REVIEWED
By Mike Buchanan at 8:48 am, Apr 29, 2025

ENSOLUM

Review of the Flora Vista #1 Annual Groundwater Report for 2024: content unsatisfactory
1. OCD notes that MW-1 has not been sampled since 2022 due to low volume in the well or well could not be located. Please propose a contingency plan for sampling the well once located, or re-drill well, or an adjacent well. MW-1 still conveys concentrations for BTEX above WQCC regulatory standards.
2. Due to drinking water standards per EPA, documentation is required showing attempt to contact landowner to sample domestic wells. Please provide proof of that during next sampling event.
3. Continue to sample groundwater monitoring wells: MW-1, MW-3, MW-4, MW-5 for BTEX, dissolved iron and manganese on a semi annual schedule.
4. Submit the 2025 annual groundwater monitoring report to OCD by April 1, 2026.

January 8, 2025

New Mexico Oil Conservation Division
New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: 2024 Annual Groundwater Monitoring Report
Flora Vista #1
San Juan County, New Mexico
Hilcorp Energy Company
NMOCD Incident Number: nCS1907338841
NMOCD Administrative Order: 3R-173

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Compa ts this *2024 Annual Groundwater Monitoring Report* to the New Mexic ivision (NMOCD) to document groundwater monitoring activities conducte natural gas production well (Site) during 2024. The Site is located on priv tter F, Section 22, Township 30 N, Range 12 W, of San Juan County, New rrently, there are five groundwater monitoring wells (MW-1 through MW-5) at nitored for groundwater elevations and sampled semi-annually. Two additio -1 and DW-2) have historically been sampled as part of Site monitoring longer sampled during regular monitoring events. Well locations and genera sented on Figure 2.

SