA	Water	300.0	
600-196673-13	MW-26	Total/NA	Water	300.0	
600-196673-14	MW-22	Total/NA	Water	300.0	
600-196673-15	MW-9	Total/NA	Water	300.0	
MB 600-282368/35	Method Blank	Total/NA	Water	300.0	
MB 600-282368/6	Method Blank	Total/NA	Water	300.0	
LCS 600-282368/36	Lab Control Sample	Total/NA	Water	300.0	
LCS 600-282368/7	Lab Control Sample	Total/NA	Water	300.0	

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Client: ARCADIS U.S., Inc. Job ID: 600-196673-1 Project/Site: GL Erwin

HPLC/IC (Continued)

Analysis Batch: 282368 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-9 MS	MW-29	Total/NA	Water	300.0	
600-196673-9 MSD	MW-29	Total/NA	Water	300.0	

Analysis Batch: 282587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-16	MW-1	Total/NA	Water	300.0	
600-196673-17	MW-2	Total/NA	Water	300.0	
600-196673-18	MW-7	Total/NA	Water	300.0	
600-196673-19	MW-13	Total/NA	Water	300.0	
600-196673-20	MW-30	Total/NA	Water	300.0	
600-196673-21	MW-14	Total/NA	Water	300.0	
600-196673-22	MW-19	Total/NA	Water	300.0	
MB 600-282587/4	Method Blank	Total/NA	Water	300.0	
LCS 600-282587/5	Lab Control Sample	Total/NA	Water	300.0	
600-196673-19 MS	MW-13	Total/NA	Water	300.0	
600-196673-19 MSD	MW-13	Total/NA	Water	300.0	

Analysis Batch: 282589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-15	MW-9	Total/NA	Water	300.0	
MB 600-282589/6	Method Blank	Total/NA	Water	300.0	
LCS 600-282589/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 282642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-20	MW-30	Total/NA	Water	300.0	
600-196673-21	MW-14	Total/NA	Water	300.0	
600-196673-22	MW-19	Total/NA	Water	300.0	
MB 600-282642/37	Method Blank	Total/NA	Water	300.0	
MB 600-282642/6	Method Blank	Total/NA	Water	300.0	
LCS 600-282642/38	Lab Control Sample	Total/NA	Water	300.0	
LCS 600-282642/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 282645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-16	MW-1	Total/NA	Water	300.0	
MB 600-282645/35	Method Blank	Total/NA	Water	300.0	
LCS 600-282645/36	Lab Control Sample	Total/NA	Water	300.0	
600-196673-16 MS	MW-1	Total/NA	Water	300.0	
600-196673-16 MSD	MW-1	Total/NA	Water	300.0	

Analysis Batch: 282782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-17	MW-2	Total/NA	Water	300.0	-
600-196673-23	DUP-1	Total/NA	Water	300.0	
600-196673-24	MW-21	Total/NA	Water	300.0	
600-196673-25	MW-24	Total/NA	Water	300.0	
600-196673-26	MW-32	Total/NA	Water	300.0	
600-196673-27	MW-23	Total/NA	Water	300.0	
600-196673-28	MW-20	Total/NA	Water	300.0	
600-196673-29	MW-15	Total/NA	Water	300.0	

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Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin

Job ID: 600-196673-1

HPLC/IC (Continued)

Analysis Batch: 282782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-30	MW-12	Total/NA	Water	300.0	
600-196673-31	MW-16	Total/NA	Water	300.0	
600-196673-32	MW-17	Total/NA	Water	300.0	
600-196673-33	MW-8	Total/NA	Water	300.0	
600-196673-34	WW-1	Total/NA	Water	300.0	
600-196673-35	DUP-2	Total/NA	Water	300.0	
MB 600-282782/6	Method Blank	Total/NA	Water	300.0	
LCS 600-282782/7	Lab Control Sample	Total/NA	Water	300.0	
600-196673-24 MS	MW-21	Total/NA	Water	300.0	
600-196673-24 MSD	MW-21	Total/NA	Water	300.0	

Analysis Batch: 282960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-18	MW-7	Total/NA	Water	300.0	
600-196673-19	MW-13	Total/NA	Water	300.0	
MB 600-282960/6	Method Blank	Total/NA	Water	300.0	
LCS 600-282960/7	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 283213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-23	DUP-1	Total/NA	Water	300.0	
600-196673-24	MW-21	Total/NA	Water	300.0	
600-196673-25	MW-24	Total/NA	Water	300.0	
600-196673-26	MW-32	Total/NA	Water	300.0	
600-196673-27	MW-23	Total/NA	Water	300.0	
600-196673-28	MW-20	Total/NA	Water	300.0	
600-196673-29	MW-15	Total/NA	Water	300.0	
600-196673-30	MW-12	Total/NA	Water	300.0	
600-196673-31	MW-16	Total/NA	Water	300.0	
600-196673-32	MW-17	Total/NA	Water	300.0	
600-196673-33	MW-8	Total/NA	Water	300.0	
600-196673-34	WW-1	Total/NA	Water	300.0	
600-196673-35	DUP-2	Total/NA	Water	300.0	
MB 600-283213/6	Method Blank	Total/NA	Water	300.0	
LCS 600-283213/7	Lab Control Sample	Total/NA	Water	300.0	
600-196673-24 MS	MW-21	Total/NA	Water	300.0	
600-196673-24 MSD	MW-21	Total/NA	Water	300.0	
600-196673-33 MS	MW-8	Total/NA	Water	300.0	
600-196673-33 MSD	MW-8	Total/NA	Water	300.0	

Analysis Batch: 283465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-3	MW-11	Total/NA	Water	300.0	
MB 600-283465/4	Method Blank	Total/NA	Water	300.0	
LCS 600-283465/5	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 281803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-33	MW-8	Total/NA	Water	SM 2540C	

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Client: ARCADIS U.S., Inc.

Job ID: 600-196673-1

Project/Site: GL Erwin

General Chemistry (Continued)

Analysis Batch: 281803 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-34	WW-1	Total/NA	Water	SM 2540C	
600-196673-35	DUP-2	Total/NA	Water	SM 2540C	
MB 600-281803/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-281803/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 281816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-13	MW-26	Total/NA	Water	SM 2540C	
600-196673-14	MW-22	Total/NA	Water	SM 2540C	
600-196673-15	MW-9	Total/NA	Water	SM 2540C	
600-196673-16	MW-1	Total/NA	Water	SM 2540C	
600-196673-17	MW-2	Total/NA	Water	SM 2540C	
600-196673-18	MW-7	Total/NA	Water	SM 2540C	
600-196673-19	MW-13	Total/NA	Water	SM 2540C	
600-196673-20	MW-30	Total/NA	Water	SM 2540C	
600-196673-21	MW-14	Total/NA	Water	SM 2540C	
600-196673-22	MW-19	Total/NA	Water	SM 2540C	
600-196673-23	DUP-1	Total/NA	Water	SM 2540C	
600-196673-24	MW-21	Total/NA	Water	SM 2540C	
600-196673-25	MW-24	Total/NA	Water	SM 2540C	
600-196673-26	MW-32	Total/NA	Water	SM 2540C	
600-196673-27	MW-23	Total/NA	Water	SM 2540C	
600-196673-28	MW-20	Total/NA	Water	SM 2540C	
600-196673-29	MW-15	Total/NA	Water	SM 2540C	
600-196673-30	MW-12	Total/NA	Water	SM 2540C	
600-196673-31	MW-16	Total/NA	Water	SM 2540C	
600-196673-32	MW-17	Total/NA	Water	SM 2540C	
MB 600-281816/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-281816/2	Lab Control Sample	Total/NA	Water	SM 2540C	
600-196673-13 DU	MW-26	Total/NA	Water	SM 2540C	
600-196673-24 DU	MW-21	Total/NA	Water	SM 2540C	

Analysis Batch: 281865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-8	MW-10	Total/NA	Water	SM 2540C	
600-196673-9	MW-29	Total/NA	Water	SM 2540C	
600-196673-10	MW-3	Total/NA	Water	SM 2540C	
600-196673-11	MW-6	Total/NA	Water	SM 2540C	
600-196673-12	MW-28	Total/NA	Water	SM 2540C	
MB 600-281865/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-281865/2	Lab Control Sample	Total/NA	Water	SM 2540C	
600-196673-8 DU	MW-10	Total/NA	Water	SM 2540C	

Analysis Batch: 281950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-196673-1	MW-25	Total/NA	Water	SM 2540C	
600-196673-2	MW-31	Total/NA	Water	SM 2540C	
600-196673-3	MW-11	Total/NA	Water	SM 2540C	
600-196673-4	MW-5	Total/NA	Water	SM 2540C	
600-196673-5	Southwest-MW	Total/NA	Water	SM 2540C	
600-196673-6	West-MW	Total/NA	Water	SM 2540C	

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Job ID: 600-196673-1 Client: ARCADIS U.S., Inc.

Project/Site: GL Erwin **General Chemistry (Continued)**

Analysis Batch: 281950 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
j	600-196673-7	MW-4	Total/NA	Water	SM 2540C	
	MB 600-281950/1	Method Blank	Total/NA	Water	SM 2540C	
	LCS 600-281950/2	Lab Control Sample	Total/NA	Water	SM 2540C	
	600-196673-4 DU	MW-5	Total/NA	Water	SM 2540C	

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: MW-25

Lab Sample ID: 600-196673-1

Matrix: Water

Date Collected: 11/24/19 13:08 Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		250	5 mL	1.0 mL	282115	12/05/19 13:09	W1N	TAL HOU
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	282259	12/06/19 09:50	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	281950	12/03/19 13:50	TNL	TAL HOU

Lab Sample ID: 600-196673-2 Client Sample ID: MW-31

Matrix: Water

Date Collected: 11/24/19 13:21 Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	5 mL	1.0 mL	282115	12/05/19 13:41	W1N	TAL HOU
Total/NA	Analysis	300.0		5			282259	12/06/19 10:23	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281950	12/03/19 13:50	TNL	TAL HOU

Lab Sample ID: 600-196673-3 Client Sample ID: MW-11 Date Collected: 11/24/19 14:49

Matrix: Water

Date Received: 11/27/19 10:15

Batch Batch Dil Initial Final Batch Prepared Method Number or Analyzed Analyst Prep Type Type **Factor** Amount Amount Run Lab Total/NA 300.0 283465 12/19/19 16:15 KP1 Analysis 50 TAL HOU Total/NA Analysis 300.0 250 282115 12/05/19 14:13 W1N TAL HOU Total/NA Analysis 300.0 5 282259 12/06/19 10:55 W1N TAL HOU Total/NA Analysis SM 2540C 1 10 mL 100 mL 281950 12/03/19 13:50 TNL TAL HOU

Client Sample ID: MW-5 Lab Sample ID: 600-196673-4

Matrix: Water

Date Collected: 11/24/19 14:55 Date Received: 11/27/19 10:15

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			282115	12/05/19 14:24	W1N	TAL HOU
Total/NA	Analysis	300.0		5			282259	12/06/19 11:06	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281950	12/03/19 13:50	TNL	TAL HOU

Lab Sample ID: 600-196673-5 Client Sample ID: Southwest-MW Date Collected: 11/24/19 15:05 **Matrix: Water**

Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282115	12/05/19 14:35	W1N	TAL HOU
Total/NA	Analysis	300.0		5			282259	12/06/19 11:16	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	281950	12/03/19 13:50	TNL	TAL HOU

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: West-MW

Lab Sample ID: 600-196673-6

Matrix: Water

Date Collected: 11/24/19 15:08 Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	1.0 mL	282259	12/06/19 11:42	W1N	TAL HOU
Total/NA	Analysis	300.0		1			282368	12/09/19 09:16	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281950	12/03/19 13:50	TNL	TAL HOU

Client Sample ID: MW-4 Lab Sample ID: 600-196673-7 Date Collected: 11/24/19 15:20

Matrix: Water

Date Received: 11/27/19 10:15

Batch Dil Initial Final Batch Ratch **Prepared Prep Type** Method Factor **Amount** Amount Number or Analyzed Type Run **Analyst** Lab 12/06/19 11:53 Total/NA 300.0 282259 TAL HOU Analysis 250 W1N Total/NA Analysis 300.0 282368 12/09/19 09:27 W1N TAL HOU 1 Total/NA Analysis 1 281950 12/03/19 13:50 TNL TAL HOU SM 2540C 10 mL 100 mL

Lab Sample ID: 600-196673-8 Client Sample ID: MW-10 Date Collected: 11/25/19 09:01

Matrix: Water

Date Received: 11/27/19 10:15

Batch Batch Dil Initial Final Batch Prepared Method Factor **Prep Type** Type **Amount** Amount Number or Analyzed Analyst Run Lab 300.0 282259 Total/NA Analysis 500 12/06/19 12:03 W1N TAL HOU Total/NA 300.0 282368 12/09/19 09:37 W1N TAL HOU Analysis 1 Total/NA Analysis SM 2540C 25 mL 100 mL 281865 12/02/19 22:01 KRD TAL HOU

Client Sample ID: MW-29 Lab Sample ID: 600-196673-9

Date Collected: 11/25/19 09:11 **Matrix: Water** Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		250			282259	12/06/19 12:14	W1N	TAL HOU
Total/NA	Analysis	300.0		1			282368	12/09/19 10:10	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	281865	12/02/19 22:01	KRD	TAL HOU

Client Sample ID: MW-3 Lab Sample ID: 600-196673-10

Date Collected: 11/25/19 09:19 **Matrix: Water** Date Received: 11/27/19 10:15

Prepared Batch Batch Dil Initial Final Batch **Prep Type** Type Method Run **Factor Amount A**mount Number or Analyzed Analyst Lab Total/NA Analysis 300.0 100 282259 12/06/19 12:47 W1N TAL HOU Total/NA Analysis 300.0 5 282368 12/09/19 10:42 W1N TAL HOU Total/NA Analysis SM 2540C 1 50 mL 100 mL 281865 12/02/19 22:01 KRD TAL HOU

Client Sample ID: MW-6 Date Collected: 11/25/19 09:23 Lab Sample ID: 600-196673-11

Matrix: Water

Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282259	12/06/19 13:19	W1N	TAL HOU
Total/NA	Analysis	300.0		5			282368	12/09/19 10:53	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281865	12/02/19 22:01	KRD	TAL HOU

Client Sample ID: MW-28 Lab Sample ID: 600-196673-12 Date Collected: 11/25/19 09:33

Matrix: Water

Date Received: 11/27/19 10:15

Prep Type Total/NA	Batch Type Analysis	Batch Method 300.0	Run	Dil Factor	Initial Amount	Final Amount	Batch Number 282259	Prepared or Analyzed 12/06/19 13:51	Analyst W1N	Lab TAL HOU
Total/NA	Analysis	300.0		5			282368	12/09/19 11:04		TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	281865	12/02/19 22:01	KRD	TAL HOU

Lab Sample ID: 600-196673-13 **Client Sample ID: MW-26** Date Collected: 11/25/19 09:40

Matrix: Water

Date Received: 11/27/19 10:15

Batch Batch Dil Initial Final Batch Prepared Method Amount Number or Analyzed Analyst Prep Type Type Run **Factor** Amount Lab Total/NA 300.0 282259 12/06/19 14:02 W1N Analysis 100 TAL HOU Total/NA Analysis 300.0 282368 12/09/19 11:14 W1N TAL HOU 1 Total/NA Analysis SM 2540C 25 mL 100 mL 281816 12/02/19 14:19 DTN TAL HOU

Lab Sample ID: 600-196673-14 Client Sample ID: MW-22

Date Collected: 11/25/19 09:46 Date Received: 11/27/19 10:15

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			282259	12/06/19 14:13	W1N	TAL HOU
Total/NA	Analysis	300.0		5			282368	12/09/19 11:25	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-9 Lab Sample ID: 600-196673-15

Date Collected: 11/25/19 09:52 **Matrix: Water** Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			282368	12/09/19 15:23	W1N	TAL HOU
Total/NA	Analysis	300.0		1			282589	12/10/19 12:07	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: MW-1

Date Collected: 11/25/19 10:09 Date Received: 11/27/19 10:15 Lab Sample ID: 600-196673-16

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	е Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			282587	12/10/19 19:02	SKR	TAL HOU
Total/NA	Analysis	300.0		1			282645	12/12/19 02:48	KP1	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-2 Lab Sample ID: 600-196673-17

Date Collected: 11/25/19 10:25 **Matrix: Water**

Date Received: 11/27/19 10:15

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282587	12/10/19 19:22	SKR	TAL HOU
Total/NA	Analysis	300.0		1			282782	12/12/19 10:35	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Lab Sample ID: 600-196673-18 **Client Sample ID: MW-7 Matrix: Water**

Date Collected: 11/25/19 10:41

Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			282587	12/10/19 19:43	SKR	TAL HOU
Total/NA	Analysis	300.0		1			282960	12/13/19 08:56	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-13 Lab Sample ID: 600-196673-19 **Matrix: Water**

Date Collected: 11/25/19 10:56 Date Received: 11/27/19 10:15

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282587	12/10/19 20:03	SKR	TAL HOU
Total/NA	Analysis	300.0		1			282960	12/13/19 09:07	SKR	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-30 Lab Sample ID: 600-196673-20 **Matrix: Water**

Date Collected: 11/25/19 11:50 Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			282587	12/10/19 21:04	SKR	TAL HOU
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	282642	12/11/19 11:40	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	5 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Job ID: 600-196673-1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: MW-14

Lab Sample ID: 600-196673-21

Matrix: Water

Date Collected: 11/25/19 12:29 Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1000			282587	12/10/19 21:25	SKR	TAL HOU
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	282642	12/11/19 11:51	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	2 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-19 Lab Sample ID: 600-196673-22

Matrix: Water

Date Collected: 11/25/19 12:36 Date Received: 11/27/19 10:15

Prep Type Total/NA	Batch Type Analysis	Batch Method 300.0	Run	Factor 500	Initial Amount	Final Amount	Batch Number 282587	Prepared or Analyzed 12/10/19 21:45	Analyst SKR	Lab TAL HOU
Total/NA Total/NA	Analysis Analysis	300.0 SM 2540C		5	5 mL 10 mL	1.0 mL 100 mL	282642 281816	12/11/19 12:23 12/02/19 14:19		TAL HOU

Client Sample ID: DUP-1 Lab Sample ID: 600-196673-23

Matrix: Water

Date Collected: 11/25/19 00:00 Date Received: 11/27/19 10:15

Batch Batch Dil Initial Final Batch Prepared Method Amount Number or Analyzed Analyst Prep Type Type **Factor** Amount Run Lab Total/NA 300.0 282782 12/12/19 06:59 W1N Analysis 1000 TAL HOU Total/NA Analysis 300.0 50 283213 12/17/19 07:21 W1N TAL HOU Total/NA Analysis SM 2540C 5 mL 100 mL 281816 12/02/19 14:19 DTN TAL HOU

Client Sample ID: MW-21 Lab Sample ID: 600-196673-24

Date Collected: 11/25/19 12:44 Matrix: Water Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			282782	12/12/19 07:32	W1N	TAL HOU
Total/NA	Analysis	300.0		2			283213	12/17/19 07:32	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-24 Lab Sample ID: 600-196673-25

Date Collected: 11/25/19 12:50 Matrix: Water
Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			282782	12/12/19 08:04	W1N	TAL HOU
Total/NA	Analysis	300.0		10			283213	12/17/19 08:04	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Job ID: 600-196673-1

Client: ARCADIS U.S., Inc. Project/Site: GL Erwin

Client Sample ID: MW-32 Lab Sample ID: 600-196673-26 Date Collected: 11/25/19 13:06

Matrix: Water

12/02/19 14:19 DTN

281816

100 mL

Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			282782	12/12/19 08:15	W1N	TAL HOU
Total/NA	Analysis	300.0		10			283213	12/17/19 08:15	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-23 Lab Sample ID: 600-196673-27

Date Collected: 11/25/19 13:40 **Matrix: Water** Date Received: 11/27/19 10:15

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method **Factor Amount** Amount Number or Analyzed Analyst Run Lab Total/NA Analysis 300.0 50 282782 12/12/19 08:26 W1N TAL HOU Total/NA Analysis 300.0 2 283213 12/17/19 08:26 W1N TAL HOU

1

Client Sample ID: MW-20 Lab Sample ID: 600-196673-28

50 mL

Date Collected: 11/25/19 13:46 **Matrix: Water**

Date Received: 11/27/19 10:15

Analysis

SM 2540C

Total/NA

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282782	12/12/19 08:36	W1N	TAL HOU
Total/NA	Analysis	300.0		10			283213	12/17/19 08:37	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	25 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-15 Lab Sample ID: 600-196673-29 **Matrix: Water**

Date Collected: 11/25/19 13:54 Date Received: 11/27/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282782	12/12/19 08:47	W1N	TAL HOU
Total/NA	Analysis	300.0		5			283213	12/17/19 09:09	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-12 Lab Sample ID: 600-196673-30

Date Collected: 11/25/19 14:00 Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		200			282782	12/12/19 08:58	W1N	TAL HOU
Total/NA	Analysis	300.0		10			283213	12/17/19 09:20	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	10 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Eurofins TestAmerica, Houston

Matrix: Water

TAL HOU

Client: ARCADIS U.S., Inc. Job ID: 600-196673-1

Project/Site: GL Erwin

Client Sample ID: MW-16 Lab Sample ID: 600-196673-31 Date Collected: 11/25/19 14:10

Matrix: Water

Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282782	12/12/19 09:09	W1N	TAL HOU
Total/NA	Analysis	300.0		2			283213	12/17/19 09:31	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Lab Sample ID: 600-196673-32 Client Sample ID: MW-17

Date Collected: 11/25/19 14:19 **Matrix: Water**

Date Received: 11/27/19 10:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			282782	12/12/19 09:41	W1N	TAL HOU
Total/NA	Analysis	300.0		2			283213	12/17/19 09:42	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	281816	12/02/19 14:19	DTN	TAL HOU

Client Sample ID: MW-8 Lab Sample ID: 600-196673-33

Date Collected: 11/25/19 14:39 **Matrix: Water**

Date Received: 11/27/19 10:15

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	-		282782	12/12/19 09:52	W1N	TAL HOU
Total/NA	Analysis	300.0		2			283213	12/17/19 09:52	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	500 mL	281803	12/02/19 12:59	DTN	TAL HOU

Client Sample ID: WW-1 Lab Sample ID: 600-196673-34 **Matrix: Water**

Date Collected: 11/26/19 10:33 Date Received: 11/27/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			282782	12/12/19 10:03	W1N	TAL HOU
Total/NA	Analysis	300.0		2			283213	12/17/19 10:25	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	500 mL	281803	12/02/19 12:59	DTN	TAL HOU

Client Sample ID: DUP-2 Lab Sample ID: 600-196673-35

Date Collected: 11/26/19 00:00 Date Received: 11/27/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			282782	12/12/19 10:13	W1N	TAL HOU
Total/NA	Analysis	300.0		2			283213	12/17/19 10:35	W1N	TAL HOU
Total/NA	Analysis	SM 2540C		1	50 mL	500 mL	281803	12/02/19 12:59	DTN	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Eurofins TestAmerica, Houston

Matrix: Water

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 600-196673-1

Project/Site: GL Erwin

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0759	08-04-20
Louisiana	NELAP	01967	06-30-20
Oklahoma	State	2019-073	08-31-20
Texas	NELAP	T104704223-19-25	10-31-19 *
Texas	NELAP	T104704223-19-25	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21
Utah	NELAP	TX000832019-5	07-31-20

Eurofins TestAmerica, Houston

^{*} Accreditation/Certification renewal pending - accreditation/certification considered valid.

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Eurofins TestAmerica, Houston

FIIDIRE (11) 000-4444 00 (11) 000-0040										
Client Information	Sampler	Martine	her	Kudch	Lab PM: Kudchadkar, Sachin G	in G	Carrier Tracking No(s)		COC No: 600-72354-19858	3
Clent Contact Mr. Russell Grant	Phone. 361-701-6	1-636	BL.	E-Mail sachir	kudchadkar	E-Mail: sachin.kudchadkar@testamericainc.com		Page Page 3 of 3	3 of 3	
Company ARCADIS U.S. Inc.				25		Analysis	Analysis Requested	Job#		
Address: Address Suite 121	Due Date Requested:	:5						Presen	Code	22
City Midland State, Zip	TAT Requested (days):	ys):						A - HCL B - NaC C - Zn A D - Nitri		M - Hexane N - None O - AsNaO2 P - Na2O4S
TX, 79701 Phone:	PO#		951					F - Mar F - MeC	E - NaHSO4 F - MeOH G - Amchlor	Q - Na2S2O3 R - Na2S2O3 S - H2SO4
916-786-5382(Tel) Email:	30006547 GL E WO#	WIII				### ##################################				- TSP Dodecahyd I - Acetone
Tussell grant@arcadis-us.com	Project #							X	4	W - pH 4-5 Z - other (specify)
G L Erwin Site:	SSOW#:				eA) as			oot to		
on a least time at a management of the state	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (wwwater, \$*solid, Owwatefold, BT=75sue, A=Ar)	Fiold Filtered S Perform MS/M: 2540C_Calcd,TD	300- Cl' E' 204		> sedminN latoT	Special Inst	Special Instructions/Note:
Sample identification	\bigvee	\setminus	Preserva	ALC: UNKNOWN	Z			Sales Sales		
M.W. 25	11/24/19	1308	5	Water	X	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		+		
MW-31	11/24/19	1321	G	Water	×	\ \		1		
Mw-11	11124119	1449	9	Water	×	×		1		
MW-5	11/24/19	1456	J	Water	X	×	dγ	SVA.		
Southwest - MW	11124119	1505	t	Water	×		otsu	-		
West-MW	11124/19	1508	5	Water	X	×) jo	1		
MW-4	11/24/19	1520	5	Water	X	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	nieri(1		
MW-10	11/25/19	1262	B	Water	X)) EZ9	7		
MW-29	11125/19	118	4	Water	×	·×	961	1		
MW-3	61/57/11	0919	5	Water	X		009			
MW-C	11/25/19	0923	5	Water	×			-		
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	☐ Poison B ☐ Unknown		Radiological	le	Sample L	le Disposal (A fee may Return To Client	r be assessed if sam Disposal By Lab	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Spisposal By Lab Mor	ger than 1 m	onth) Months
Deilverable Requested: I, II, III, IV, Other (specify)					Special In	Special Instructions/QC Requirements				
Empty Kit Relinquished by:		Date:			Time:		Method of Shipmen	Hipment		
Reinquished by: Mar-fried. Reinquished by:	1/26/9 Date/Time	1/800	20	Company Company	Received by Received by	DA DE		Date/Time: 1/19	1015	Company Company
Relinquished by:	Date/Time			Company	Receiv	ed by.		Date/Time:		Company

Ver: 01/16/2019

Tat Requested (days): Tat Requested (days): Tat Requested (days): Sample S		
Sachink Superance Sachink Sample Date Sample	Sachin G Camer Tracking No(s):	COC No 600-72354-19858.3
1.25 1.05	E-Mail: sachin.kudchadkar@testamericainc.com	Page Page 3 of 3
Big Spring Suite 121	Analysis Requested	Job #
Post Post		Cod
10006547 GL Erwin 10006547 GL Erwin 100006547		61
1006647 GL Ewin 1006647 GL		
Sample Date Sample Date Sample		G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
1000000000000000000000000000000000000	6.	1 - Ice J - DI Water
Sample Date Sample Date Sample Date Sample Sample Date Time Sample Sample Date Time Sample Date Time G=grab) Birchard Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Acta) Each Barrawa Bear Each Each Barrawa Bear Each	enistr	
Sample Date Sample Sample Water Type Sample Water Type Sample C=Comp. C=co		Other:
125 9 09%		
1125/9		Special Instructions/Note:
1125/9 0946 G Water 1125/9 0946 G Water 1125/9 0952 G Water 1125/9 10cm		
1125 4 (24 Water 1125 4 (24 Water 1125 4 1063	X	
	XX	
1125 9 10c9 C_T Water 1125 9 10c9 C_T Water 1125 9 104 C_T Water 1125 9 1056 C_T Water 1125 9 1150 C_T Water 1125 9 1229 C_T Water 1125 9 1236 C_T Water 1125 9 1236 C_T Water Company Date: Date: Time Date: Company Time Date: Company Comp	× ×	
11.25 9 10.25 6 Water 11.25 9 10.41 6 Water 11.45 9 10.56 6 Water 11.25 9 11.50 6 Water 11.25 9 12.29 6 Water 11.25 9 12.36 6 Water 11.25 9 Water 11.25 9 Water Mater Mate		
1 1.5 1 1.0.5 & C_ water 1/2 1/2 1/2 1/2 C_ water 1/2 1/2 C_ water Other (specify) Date:	XX	
1/25/9 1/50 C	XX	
1/25/9 1229 & water 1/25/9 1236 & water 1/25/8 1236 Ca water Water Date: Da		
Other (specify) 1236 Ca Water	XX	
Other (specify) Date: Date: Company Company Time Company Compa	- X X	
Other (specify) Date: Time Company	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Archive For	tained longer than 1 month) Archive For
Date: Time: Date:		
Date/Time: Company	Method of Shipment:	
1, Martinea 112618 / 1800 ARCANIS	JOHN DE	1015
Date/Time	Vacapros by Date Cime. Date Cime.	Company
		Signature.

Environment Testing TestAmerica

otop one (clif) valitation (clif) pilotti							
Client Information	Sampler 188 M	Letina	Lab PM Kudchad	Lab PM: Kudchadkar, Sachin G	Carner Tracking No(s):	COC No 600-72354-19858.3	
Clent Contact. Mr. Russell Grant	Phone 3 61-701	1-0369	E-Mail. Sachin ki	E-Mail: sachin.kudchadkar@testamericainc.com		Page 3 of 3	
Company: ARCADIS U.S., Inc.				Analysis Requested	quested	# qor	
Address: 1004 North Big Spring Suite 121	Due Date Requested:						
City. Midland	TAT Requested (days):						Hexane None
State, Zip: TX, 79701						D - Nitric Acid P - Na E - NaHSO4 O - Na	P - Na204S Q - Na2SO3
Phone: 916-786-5382(Tel)	PO # 30006547 GL Erwin		(6				Va2S203 42S04 SP Dodershydti
Email: russeil grant@arcadis-us.com	#OM			(0)		1 - Ice J - DI Water	Acetone
Project Name	Project #			N 10 8		K - EDTA L - EDA	pH 4-5 other (specify)
Site	#WOSS			_		Other.	
			Matrix (Wewater, Sarold, Owwater)	erform MS/M 540C_Calcd,TD 00- Cl, F, SO4		admuM isto	
Sample Identification	Sample Date	Preserva	ation Code: X	Z		Special Instructions/Note:	ctions/Note:
- 65C	11/25/119	2	Water	1			
12-21	1	244 62	Water	×			
42-1W	112514 1	250 G	Water	××		-	
MW-32	61 61 5211	306 6	Water	××			
MW-23	112519 17		Water	XX			
02-MW	1125/4 17)	Water	XX		1	
MW-15	112519 (3	354 G	Water	XX		Ţ	
1011-12	112511 14	1400 G	Water	×			
14W-16	112511 1410	10 R	Water	×		-	
MW-17		1419 G	Water	<i>**</i>			
MW-8	112519 143	39 a	Water	××			
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison B Unknown	Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	Disposal Rv Lab	are retained longer than 1 mont	nth)
este				Special Instructions/QC Requirements	nts		200
Empty Kit Relinquished by	Date	äš	Time:	a	Method of Shipment.		
Relinquished by, Marthus. Relinquished by.	Date/Time:	1800	Company Company	Received by AP	Date/Time	121/19 1015 Company	the the
Reinquished by:	Date/Time		Company	Received by	Date/Time		pany

Environment Testing TestAmerica

Chain of Custody Record

Eurofins TestAmerica, Houston

6310 Rothway Street

Ver. 01/16/2019

			100	1000	
Client Information	Sampler Carly Martines		Lab PM Kudchadkar, Sachin G	Carrier Tracking No(s);	600-72354-19858.3
Client Contact: Mr. Russell Grant	Phone: 51-761-6369		E-Mail. sachin kudchadkar@testamericainc.com		Page: Page 3 of 3
Company. ARCADIS U.S., Inc.			Analysis Requested	quested	Job#:
Address:	Due Date Requested:				
Midland	TAT Requested (days):				B - NaOH N - None
State, Zip. TX, 79701					
Phone: 916-786-5382(Tel)	90 # 30006547 GL Erwin		, (c		
Email: russell.grant@arcadis-us.com	WO#				I - Ice J - DI Water
Project Name. G L Erwin	Project # 60003622				K-EDTA L-EDA
Site:	SSOW#.		A) as		Other:
and the settle and an annual of the settle and anothing an annual of the settle and an annual of the settle and an	Sample	Sample Matrix Type (wweter, Sesolid, Caccomp, Carrent)	Perform MS/M: Perform MS/M: S40C_Calcd,TD 00- Cl, F, SO4		otel Number of
Sample Identification	1	Preservation Code:	Z		Special instructions/Note:
1-1-1	112619 1033	Water	-		
2-dha	112619	Nater Water	×		
		Water			
ant	Poison B	Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mon	be assessed if samples are reta	tained !onger than 1 month) Archive For Months
Other (specify)			Special Instructions/QC Requirements:		
Empty Kit Refinquished by:	Date:		36	Method of Shipment.	
Reinquished by Har hier.	172 6 19 / 1800 Date/Time:	Company CAPI	4 M/5 Received by A	Date/fine	19 10/S Company
Reinquished by:	Date/Time:	Company	Received by	Date/Time:	Company
Outstand Control Control			4		

Loc: 600 196673

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Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

36	imple nece	ipi Oneckii	31		
		Da	te/Time Received:		719 NCV 27 1001
JOB NUMBER:		CL	IENT:	Arcad	13
UNPACKED BY:	JP.	CA	RRIER/DRIVER:	FedEX	
Custody Seal Present:		NO Nui	mber of Coolers Rec		
Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm The	Conceted remp
3604	X/N	YIN	0.3	676 +0	0.4
6188	y / N	Y/M	0.6	676 +6	0-1 0-7
8482	Y/N	Y/N	1.0	616 40	1-1 t-1
	Y/N	Y/N		28 11	127/19
	YIN	Y / N		(7)	-4-1
CF	= correction factor			V	
TX1005 samples <u>frozen</u> pH paper Lot #	193		TE & TIME PUT IN A headspace accept	FREEZER:	□NO ØNA
Did samples meet the labora	tory's standard co	onditions of sample	acceptability upon rec	ceipt?	TOYES NO
COMMENTS:					
					/
				JP 11	/29/19
				V	
HS-SA-WI-013					Rev. 4A: 08/26/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 600-196673-1

Login Number: 196673 List Source: Eurofins TestAmerica, Houston

List Number: 1 Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td>Lab does not accept radioactive samples.</td>	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4,0.7,1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Released to Imaging: 8/17/2023 3:40:54 PM

APPENDIX E

Cumulative Summary of Groundwater Potentiometric Elevation Data



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)				
		,		2/4/98	87.70	64.15					
				2/7/01		61.40					
				4/30/02		61.43	3100.26				
				10/11/02		61.43	3100.26				
				12/26/02		61.43	3100.26				
				2/17/03		61.42					
				5/29/03		61.58					
				8/22/03 11/5/03		61.37 61.35					
				2/3/04		61.34					
				5/5/04		61.13					
				8/2/04		61.08					
				11/23/04		60.61	3101.08				
				2/9/05		60.46	3101.23				
				8/4/05		60.62	3101.07				
				2/22/06		60.30					
				8/24/06		60.46					
	3,161.69			2/27/07		60.12					
	3,101.09			8/23/07 2/18/08		59.88 59.95					
				8/11/08		59.99					
MW-01		2	55'-85'	2/16/09		60.44					
				7/27/09		60.57	3101.12				
1	1	1		2/22/10		60.73	3100.96				
İ				7/26/10		60.48	3101.21				
1		1		2/15/11		60.42	3101.27				
1		1		8/16/11		60.39	Groundwater Elevation (ft above MSL* (1804) 100.26 3100.26 3100.26 3100.26 3100.26 3100.26 3100.26 3100.27 3100.11 3100.34 3100.35 3100.56 3100.56 3100.56 3100.56 3100.56 3100.56 3100.56 3100.56 3100.56 3100.56 3100.56 3100.57 3101.39 3101.27 3101.39 3101.27 3101.30 3101.77 3101.31 3101.77 3101.31 3101.77 3101.31 3101.27 3101.30 3101.27 3101.30 3101.27 3101.30 3101.37 3100.96 3100.96 3100.96 3100.96 3100.97 310				
1		1		2/20/12		60.52					
1	1	1		8/23/12		60.56					
				2/18/13		60.51					
				8/13/13 4/2/14		60.76 60.52					
				10/9/14		60.78					
				06/23/15		60.49					
				10/06/15		60.65	3101.12 3100.96 3101.21 3101.27 3101.30 3101.17 3101.13 3101.18 3100.93 3101.17 3101.20 3101.20 3101.22 3101.24 3101.24 3103.62 3103.61 3103.73 3103.73 3103.61 3103.73 3103.61 3103.73 3103.61 3103.6				
				06/22/16		60.47					
				10/06/16		60.45					
				05/22/17		60.52	3103.62				
				10/11/17		60.53					
	3,164.14			05/08/18		60.41	3103.43 3100.15 3100.96 3098.56 3098.44				
				10/09/18		60.71					
				6/11/19 11/21/19	87.70 80.70	61.54 60.73					
				2/4/98	72.94	61.33	_				
				2/7/01	72.94	61.45					
				4/30/02		61.47					
				10/11/02		61.46					
				12/26/02		61.52	3098.37				
				2/17/03		61.53	3098.36				
		5/29/03 8/22/03		61.48							
			8/22/03 11/5/03 2/3/04			61.41					
					61.38						
						61.35					
1				5/5/04 8/2/04		61.20 61.11					
1	1	1		11/23/04		60.52					
1		1		2/9/05		60.45					
İ				8/4/05		66.60					
1		1		2/22/06		60.26	3099.63				
1		1		8/24/06		60.42					
1	0.450.00	1		2/27/07		60.04					
	3,159.89	1		8/23/07		59.80	3101.27 3101.30 3101.17 3101.13 3101.17 3101.13 3101.17 3100.93 3101.17 3100.93 3101.17 3100.91 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3101.20 3103.61 3103.62 3103.61 3103.43 3100.15 3100.98 3098.56 3098.44 3098.43 3098.37 3098.44 3098.49 3098.37 3098.41 3098.48 3098.51 3098.51 3098.51 3098.51 3099.85 3100.00 3099.37 3099.47 3099.38 3099.37 3099.48 3099.39 3099.63 3100.00 3099.47 3099.39 3099.63 3099.37 3099.40 3099.39 3099.40 3099.39 3099.40 3099.39 3099.40 3099.39 3099.40 3099.39 3099.41 3099.39 3099.41 3099.39 3099.41 3099.39 3099.41 3099.39 3099.41 3099.39 3099.41 3099.39				
İ				2/18/08		59.83					
MW-02		2	50'-70'	8/11/08 2/16/09		59.89 60.42	3100.34 3100.35 3100.56 3100.65 3100.61 3101.08 3101.23 3101.27 3101.39 3101.23 3101.57 3101.31 3101.74 3101.74 3101.75 3101.12 3101.96 3101.12 3101.96 3101.17 3101.13 3101.17 3101.13 3101.17 3101.13 3101.17 3101.13 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3101.30 3101.17 3100.91 3101.30 3101.40 3101.50 310				
		-	55-10	7/27/09		60.55					
1		1		2/22/10		60.56					
İ				7/26/10		60.73					
İ				2/15/11		60.50					
1		1		8/16/11		60.43					
1		1		2/20/12		60.56					
1	1	1		8/23/12		60.85					
İ				2/18/13		60.86					
				8/13/13		60.85					
				4/2/14		60.78 60.82					
							3099.07				
				10/9/14			3000 10				
				6/23/15		60.79					
				6/23/15 10/6/15		60.79 60.78	3099.11				
				6/23/15		60.79	3099.11 3099.19				
				6/23/15 10/6/15 6/22/16		60.79 60.78 60.70	3100.26 3100.27 3100.27 3100.11 3100.32 3100.35 3100.35 3100.55 3100.56 3100.61 3101.08 3101.03 3101.07 3101.39 3101.23 3101.37 3101.31 3101.37 3101.31 3101.37 3101.31 3101.37 3101.31 3101.35 3101.35 3101.35 3101.35 3101.35 3101.35 3101.35 3101.35 3101.35 3101.35 3101.35				
				6/23/15 10/6/15 6/22/16 10/6/16		60.79 60.78 60.70 60.64	3099.11 3099.19 3099.25 3101.67				
	3 162 33			6/23/15 10/6/15 6/22/16 10/6/16 05/22/17		60.79 60.78 60.70 60.64 60.66	3099.11 3099.19 3099.25 3101.67 3101.78				
	3,162.33			6/23/15 10/6/15 6/22/16 10/6/16 05/22/17 10/11/17 05/08/18 10/08/18		60.79 60.78 60.70 60.64 60.66 60.55 60.47 60.78	3100.26 3100.27 3100.11 3100.32 3100.35 3100.36 3100.35 3100.36 3100.61 3101.08 3101.08 3101.09 3101.23 3101.39 3101.27 3101.39 3101.57 3101.81 3101.70 3101.25 3101.17 3101.81 3101.70 3101.25 3101.17 3101.30 3101.17 3100.96 3101.21 3101.30 3101.17 3100.91 3101.30 3101.17 3100.91 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3101.30 3100.96 3098.36 3098.41 3098.42 3098.43 3098.41 3098.56 3098.44 3098.56 3098.44 3098.59 3098.41 3098.59 3098.78 3099.37 3098.59 3098.78 3099.37 3099.39 3099.44 3099.39 3099.47 3099.34 3099.37 3099.34 3099.39 3099.47 3099.34 3099.39 3099.39 3099.47 3099.39 3099.99				
	3,162.33			6/23/15 10/6/15 6/22/16 10/6/16 05/22/17 10/11/17 05/08/18		60.79 60.78 60.70 60.64 60.66 60.55 60.47	3099.11 3099.19 3099.25 3101.67 3101.78 3101.86 3101.55 3100.74				



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
				2/4/98	73.26	65.18	3098.90
				2/7/01		65.22	3098.86
				4/30/02		65.11	3098.97
				10/11/02 12/26/02		65.14	3098.94
				2/17/03		65.15 65.15	3098.93 3098.93
				5/29/03		65.19	3098.89
				8/22/03		65.09	3098.99
				11/5/03		65.09	3098.99
				2/3/04		65.06	3099.02
				5/5/04 8/2/04		64.97 64.54	3099.11 3099.54
				11/23/04		64.47	3099.61
				2/9/05		64.18	3099.90
				8/4/05		64.30	3099.78
				2/22/06		63.93	3100.15
				8/24/06		64.09	3099.99
	3,164.08			2/27/07 8/23/07		63.74 63.54	3100.34 3100.54
	0,70 1100			2/18/08		63.55	3100.53
				8/11/08		63.61	3100.47
MW-03		2	50'-70'	2/16/09		64.09	3099.99
				7/27/09		64.22	3099.86
				2/22/10		64.15	3099.93
				7/26/10 2/15/11		64.46 64.16	3099.62 3099.92
		1		8/16/11		64.04	3100.04
				2/20/12		64.20	3099.88
				8/24/12		64.44	3099.64
				2/18/13		64.27	3099.81
				8/13/13		64.49	3099.59
				4/2/14 10/9/14		60.24 60.65	3103.84 3103.43
				6/23/15		64.22	3099.86
				10/6/15		64.38	3099.70
				6/23/16		64.26	3099.82
				10/6/16		64.22	3099.86
				05/22/17		64.26	3102.23
				10/11/17 05/09/18		64.35 64.17	3102.14 3102.32
	3,166.49			10/09/18		64.60	3101.89
				06/11/19	73.26	64.26	3102.23
				11/21/19	73.30	64.46	3102.03
				2/4/98	73.31	63.94	3101.71
				10/19/00		63.80	3101.85
				2/7/01 4/30/02		63.78 63.72	3101.87 3101.93
				10/11/02		63.74	3101.91
				12/26/02		63.74	3101.91
			2/17/03 63.	63.74	3101.91		
				5/29/03		63.83	3101.82
				8/22/03		63.71 63.68	3101.94
				11/5/03 2/3/04		63.64	3101.97 3102.01
				5/5/04		63.55	3102.10
		1		8/2/04		63.45	3102.20
				11/23/04		62.91	3102.74
				2/9/05		62.83	3102.82
				8/4/05 2/23/06		63.12 62.80	3102.53 3102.85
		1		8/25/06		62.97	3102.68
	3,165.65			2/27/07		62.60	3103.05
	3,100.00			8/23/07		62.33	3103.32
		1		2/18/08		62.35	3103.30
MW-04		2	50'-70'	8/11/08		62.38 62.73	3103.27
				2/16/09 7/27/09		62.73	3102.92 3102.80
				2/22/10		62.72	3102.93
		1		7/26/10		62.99	3102.66
				2/15/11		62.70	3102.95
				8/16/11		62.64	3103.01
				2/20/12 8/24/12		63.41	NG 3102.24
		1		2/18/13		64.27	3102.24
				8/13/13		62.93	3102.72
				4/2/14		62.76	3102.89
		1		10/9/14		62.80	3102.85
				6/23/15		62.77	3102.88
				10/6/15		62.43	3103.22
I		1		6/23/16 10/6/16		62.87 62.80	3102.78 3102.85
		1		05/22/17		65.00	3103.08
		1		03/22/17			
				10/11/17		63.05	3105.03
	3.168.08			10/11/17 05/09/18		63.05 63.01	3105.03 3105.07
	3,168.08			10/11/17		63.05	3105.03



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)				
		1		2/4/98	73.10	60.33	3100.42				
				10/19/00		60.25	3100.50				
				2/7/01		60.58	3100.17				
				4/30/02		62.27	3098.48				
				10/11/02		60.29					
				12/26/02		60.29					
				2/17/03		60.30					
				5/29/03 8/22/03		60.33 60.24					
				11/5/03		60.24					
				2/3/04		60.20					
				5/5/04		60.04					
				8/2/04		59.97	3100.78				
				11/23/04		59.51	3101.24				
				2/9/05		59.32	3101.43				
				8/4/05		59.55	3101.20				
				2/22/06		59.22					
				8/24/06		59.39					
	3,160.75			2/27/07 8/23/07		59.03 58.84					
				2/18/08		58.83					
				8/11/08		58.84					
MW-05		2	50'-70'	2/16/09		59.36	3101.39				
1	1	1		7/27/09		59.50	3101.25				
ĺ		1		2/22/10		59.35	3101.40				
1	1	1		7/26/10		59.72	3101.03				
ĺ		1		2/15/11			NG				
1		1		8/16/11		59.28	3101.47				
1		1		2/20/12		59.46					
				8/24/12		59.47					
				2/18/13 8/13/13		59.51 59.71					
				4/2/14		59.45					
				10/9/14		59.70					
				6/23/15		59.46					
				10/6/15		59.61					
				6/23/16		59.45	3101.30				
				10/6/16		59.42	3101.33 3103.72 3103.69 3103.82 3103.59 3103.66 3103.44				
				05/22/17		59.47					
				10/11/17		59.50					
	3,163.19			05/09/18		59.37					
				10/09/18 06/11/19	73.10	59.60 59.53					
				11/21/19	72.51	59.75					
				2/7/01	77.24	68.00					
				4/30/02		68.10					
		10/1		10/11/02		68.04	3096.14				
			12/26/02		68.03	3096.15					
				2/17/03		68.03	3096.15				
				5/29/03		68.38	3095.80				
				8/22/03		67.99	3096.19				
				11/5/03		67.99					
				2/3/04		67.92					
1		1		5/5/04 8/2/04		67.88 67.78					
1	1	1		11/23/04		67.78					
ĺ		1		2/9/05		67.17	3097.01				
ĺ		1		8/4/05		63.13	3101.05				
1		1		2/22/06		66.72	3097.46				
1		1		8/24/06		66.93	3097.25				
1		1		2/27/07		66.58	3097.60				
1	3,164.18	1		8/27/07		66.35					
ĺ		1		2/18/08		66.35					
ĺ		1		8/11/08 2/16/09		66.39 66.94					
MW-06		2	59'-74'	7/27/09		67.04					
1		1		2/22/10		67.10					
ĺ		1		7/26/10		67.32					
ĺ		1		2/15/11		67.15	3097.03				
1		1		8/16/11		67.09	3097.09				
1		1		2/20/12		67.14	3097.04				
1	1	1		8/24/12		67.53	3096.65				
ĺ		1		2/18/13		67.68					
1		1		8/13/13		67.41					
1		1		4/2/14		67.32					
1	1	1		10/9/14 6/23/15		67.63 67.17					
1	1	1		10/6/15		67.17					
ĺ		1		6/23/16		67.33					
1		1		10/6/16		67.29	3096.89				
1	1	1		05/22/17		67.31	3099.29				
	1	1		10/11/17		67.35	3101.24 3101.43 3101.43 3101.43 3101.43 3101.43 3101.53 3101.53 3101.72 3101.91 3101.92 3101.91 3101.92 3101.91 3101.03 NG 3101.47 3101.28 3101.40 3101.29 3101.40 3101.29 3101.14 3101.30 3101.29 3101.28 3101.29 3101.30 3101.29 3101.30 3101.30 3101.30 3101.30 3103.69				
						67.38	3000 22				
	3 166 60			05/09/18			3033.22				
	3,166.60			10/09/18		67.40	3098.48 3100.46 3100.46 3100.46 3100.46 3100.46 3100.46 3100.45 3100.51 3100.51 3100.51 3100.51 3100.71 3100.55 3100.71 3100.78 3101.24 3101.20 3101.53 3101.36 3101.36 3101.91 3101.92 3101.91 3101.92 3101.91 3101.92 3101.91 3101.92 3101.91 3101.30 3101.25 3101.40 3101.30 3101.25 3101.40 3101.30 3101.25 3101.47 3101.29 3101.40 3101.30 3101.53 3101.55 3101.40 3101.55 3101.65 3101.65 3101.72 3101.69 3101.72 3101.69 3101.72 3101.69 3101.72 3103.69 3103.79 3103.69 3103.79 3103.69 3103.7				
	3,166.60				77.24 76.72		3099.20 3099.43				



	WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)		
_			ī		2/7/01	73.45	67.25	3094.81		
					4/30/02		67.50	3094.56		
					10/11/02		67.53	3094.53		
					12/26/02		67.53			
					2/17/03		67.53			
					5/29/03		67.61			
					8/22/03 11/5/03		67.49 67.47			
					2/3/04		67.46			
					5/5/04		67.44			
					8/2/04		67.34	3094.72		
					11/23/04		67.02	3095.04		
					2/9/05		67.74	3094.32		
					8/4/05		66.62			
					2/22/06		66.31			
					8/24/06 2/27/07		66.37 66.05			
					8/23/07		65.87			
		3,162.06			2/18/08		65.88			
					8/11/08		65.91	3096.15		
	MW-07		2	55'-70'	2/16/09		66.35	3095.71		
			_	00-10	7/27/09		66.51	3095.55		
					2/22/10		66.70			
					7/26/10 2/15/11		66.86			
					8/16/11		66.74 66.73			
					2/20/12		66.74			
					8/23/12		66.98	3095.08		
					2/18/13		66.97	3095.09		
					8/13/13		67.03	3095.03		
					4/2/14		67.00			
					10/9/14 6/23/15		67.04 66.76			
					10/6/15		66.90			
					6/23/16		66.95			
					10/6/16		66.89			
					05/22/17		66.94	3097.49		
					10/11/17		67.00	3097.43		
		3,164.43			05/08/18		66.70			
		,			10/09/18	73.45	67.01			
					06/11/19 11/21/19	71.63	66.75 66.93			
\vdash										
					2/3/99 70.66 68.21 2/7/01 68.30 4/30/02 68.42					
					10/11/02		68.30	3091.36		
					12/26/02		68.30			
					2/17/03		68.30			
					5/29/03 8/22/03		68.36 68.26			
					11/5/03		68.26			
					2/3/04		68.24	3091.42		
					5/5/04		68.24	3091.42		
					8/2/04		68.17	3091.49		
					11/23/04		67.72			
					2/9/05 8/4/05		67.41 67.39			
					2/22/06		67.04			
					8/24/06		67.29	3094.56 3094.53 3094.53 3094.53 3094.53 3094.53 3094.57 3094.57 3094.59 3094.60 3094.60 3094.62 3094.60 3094.62 3095.04 3094.62 3095.04 3096.19 3096.10 3096.10 3096.10 3096.10 3096.10 3096.10 3096.10 3096.10 3097.30 3097.40 3097.40 3097.41 3097.42 3097.42 3097.42 3097.43 3097.42 3097.43 3097.43 3097.43 3097.44 3091.36 3091.36 3091.36 3091.36 3091.36 3091.36 3091.36 3091.36		
					2/27/07		66.87			
		3,159.66			8/23/07		66.77			
					2/18/08		66.79			
	MW-08		2	50'-70'	8/11/08 2/16/09		66.81 67.31			
	III T - 00			55-70	7/27/09		67.40			
					2/22/10		67.53			
					7/26/10		67.65			
					2/15/11		67.65	3092.01		
					8/16/11		67.59			
					2/20/12		67.59			
					8/23/12 2/19/13		67.73 67.86			
					8/13/13		67.86			
					4/2/14		67.82			
					10/9/14		67.80			
					6/23/15		67.55			
					10/6/15		67.66	3092.00		
					6/22/16		67.69			
					10/6/16		67.70			
1					05/22/17 10/11/17		67.73 67.90			
					05/08/18		67.62			
		3,162.05								
		3,162.05			10/09/18 06/11/19		67.72 67.71	3094.33		



## 4300(2	WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
1011102 63.59 3103.48 1272002 63.59 3103.48 272003 63.60 3103.47 82003 63.60 3103.47 82103 63.60 3103.47 82103 63.60 3103.47 82103 63.50 3103.52 82104 63.50 3103.52 82004 63.50 3103.52 82004 63.24 3103.50 82004 63.24 3103.50 82004 63.24 3103.50 82004 63.24 3103.50 82006 62.68 3104.50 822306 62.68 3104.50 822306 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 822506 62.68 3104.50 821600 62.33 3104.64 821600 62.33 3104.64 821600 62.33 3104.64 821600 62.33 3104.64 821600 62.53 3104.62 822600 62.63 3104.62 822600 62.63 3104.62 822600 62.63 3104.62 822600 62.63 3104.62 822600 62.63 3104.62 822600 62.64 3104.63 82260					4/30/02	70.39	63.65	
### Page 12 19 19 19 19 19 19 19					10/11/02		63.59	3103.48
### Section Se								
### 1995 1995								
### 1997 1998								
S5004								
### 11/23/94								
### 29905 62.90 3104.78 ### 29306 62.80 3104.78 ### 29306 62.80 3104.78 ### 29307 62.23 3104.81 ### 29307 62.23 3104.82 ### 29307 61.88 3105.19 ### 29307 61.88 3105.19 ### 29307 61.88 3105.19 ### 29307 61.88 3105.19 ### 29307 61.88 3105.19 ### 29307 61.88 3105.19 ### 29307 61.88 3105.19 ### 29307 62.23 3104.74 ### 29307 62.24 3104.62 ### 29307 62.24 3104.62 ### 29307 62.24 3104.62 ### 29307 62.24 3104.62 ### 29307 62.24 3104.62 ### 29307 62.24 3104.62 ### 29307 62.25 3104.62 ### 29307 62.25 3104.62 ### 29307 62.25 3104.62 ### 29307 62.25 3104.62 ### 29307 62.25 3104.62 ### 29307 62.25 3104.62 ### 29307 62.26 3104.62 ### 29307 62.26 3104.62 ### 29307 62.26 3104.62 ### 29307 62.26 3104.62 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29307 62.24 3104.63 ### 29308 62								
84405								
3,167.07 3,167.								
3,167.07 3,167.07 3,167.07 MW-09 2 557-07 MW-09 2 557-07 American State								
3,167.07 MW-09 2 55-70 MW-09 3 105-70 MW-10 2 55-70 MW-10 2 55-70 MW-10 2 55-70 MW-10 2 55-70 MW-10 2 55-70 MW-10 3 105-70 MW-10 2 55-70 MW-10 3 170-99 MW-10 3 170-99 3 170-99 3 170-99 MW-10 3 1770-99 MW-10 MW-10 3 1770-99 MW-10 MW-10 3 1770-99 MW-10 MW-10 A 1770-99 MW-10 A 1770-9								
MW-09 2 56-707 MW-09								
MW-09 2 55-70' 72709 62.33 3104.85 3104.85 727209 62.33 3104.85 3104.85 727209 62.33 3104.85 3104.85 727209 62.33 3104.85 7272010 62.33 3104.85 7272010 62.33 3104.85 7272010 62.35 3104.85 7272012 MG 3104.75 7272012		3,167.07						
MW-09 2 58-70" 7/27/09 62.42 3104.78								
	MW-09		2	55'-70'				
772810 62.53 3104.54 211511 62.25 3 3104.54 816111 62.25 3104.78 816411 62.25 NG 812412 62.53 3104.54 211913 62.45 3104.64 8131313 62.45 3104.64 42/214 62.25 3104.54 42/214 62.25 3104.54 42/214 62.25 3104.54 10914 62.24 3104.53 10914 62.24 3104.53 10914 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109615 62.24 3104.53 109616 62.47 3105.00 0522717 62.73 3106.97 1011117 62.70 3107.00 0502717 62.73 3106.97 101117 62.70 3107.00 050918 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 60.01 3105.70 109618 70.50 3100.49 21/27/03 70.50 3100.49 21/27/03 70.50 3100.49 21/27/03 70.50 3100.49 21/27/03 70.50 3100.49 21/27/04 70.38 3100.51 22/204 70.38 3100.51 22/204 70.38 3100.51 22/204 70.38 3100.51 22/206 60.50 3100.40 22/207 60.20 3100.73 11/2304 60.96 3101.33 11/2304 60.96 3101.33 21/1808 60.06 3101.33 21/1808 60.06 3101.33 21/1808 60.06 3101.33 21/1808 60.06 3101.33 21/1808 60.06 3101.33 21/1808 60.06 3101.59 21/27/07 60.29 3101.72 22/27/07 60.29 3101.72 22/27/07 60.29 3101.72 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07 60.29 3101.73 22/27/07	10100-03		2	33-70				
### 16/11 62.29 3104.78 ### 22/2012 10, 10 ### 16/21 62.53 3104.54 ### 27/14 62.25 3104.54 ### 16/214 62.25 3104.54 ### 16/214 62.25 3104.54 ### 10/914 62.25 3104.54 ### 10/914 62.21 3105.06 ### 62/315 62.24 3104.33 ### 10/615 62.24 3104.33 ### 10/615 62.24 3104.33 ### 10/615 62.24 3104.33 ### 10/616 62.47 3104.60 ### 62/216 62.46 3104.41 ### 10/616 62.47 3105.06 ### 62/217 62.73 3106.97 ### 10/11/17 62.73 3106.97 ### 10/11/17 62.73 3106.97 ### 10/11/17 62.73 3106.97 ### 10/11/17 62.73 3106.97 ### 10/11/17 62.73 3106.97 ### 10/91/19 62.91 3106.73 ### 11/21/19 68.26 63.17 3106.53 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/21/19 68.26 63.17 310.52 ### 11/22004 69.78 ### 11/22004 69.78 ### 11/22004 69.78 ### 11/22004 69					7/26/10		62.53	3104.54
### STATE ST								
8/24/12							02.29	
B(13/13) 62.43 3104.64					8/24/12			3104.54
4/2/14								
109914								
106/15								
662216								
106/16 62.47 3104.80 105/22/17 62.70 3106.97 10/11/17 62.70 3106.97 10/11/17 62.70 3106.97 10/11/17 62.70 3105.70 10/09/18 64.00 3105.70 10/09/18 62.91 3106.79 06/11/19 70.39 62.67 3106.83 11/21/19 68.26 63.17 3106.53 11/21/19 68.26 63.17 3106.53 14/30/02 72.20 70.35 3100.64 10/11/102 70.49 3100.50 12/26/02 70.50 3100.49 2/17/03 70.50 3100.49 5/29/03 70.50 3100.49 5/29/03 70.47 3100.52 11/5/03 70.49 3100.50 12/26/02 70.50 3100.49 5/29/03 70.47 3100.52 11/5/03 70.49 3100.50 12/26/02 70.50 3100.49 5/29/03 70.47 3100.52 11/5/03 70.49 3100.50 12/26/02 70.50 3100.49 5/29/03 70.47 3100.52 11/5/03 70.49 3100.50 12/26/02 70.35 3100.47 11/23/04 69.76 3100.73 11/23/04 69.76 3100.73 11/23/04 69.78 3101.21 2/9/05 NG 8/4/05 69.89 3101.40 8/2/04 70.28 3101.21 2/9/05 89.80 3101.10 2/22/06 69.95 3101.40 8/2/20/06 69.95 3101.40 8/2/20/07 69.90 3101.30 10/2/20/06 69.90 3101.30 10/2/20/07 69.90 3101.30 10/2/20/07 69.90 3101.30 10/2/20/07 69.90 3101.30 10/2/20/07 69.90 3101.30 10/2/20/07 69.90 3101.30 10/2/20/07 69.90 3101.30 10/2/20/07 69.90 31								
3,169.70 10/11/17								
05/08/18								
3,169.70 1009/18								
06/11/19 70.39 62.87 3106.53 11/21/19 68.26 63.17 3106.53 14/30/02 72.20 70.35 3100.64 10/11/02		3,169.70						
## ## ## ## ## ## ## ## ## ## ## ## ##					06/11/19			
10/11/02 70.49 3100.59 12/26/02 70.50 3100.49 21/17/03 70.50 3100.49 5/29/03 70.37 3100.62 8/22/03 70.47 3100.52 8/22/03 70.49 3100.50 11/503 70.49 3100.50 5/5/04 70.38 3100.61 8/2/04 70.26 3100.73 11/23/04 70.26 3100.73 11/23/04 70.26 3100.73 11/23/05 69.78 3101.21 2/29/05 69.78 3101.10 2/29/05 69.89 3101.10 2/22/06 69.59 3101.40 8/25/06 69.65 3101.34 2/27/07 69.29 3101.70 8/25/06 69.65 3101.34 2/27/07 69.06 3101.93 2/18/08 69.06 3101.93 2/18/08 69.06 3101.93 8/11/08 69.06 3101.93 2/16/09 69.74 3101.25 2/16/09 69.74 3101.25 2/16/09 69.74 3101.25 2/16/09 69.74 3101.59 2/15/11 69.30 3101.69 2/15/11 69.30 3101.69 3/16/11 69.80 3101.71 2/20/12 NG 8/16/11 69.80 3101.71 2/20/12 NG 8/16/11 69.80 3101.71 2/20/12 NG 8/16/11 69.80 3101.59 8/16/11 69.81 3101.56 8/16/11 69.33 3101.66 10/9/14 69.33 3101.66 10/9/14 69.33 3101.66 10/9/14 69.33 3101.66 10/9/14 69.33 3101.66 10/9/14 69.37 3101.52 05/22/17 69.60 3103.85 10/06/15 69.47 3101.35 05/52/17 69.60 3103.85 10/06/16 69.47 3101.35 05/52/17 69.60 3103.85 10/06/16 69.47 3101.35 05/52/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.60 3103.85 10/17/17 69.80 3103.85 10/17/17 69.80 3103.85 10/17/17 69.80 3103.85 10/17/17 69.80 3103.85 10/17/17 69.80 3103.85 10/17/17 69.80 3103.85								
2/17/03						12.20		
Si/29/03					12/26/02			3100.49
### Name								
1/23/04								
MW-10 Signature Signatur					11/5/03		70.49	3100.50
8/2/04								
MW-10 11/23/04 69.78 3101.21 2/9/05 NG 8/4/05 69.89 3101.10 2/22/06 69.59 3101.40 8/25/06 69.55 3101.34 2/27/07 69.29 3101.70 8/23/07 69.06 3101.93 2/18/08 69.06 3101.93 2/18/08 69.05 3101.94 2/16/09 69.74 3101.25 2/22/10 69.30 3101.69 2/26/09 69.30 3101.69 7/26/10 69.40 3101.59 2/16/11 69.40 3101.59 2/16/11 69.28 3101.71 2/20/12 69.30 8/24/12 69.41 3101.59 8/34/13 69.41 3101.59 2/19/13 69.40 3101.59 8/34/13 69.40 3101.59 8/34/13 69.34 3101.65 4/2/14 69.38 3101.61 6/23/15 62.26 3108.73 10/6/15 69.37 3101.62 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 6/22/17 69.60 3103.85 10/6/15 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.84								
Side Side					11/23/04			3101.21
3,170.99 3,170.99 3,170.99 3,170.99 3,170.99 3,170.99 3,170.99 3,170.99 2,127/107 69.29 3101.70 8/23/07 69.06 3101.93 2/18/08 69.06 3101.93 2/18/08 69.05 3101.94 2/18/09 69.05 3101.94 2/18/09 69.74 3101.72 2/27/10 69.30 3101.69 7/26/10 69.30 3101.69 7/26/10 69.40 3101.59 2/15/11 69.28 3101.71 2/20/12 NG 8/24/12 69.41 3101.58 2/19/13 69.40 3101.59 8/33/13 69.40 3101.69 4/2/14 69.38 3101.61 6/23/15 62.26 3108.73 10/6/15 69.37 3101.62 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 6/22/17 69.60 3103.85 10/6/15 69.47 3101.52 6/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.85							00.00	
8/25/06 69.65 3101.34 2/27/07 69.29 3101.70 8/23/07 69.06 3101.93 2/18/08 69.06 3101.93 2/18/08 69.06 3101.93 8/15/09 69.74 3101.25 2/16/09 69.74 3101.25 2/22/10 69.27 3101.72 2/22/10 69.27 3101.72 2/22/10 69.40 3101.59 7/26/10 69.40 3101.59 8/16/11 69.28 3101.71 2/20/12 NG 8/4/11 69.38 3101.61 8/16/11 69.38 3101.61 6/23/15 69.34 3101.65 4/2/14 69.38 3101.61 6/23/15 69.38 3101.61 6/23/15 69.38 3101.61 6/23/15 69.37 3101.52 6/22/16 69.43 3101.52 6/22/16 69.43 3101.52 6/22/16 69.43 3101.52 6/22/16 69.43 3101.52 6/22/16 69.43 3101.52 6/22/16 69.43 3101.52 6/22/17 69.60 3103.53 10/6/16 69.47 3101.52 6/22/17 69.60 3103.53 10/1/17 69.60 3103.53								
3,170.99 MW-10 2 54'-69'					8/25/06			3101.34
3,170.99 MW-10 2 54'-69' 54'-69' 54'-69' 2 54'-69' 2 54'-69' 3101.93 3101								
MW-10 2 54'-69' 2/16/09 69.74 3101.25		3.170.99						
MW-10 2 54'-69' 7/27/09 69.27 3101.72 2/22/10 69.30 3101.69 7/26/10 69.40 3101.59 2/15/11 NG 8/16/11 69.28 3101.71 2/20/12 NG 8/24/12 69.40 3101.59 8/24/12 69.40 3101.59 8/13/13 69.34 3101.61 69.33 3101.61 10/9/14 69.38 3101.61 10/9/14 69.37 3101.62 6/22/16 69.47 3101.56 6/22/16 69.47 3101.56 10/6/15 69.47 3101.56 10/6/15 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3101.56 10/6/16 69.47 3103.85 10/11/17 69.60 3103.85 10/11/17 69.60 3103.85 10/11/17 69.61 3103.85		-,						
2/22/10	MM4/ 40			E41.001				
7/28/10 69.40 3101.59 2/15/11 NG 8/16/11 69.28 3101.71 2/20/12 109.41 3101.58 2/29/13 69.40 3101.59 8/13/13 69.40 3101.59 8/13/13 69.34 3101.65 4/2/14 69.33 3101.61 10/9/14 69.38 3101.61 6/23/15 62.26 3108.73 10/6/15 69.37 3101.22 6/22/16 69.47 3101.52 6/22/16 69.47 3101.52 05/22/17 69.60 3103.85 10/11/17 69.60 3103.75 05/09/18 69.61 3103.85	WW-10		2	54'-69'				
2/15/11 NG								
2/20/12 NG					2/15/11			NG
8/24/12 69.41 3101.58 2/19/13 69.40 3101.59 8/13/13 69.34 3101.65 4/2/14 69.33 3101.65 4/2/14 69.38 3101.61 10/9/14 69.38 3101.61 6/23/15 62.26 3108.73 10/6/15 69.37 3101.62 6/22/16 69.43 3101.56 6/22/16 69.43 3101.56 10/6/16 69.47 3101.52 05/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.84								
2/19/13 69.40 3101.59 8/13/13 69.34 3101.65 4/2/14 69.33 3101.66 10/9/14 69.38 3101.61 10/9/14 69.38 3101.61 6/23/15 62.26 3108.73 10/6/15 69.37 3101.62 6/22/16 69.43 3101.56 6/22/16 69.43 3101.56 10/6/217 69.60 3103.85 10/11/17 69.60 3103.85 10/11/17 69.60 3103.85 10/11/17 69.61 3103.84								
4/2/14 69.33 3101.66 10/9/14 69.38 3101.61 6/23/15 69.38 3101.61 10/6/15 69.37 3101.62 6/22/16 69.43 3101.56 10/6/16 69.47 3101.52 05/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.84					2/19/13		69.40	3101.59
10/01/4 69.38 3101.61 6/23/15 62.26 3108.73 10/6/15 69.37 3101.62 6/22/16 69.43 3101.56 10/6/16 69.47 3101.52 05/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.84 3,173.45								
6/23/15 62.26 3108.73 10/6/15 69.37 3101.62 6/22/16 69.43 3101.50 10/6/16 69.47 3101.52 05/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.81 3103.84 10/09/18 69.83 3103.62								
10/6/15 69.37 3101.62 6/22/16 69.43 3101.56 10/6/16 69.47 3301.56 05/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.84 10/09/18 69.83 3103.62								
10/6/16 69.47 3101.52 05/22/17 69.60 3103.85 10/11/1 69.70 3103.75 05/09/18 69.61 3103.84 10/09/18 69.83 3103.62					10/6/15		69.37	3101.62
05/22/17 69.60 3103.85 10/11/17 69.70 3103.75 05/09/18 69.61 3103.84 10/09/18 69.61 3103.84 10/09/18 69.83 3103.62								
10/11/17 69.70 3103.75 05/09/18 69.61 3103.84 10/09/18 69.83 3103.62								
10/09/18 69.83 3103.62					10/11/17		69.70	3103.75
		3,173.45						
					6/11/19	72.20	69.83 69.83	3103.62 3103.62
11/21/19 72.02 69.94 3103.51								



	WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
Ī					4/30/02	75.60		DRY
					10/11/02			DRY
					12/26/02			DRY
					2/17/03			DRY DRY
								DRY
								DRY
					2/3/04			DRY
					5/29/03 8/22/03 8/22/03 11/5/03 2/3/04 5/5/04 11/23/04 12/9/05 8/4/05 2/22/06 8/4/06 2/27/07 8/23/07 2/18/08 2/18/08 2/18/08 2/18/08 2/18/08 2/18/08 2/18/08 2/18/08 2/18/08 2/18/08 2/18/09 2/18/09 2/22/10 7/26/10 2/22/10 7/26/10 2/22/10 2/22/10 2/22/10 3/3/11 8/23/12 2/18/13 8/23/12 2/18/13 10/6/15 6/23/15 10/6/15 6/23/15 10/6/16 05/22/17 10/11/17 05/08/18 10/08/18 10/08/18 10/08/19 75.60 4/30/02 77.81 10/10/2 12/28/02 2/17/03 5/29/03 8/22/03 1/5/03 5/29/03 2/3/04			DRY
								DRY
								DRY
							61.91	DRY 3106.33
							74.71	3093.53
							74.71	3093.53
							74.51	3093.73
					8/23/07		74.38	3093.86
		3,168.24					74.21	3094.03
							74.38	3093.86
	MW-11		2	58'-73'			74.46	3093.78
	IVI VV - 1 1		2	50-73			74.45 74.52	3093.79 3093.72
							74.52	3093.63
							74.56	3093.68
							74.63	3093.61
					2/20/12			NG
							74.62	3093.62
							74.65	3093.59
							74.66	3093.58
							74.73 74.7	3093.51 3093.54
							74.49	3093.75
							74.60	3093.64
							74.68	3093.56
							74.70	3093.54
								NG
							74.88	3095.78
		3,170.66					74.87 74.87	3095.79
						75.60	74.85	3095.79 3095.81
							74.93	3095.73
ľ							72.80	3079.68
							72.81	3079.67
					12/26/02		72.82	3079.66
							72.82	3079.66
							72.77	3079.71
							72.81 72.81	3079.67 3079.67
							72.83	3079.65
							72.78	3079.70
					8/2/04		72.81	3079.67
					11/23/04		72.69	3079.79
					2/9/05		72.83	3079.65
					8/4/05		72.48	3080.00
							72.15	3080.33
							71.91 71.75	3080.57 3080.73
					8/23/07		71.75	3080.73
		3,152.48			2/18/08		71.42	3081.06
					8/11/08		71.46	3081.02
				-or - ··	2/16/09		73.13	3079.35
	MW-12		2	59'-74'	7/27/09		71.59	3080.89
					2/22/10		71.94	3080.54
							72.21 72.36	3080.27 3080.12
							72.50	3079.98
							72.45	3080.03
					8/22/12		72.71	3079.77
					8/2/04 11/23/04 2/9/05 8/4/05 8/4/06 2/27/06 8/24/06 2/27/07 8/23/07 2/18/08 8/11/08 2/18/08 8/11/08 2/18/08 8/11/08 2/18/08 8/11/08 2/18/08 8/11/08 2/18/08 1/26/10 1/26/10 1/26/10 2/15/11 8/15/11 2/15/11 8/15/11 8/15/11 2/18/13 8/13/13 4/2/14 10/9/14 6/23/15 10/9/14 6/23/15 10/9/14 6/23/15 10/9/14 6/23/16 10/9/14 10/9/14 6/23/16 10/9/14 10/9/14 6/23/15 10/9/14 10/9/14 6/23/15 10/9/14 6/23/15 10/9/14 10/9/14 6/23/15 10/9/14 10/9/14 6/23/15 10/9/14	72.65	3079.83	
							72.59	3079.89
							72.83	3079.65
							72.91	3079.57
							72.52 71.48	3079.96 3081.00
							71.46	3079.76
- [72.73	3079.75
					10/6/16		12.13	
							72.65	3082.28
					5/22/17 10/11/17		72.65 72.71	3082.28 3082.22
		3,154.93			5/22/17 10/11/17 05/08/18		72.65 72.71 72.54	3082.28 3082.22 3082.39
		3,154.93			5/22/17 10/11/17 05/08/18 10/08/18		72.65 72.71 72.54 72.61	3082.28 3082.22 3082.39 3082.32
		3,154.93			5/22/17 10/11/17 05/08/18 10/08/18 6/11/19	 77.81	72.65 72.71 72.54	3082.28 3082.22 3082.39



	WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
					4/30/02	70.55	66.97	3087.95
					10/11/02		66.38	3088.54
					12/26/02		66.37	3088.55
					2/17/03		66.37	3088.55
					5/29/03		66.68	3088.24
					8/22/03		67.06	3087.86
					11/5/03		67.36	3087.56
					2/3/04		67.11	3087.81
					5/5/04		67.05	3087.87
					8/2/04		67.21	3087.71
					11/23/04		66.82	3088.10
					2/9/05		66.50	3088.42
					8/4/05		66.11	3088.81
					2/22/06		65.73 65.45	3089.19
					8/24/06 2/27/07		65.22	3089.47 3089.70
					8/23/07		65.06	3089.86
		3,154.92			2/18/08		65.10	3089.82
		-,			8/11/08		65.12	3089.80
					2/16/09		64.74	3090.18
	MW-13		2	53'-68'	7/27/09		64.89	3090.03
					2/22/10		65.19	3089.73
					7/26/10		65.45	3089.47
					2/15/11		65.60	3089.32
					8/16/11		65.79	3089.13
					2/20/12		65.83	3089.09
					8/23/12		66.01	3088.91
					2/19/13		66.11	3088.81
					8/13/13		66.17	3088.75
					4/2/14		66.91	3088.01
					10/9/14		66.68	3088.24
				6/23/15 66.43	3088.49			
					10/6/15 6/23/16		66.56 66.61	3088.36 3088.31
					10/6/16		66.61	3088.31
					5/22/17		67.65	3089.71
					10/11/17		66.75	3090.61
					05/08/18		66.60	3090.76
		3,157.36			10/09/18		66.65	3090.71
					6/11/19	70.55	66.70	3090.66
					11/21/19	70.40	66.60	3090.76
					11/5/03	92.43	71.60	3080.31
					2/3/04		71.62	3080.29
					5/5/04		71.67	3080.24
					8/2/04		71.69	3080.22
					11/23/04		71.60	3080.31
					2/9/05		71.30	3080.61
					8/4/05		70.90	3081.01
					2/22/06		70.49 70.24	3081.42
					8/24/06			3081.67
					2/27/07 8/23/07		70.05 69.78	3081.86 3082.13
					2/18/08		69.68	3082.23
					8/11/08		69.72	3082.23
					2/16/09		69.31	3082.60
		3,151.91			7/27/09		69.37	3082.54
					2/22/10		69.65	3082.26
					7/26/10		69.95	3081.96
	MW-14		2	79.5'-89.5'	2/15/11		70.20	3081.71
					8/16/11		70.39	3081.52
					2/20/12		70.48	3081.43
					8/23/12		70.81	3081.10
					2/19/13		70.97	3080.94
					8/13/13		70.92	3080.99
				4/2/14		71.14	3080.77	
				10/9/14		71.52	3080.39	
				6/23/15		71.38	3080.53	
				10/6/15		71.46	3080.45	
					6/22/16 10/6/16		71.65 71.68	3080.26 3080.23
					5/22/17		71.68	3080.23
					10/11/17		71.74	3082.64
					05/08/18		71.81	3082.73
		3,154.54			10/08/18		71.91	3082.63
1		3,154.54						
					6/11/19	92.43	71.75	3082.79



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
				11/5/03	87.45		DRY
				2/3/04			DRY
				5/5/04			
				8/2/04			
				11/23/04			
				2/9/05 8/4/05		86.91	
				2/22/06		86.54	
				8/24/06		86.34	3066.14
				2/27/07		85.73	3066.75
				8/23/07		85.26	
				2/18/08		81.90	
				8/11/08		81.99	
	3,152.48			2/16/09 7/27/09		77.83 77.19	
	0,702.40			2/22/10		77.06	
				7/26/10		77.05	
MW-15		2	64.5'-84.5'	2/15/11		77.08	3075.40
				8/16/11		77.23	3075.25
				2/20/12		77.31	
				8/22/12		77.50	
				2/19/13 8/13/13		77.61 77.78	
				4/2/14		78.51	
				10/9/14		78.30	
				6/23/15		78.26	3074.22
				10/6/15		78.51	3073.97
		(in)		6/22/16		78.65	3073.83
				10/6/16		78.82	
				5/22/17		78.94 79.40	Groundwater Elevation (It above MSL-1 DRY DRY DRY DRY DRY DRY DRY DRY 3065.57 3065.94 3066.14 3066.14 3066.75 3070.49 3070.49 3075.42 3075.43 3075.49 3075.47 3075.49 3075.49 3075.49 3075.49 3075.49 3075.49 3075.49 3075.40 3075.40 3075.40 3075.40 3075.40 3075.40 3075.40 3074.91 3074.91 3074.91 3074.91 3074.91 3074.91 3074.91 3075.40 3075.40 3075.40 3076.00 3075.50 3088.50 3088.50 3088.50 3089.75 3088.50 3088.50 3089.75 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.77 3089.75 3099.75
				10/11/17 05/08/18		79.40	
	3,154.94			10/08/18		80.03	3074.91
				6/11/19	87.45	80.17	
				11/22/19	87.37	80.60	3074.34
				11/5/03	77.22	65.68	
				2/3/04		68.67	
				5/5/04		68.69	
				8/2/04 11/23/04		68.65 68.10	
				2/9/05		67.53	
				8/4/05		67.77	
				2/22/06		67.24	
				8/24/06		67.66	
				2/27/07		67.09	
	ĺ			8/23/07		67.10	
	ĺ			2/18/08		67.03	
	ĺ			8/11/08 2/16/09		67.09 67.85	
	3,157.25			7/27/09		67.92	
	1			2/22/10		68.10	
	ĺ			7/26/10		68.20	3089.05
MW-16	1	2	59.5'-74.5'	2/15/11		68.18	
	1			8/16/11		68.16	
	1			2/20/12		68.12	
	ĺ			8/23/12 2/19/13		68.20 68.43	
	1			8/13/13		68.25	
	1			4/2/14		68.42	
	1			10/9/14		68.38	3088.87
	ĺ			6/23/15		68.03	
	ĺ			10/6/15		68.18	
	1			6/22/16		68.28	
	ĺ			10/6/16 5/22/17		68.20	
	ĺ			10/11/17		68.24 68.34	
				05/08/18		68.08	
	3,159.66			10/08/18		68.21	3091.45
3,139.00		F	6/11/19	77.22	68.05	3091.61	
				11/22/19	74.41		3091.41



Γ		TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
					11/5/03	79.37	69.51	3088.86
					2/3/04		69.53	3088.84
					5/5/04		69.52	3088.85
					8/2/04		70.12	3088.25
					11/23/04 2/9/05		69.31 69.04	3089.06 3089.33
					8/4/05		68.90	3089.47
					2/22/06		68.72	3089.65
					8/24/06		68.78	3089.59
					2/27/07		68.55	3089.82
					8/23/07		68.50	3089.87
					2/18/08 8/11/08		68.41	3089.96 3089.94
					2/16/09			3089.50
		3,158.37			7/27/09		68.99	3089.38
					2/22/10		69.14	3089.23
					7/26/10			3089.15
	MW-17		2	57'-77'	2/15/11			3089.14
					8/16/11 2/20/12			3089.14 3089.18
					8/23/12			3089.01
					2/19/13			3088.88
					8/13/13		69.31	3089.06
					4/2/14		69.53	3088.84
					10/9/14			3088.96
					6/23/15			3089.27
				10/6/15 6/22/16			3089.10 3089.11	
							- 68.87 - 69.14 - 69.22 - 69.23 - 69.23 - 69.36 - 69.49 - 69.36 - 69.49 - 69.31 - 69.27 - 69.26 - 69.29 - 69.25 - 69.31 - 37 - 69.10 - 69.31 - 69.31 - 69.31 - 69.31 - 69.31 - 69.31	3089.08
								3091.47
					10/11/17			3091.36
		3,160.72	5/22/17 69.25 10/11/17 69.36 05/08/18 69.10 10/08/18 69.31		3091.62			
		•			10/08/18 6/11/19	79.37		3091.41 3091.56
					11/22/19	76.94		3091.47
-				<u> </u>	11/23/04	76.98		DRY
					2/9/05			DRY
					8/4/05			DRY
					2/22/06			DRY
					8/24/06			DRY
					2/27/07 8/23/07			DRY DRY
					2/18/08			DRY
					8/11/08			DRY
					2/16/09			DRY
					7/27/09			DRY
		3,151.08			2/22/10			DRY
		3,151.06			7/26/10 2/15/11			DRY DRY
					8/16/11			DRY
	MW-18		2	54.5'-74.5	2/20/12			DRY
					8/23/12			DRY
					2/18/13			DRY
				8/13/13			DRY	
				4/2/14 10/9/14			DRY DRY	
				6/23/15			DRY	
				10/6/15			DRY	
				6/23/16			DRY	
				10/6/16			DRY	
				5/22/17			DRY	
					10/11/17			DRY
		3,153.80			05/08/18 10/08/18			DRY DRY
					6/11/19	76.98	78.45	3075.35
					11/21/19	78.50	78.44	3075.36



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
				11/23/04	105.61	72.63	3075.16
				2/9/05		72.36	3075.43
				8/4/05 2/22/06		72.18 71.83	3075.61 3075.96
				8/24/06		71.57	3076.22
				2/27/07		71.28	3076.51
				8/23/07		70.75	3077.04
				2/18/08		70.29	3077.50
				8/11/08 2/16/09		70.33 71.54	3077.46 3076.25
				7/27/09		70.71	3077.08
				2/22/10		69.91	3077.88
	3,147.79			7/26/10		70.15	3077.64
				2/15/11 8/16/11		70.26 70.50	3077.53 3077.29
MW-19		2	82.5'-102.5'	2/20/12		70.50	3077.18
		_	02.0 102.0	8/23/12		70.01	3077.78
				2/19/13		71.34	3076.45
				8/13/13		71.31	3076.48
				4/2/14		71.85	3075.94
				10/9/14 6/23/15		72.50 72.13	3075.29 3075.66
				10/6/15		72.30	3075.49
				6/22/16		72.77	3075.02
				10/6/16		72.96	3074.83
				5/22/17		72.90	3077.36
				10/11/17		72.85	3077.41
	3,150.26			05/08/18 10/08/18		73.01 73.04	3077.25 3077.22
				6/11/19	105.61	73.08	3077.18
				11/21/19	104.55	73.01	3077.25
				11/23/04	94.94	81.81	3069.75
				2/9/05		81.85	3069.71
				8/4/05		81.81	3069.75
				2/22/06 8/24/06		81.71 81.66	3069.85
				2/27/07		81.39	3069.90 3070.17
				8/23/07		81.20	3070.36
				2/18/08		80.93	3070.63
				8/11/08		80.96	3070.60
				2/16/09		80.58	3070.98
				7/27/09 2/22/10		80.42 80.35	3071.14 3071.21
	3.151.56			7/26/10		80.39	3071.17
	,			2/15/11		80.38	3071.18
				8/16/11		80.52	3071.04
MW-20		2	72.5'-92.5'	2/20/12		80.61	3070.95
				8/22/12		80.85	3070.71
				2/19/13 8/13/13		81.09 81.23	3070.47 3070.33
				4/2/14		81.57	3069.99
				10/9/14		81.70	3069.86
				6/23/15		81.81	3069.75
				10/6/15		81.96	3069.60
				6/22/16		82.17	3069.39
				10/6/16		82.26	3069.30
				5/22/17 10/11/17		82.29 82.50	3071.70 3071.49
	0.450.00			5/8/18		82.48	3071.51
	3,153.99			10/8/18		82.68	3071.31
				6/11/19	94.94	82.72	3071.27
				11/22/19	88.83	82.79	3071.20



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
				11/20/07	99.00	71.05	3074.82
				2/18/08		70.96	3074.91
				8/11/08		71.01	3074.86
				2/16/09		70.78	3075.09
				7/27/09		70.71	3075.16
				2/22/10		70.83	3075.04
				7/26/10		71.03	3074.84
				2/15/11		71.04	3074.83
	3,145.87			8/16/11		71.31	3074.56
	.,			2/20/12		71.50	3074.37
				8/22/12		71.79	3074.08
		_		2/19/13		72.06	3073.81
MW-21		2	67'-97'	8/13/13		72.27	3073.60
				4/2/14		72.65	3073.22
				10/9/14		73.41	3072.46
				6/23/15		73.04	3072.83
				10/6/15		73.26	3072.61
		_		6/22/16		73.34	3072.53
				10/6/16		73.41	3072.46
				5/22/17		73.51	3073.94
	3.147.45			10/11/17		73.62	3073.83
	3,147.45			05/08/18		73.32	3074.13
				10/08/18		73.71	3073.74
				6/11/19	99.00	73.30	3074.15
				11/21/19	96.17	73.60	3073.85
				11/20/07	68.95	62.35	3108.29
				2/18/08		62.59	3108.05
				8/11/08		62.62	3108.02
			Ì	2/16/09		62.68	3107.96
				7/27/09 2/22/10		62.90 62.74	3107.74 3107.90
				7/26/10		62.80	3107.84
				2/15/11 8/16/11		62.59 62.71	3108.05 3107.93
	3.170.64			2/21/12		02.71	NG
	3,170.04			8/24/12		62.91	3107.73
				2/19/13		62.61	3107.73
MW-22		2	46.5'-66.5'	8/13/13		62.60	3108.04
11111-22		_	40.0 -00.0	4/2/14		62.60	3108.04
				10/9/14		61.90	3108.74
				6/23/15		62.61	3108.03
	1			10/6/15		62.79	3107.85
	1			6/22/16		62.98	3107.66
	1			10/6/16		63.07	3107.57
	1			5/22/17		63.27	3109.18
	1			10/11/17		63.21	3109.24
				05/08/18		63.41	3109.04
	3,172.45			10/09/18		63.70	3108.75
	1			06/11/19	68.95	63.66	3108.79
I				11/21/19	67.79	63.87	3108.58



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
				2/20/12	103.60	89.59	3064.79
				8/22/12		89.54	3064.84
				2/19/13		89.71	3064.67
				8/13/13		89.72	3064.66
	3.154.38			4/2/14		89.99	3064.39
	5,11			10/9/14		90.03	3064.35
				6/23/15		90.22	3064.16
MW-23		2	70-100'	10/6/15		90.37	3064.01
				6/22/16		90.44	3063.94
				10/6/16		90.46	3063.92
				5/22/17		90.62	3065.37
				10/11/17 05/08/18		90.80	3065.19 3065.22
	3,155.99					90.77	
				10/08/18 06/11/19	103.60	90.83	3065.16 3064.91
				11/22/19	101.52	91.11	3064.88
				2/20/12	62.95	48.81	3097.26
				8/22/12	62.95	49.11	3096.96
				2/19/13		49.23	3096.84
				8/13/13		49.35	3096.72
				4/2/14		49.50	3096.57
	3,146.07			10/9/14		50.05	3096.02
				6/23/15		49.65	3096.42
			00.00	10/6/15		49.80	3096.27
MW-24		2	30-60'	6/22/16		49.87	3096.20
				10/6/16		49.99	3096.08
				5/22/17		49.98	3097.63
				10/11/17		50.15	3097.46
	3,147.61			05/08/18		49.68	3097.93
	3,147.01			10/08/18		49.94	3097.67
				6/11/19	62.95	49.44	3098.17
	<u> </u>	<u> </u>		11/21/19	62.63	49.52	3098.09
				4/5/12	97.00	78.08	3093.24
ĺ	1			5/24/12		77.96	3093.36
ĺ	1			8/23/12		77.79	3093.53
				2/19/13		78.16	3093.16
				8/13/13		78.15	3093.17
	3,171.32			4/2/14		78.41	3092.91
				10/9/14		78.39	3092.93
			05.051	6/23/15		78.04	3093.28
MW-25	1	2	65-95'	10/6/15		78.05	3093.27
ĺ	1			6/22/16		78.21	3093.11
	1			10/6/16		78.14	3093.18
ĺ	1			5/22/17		78.20	3094.65
ĺ	1			10/11/17		78.38	3094.47
ĺ	3,172.85			05/08/18		78.21	3094.64
ĺ	1			10/08/18 6/11/19	97.00	78.41 78.40	3094.44
ĺ	1			11/22/19	94.30	78.40	3094.45 3094.35
<u> </u>	i	I		11/22/19	34.30	70.00	3034.33



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
				4/5/12	76.61	63.02	3109.82
				5/24/12		63.02	3109.82
				8/24/12		63.02	3109.82
				2/19/13		62.98	3109.86
				8/13/13		62.89	3109.95
	3,172.84			4/2/14		62.85	3109.99
				10/9/14		63.02	3109.82
				6/23/15		63.10	3109.74
MW-26		2	55-75'	10/6/15		63.22	3109.62
				6/22/16		63.47	3109.37
				10/6/16		63.50	3109.34
				5/22/17		63.72	3110.91
				10/11/17		63.90	3110.73
	3,174.63			05/08/18		63.94	3110.69
	3,11 1122			10/08/18		64.13	3110.50
				6/11/19	76.61	64.22	3110.41
				11/20/19	75.73	64.30	3110.33
				4/5/12	48.80	46.30	3100.30
				8/23/12			DRY
				2/19/13		48.20	3098.40
				8/13/13			DRY
	3,146.60			4/2/04			DRY
				10/9/04			DRY
				6/23/15			DRY
MW-27		2	25-45'	10/6/15			DRY
				6/22/16			DRY
				10/6/16 5/22/17			DRY DRY
				10/11/17			DRY
				5/8/18			DRY
	3,151.17			10/8/18			DRY
				6/11/19	48.80		DRY
				11/20/19	48.58		DRY
		+ +		6/11/19	74.14	64.57	3111.03
MW-28	3,175.60			11/20/19	72.90	64.66	3110.94
1111-20	0,170.00			11/20/18	12.50	04.00	3110.54
		 		6/11/19	78.62	66.70	3102.76
MW-29	3,169.46			11/21/19	78.60	66.83	3102.76
20	5,.30.40			11/21/18	7 5.00	55.65	0102.00
		 		6/11/19	73.95	68.44	3083.71
MW-30	3,152.15			11/21/19	73.70	68.54	3083.61
	5,.525	1		11/21/10	70.70	00.04	0000.01
				6/11/19	83.75	80.21	3093.58
MW-31	3,173.79			11/22/19	82.75	80.33	3093.46
	-,	1		11/22/10	02.70	00.00	5555.40
		 		6/11/19	87.85	85.84	3063.24
MW-32	3,149.08			11/21/19	87.00	85.83	3063.25
	1 5,			11/21/10	07.00	00.00	0000.20



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL ²)
				4/30/02	192.00	70.21	3100.00
				10/11/02	192.00	69.71	3100.50
				12/26/02		69.70	3100.51
				2/17/03		69.70	3100.51
				5/29/03		67.37	3102.84
				8/22/03		70.27	3099.94
				11/5/03		70.23	3099.98
				2/3/04 5/5/04		70.31 70.23	3099.90 3099.98
				8/2/04		69.47	3100.74
				11/23/04		69.92	3100.29
				2/9/05		69.75	3100.46
				8/4/05		69.89	3100.32
				2/22/06 8/25/06		69.51	3100.70
				2/27/07		69.50 69.20	3100.71 3101.01
	3,170.21			8/23/07		68.99	3101.22
	5,115.21			2/18/08		69.00	3101.21
				8/11/08		68.95	3101.26
		1		2/16/09		69.00	3101.21
WW-1		4		7/27/09		69.00	3101.21
		1		2/22/10		68.89	3101.32
1		1		7/26/10 2/15/11			NG NG
		1		8/16/11			NG
1				2/20/12		69.05	3101.16
1		1		8/23/12		69.22	3100.99
		1		2/18/13		69.22	3100.99
		1		8/13/13		69.09	3101.12
1				4/2/14 10/9/14		69.07 69.13	3101.14 3101.08
				6/23/15		69.10	3101.06
				10/6/15		69.10	3101.11
				6/22/16		69.27	3100.94
	3,172.12			10/6/16		69.28	3100.93
				5/22/17		69.54	3102.58
				10/11/17		69.58	3102.54
				05/08/18 10/08/18		69.44 69.63	3102.68 3102.49
				6/11/19	192.00	69.69	3102.43
				11/22/19	187.80	69.78	3102.34
				8/22/97	70.43	62.58	3101.86
				2/4/98		62.50	3101.94
				10/19/00		62.37	3102.07
				2/7/01 4/30/02		62.43 62.37	3102.01 3102.07
				10/11/02		62.35	3102.07
				12/26/02		62.34	3102.10
				2/17/03		62.34	3102.10
				5/29/03		62.22	3102.22
		1		8/22/03		62.35	3102.09
1		1		11/5/03 2/3/04		62.31 62.27	3102.13 3102.17
		1		5/5/04		62.11	3102.17
		1		8/2/04		62.01	3102.43
		1		11/23/04		61.40	3103.04
		1		2/9/05		61.30	3103.14
		1		8/4/05 2/23/06		61.61 61.24	3102.83 3103.20
1				8/25/06		61.43	3103.20
1	3,164.44			2/27/07		61.03	3103.41
1				8/23/07		60.74	3103.70
147 . 4		_		2/18/08		60.97	3103.47
West MW		2		8/11/08		61.06	3103.38
1				2/16/09 7/27/09		61.27 61.42	3103.17 3103.02
1				2/22/10		61.26	3103.02
1				7/26/10		61.62	3102.82
1				2/15/11		61.20	3103.24
		1		8/16/11		61.21	3103.23
1				2/21/12		61 50	NG 2102.02
		1		8/24/12 2/18/13		61.52 61.43	3102.92 3103.01
		1		8/13/13		61.56	3102.88
1		1		4/2/14		61.28	3103.16
1		1		10/9/14		61.40	3103.04
1				6/23/15		61.35	3103.09
1				10/6/15		61.48	3102.96
1				6/22/16 10/6/16		61.35 61.34	3103.09 3103.10
1				5/22/17		61.96	3104.91
1				10/11/17		62.25	3104.62
	2 166 07	1		05/08/18		61.42	3105.45
	3,166.87			10/09/18		61.63	3105.24
				6/11/19 11/21/19	70.43 67.30	61.89 61.80	3104.98 3105.07



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
				8/22/97	70.45	63.25	3101.29
				2/4/98		63.21	3101.33
				10/19/00		63.06	3101.48
				2/7/01		63.10	3101.44
				4/30/02		63.06	3101.48
				10/11/02		62.72	3101.82
				12/26/02		62.70	3101.84
				2/17/03		62.70	3101.84
				5/29/03		62.92	3101.62
				8/22/03		63.04	3101.50
				11/5/03		63.03	3101.51
				2/3/04		62.99	3101.55
				5/5/04		62.90	3101.64
				8/2/04		62.71	3101.83
				11/23/04		62.17	3102.37
				2/9/05		62.05	3102.49
				8/4/05		62.33	3102.21
				2/23/06		61.98	3102.56
				8/25/06		62.17	3102.37
	3,164.54			2/27/07		61.78	3102.76
				8/23/07		61.52	3103.02
		2	-	2/18/08		61.9	3102.64
Southwest MW				8/11/08		61.93	3102.61
				2/16/09		62.10	3102.44
				7/27/09		62.19	3102.35
				2/22/10		62.00	3102.54
					7/26/10		62.64
				2/15/11			NG
				8/16/11		61.94	3102.60
				2/21/12			NG
				8/24/12		62.03	3102.51
				2/18/13		62.75	3101.79
				8/13/13		62.50	3102.04
				4/2/14		62.15	3102.39
				10/9/14		62.60	3101.94
				6/23/15		62.28	3102.26
				10/6/15		62.51	3102.03
				6/23/16		62.12	3102.42
				10/6/16		62.14	3102.40
				5/22/17		62.21	3104.75
				10/11/17		61.55	3105.41
ĺ	3,166.96			05/09/18		62.13	3104.83
ĺ	0,700.00			10/08/18		62.36	3104.60
ĺ				6/11/19	70.45	62.28	3104.68
				11/21/19	70.91	62.42	3104.54



WELL ID	TOC1 elevation	Well Diameter (in)	Screen Interval (bgs³)	DATE	Total Depth (ft)	Depth to Water (ft)	Corrected Groundwater Elevation (ft above MSL²)
				1/14/99	76.30	50.85	3112.67
				10/19/00		62.33	3101.19
				4/30/02		62.28	3101.24
				10/11/02		62.27	3101.25
				12/26/02		62.26	3101.26
				2/17/03		62.26	3101.26
				5/29/03		62.34	3101.18
				8/22/03		62.25	3101.27
				11/5/03		62.25	3101.27
				2/3/04		62.20	3101.32
				5/5/04		62.12	3101.40
				8/2/04		61.96	3101.56
				11/23/04		61.46	3102.06
				2/9/05		61.30	3102.22
				8/4/05		61.51	3102.01
				2/23/06		61.20	3102.32
				8/25/06		61.36	3102.16
				2/27/07		62.44	3101.08
				8/23/07			NG
				2/18/08			NG
RW-1	2 462 52	1 , 1	E01 701	2/16/09			NG
KW-1	3,163.52	4	53'-73'	7/27/09			NG
				2/22/10			NG
				7/26/10			NG
				2/15/11			NG
				8/16/11		61.14	3102.38
				2/20/12			NG
				8/24/12			NG
				2/18/13		69.96	3093.56
				8/13/13			NG
				4/2/14			NG
				10/9/14			NG
				6/23/15			NG
	1			10/6/15		-	NG
				6/23/16			NG
				10/6/16			NG
				5/22/17			NG
				10/11/17			NG
	1			5/9/18		-	NG
	ĺ			10/9/18		61.76	3101.76
				6/11/19	76.30	61.46	3102.06
				11/21/19		Not Gauge	d

Notes:

- 1 Top of Casing

1 - Top of Casing
2 - Mean Sea Level
3 - Below ground surface
4 - NG - Not Gauged due to presence of recovery pump
All depths were measured from the TOC
Professional Surveys were conducted by Piper Surveying Company in February and July 1998, October 2001
October 2003 and December 2004
Professional Surveys were conducted by West Company in November 2011, June 2012, and August 2017.



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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 200168

CONDITIONS

Operator:	OGRID:
TEXACO PIPELINE INC P.O. Box 5080 Bellaire, TX BAD ADDR	22438
	Action Number:
	200168
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2019 Annual Groundwater Monitoring Report for G.L. Erwin Federal NCT-2 Tank Battery: Content Satisfactory 1. Continue to conduct groundwater monitoring and sampling. 2 Continue LNAPL Recovery efforts per report. 3. Submit the 2020, 2021 and 2022 annual groundwater reports by or before April each consecutive year.	8/17/2023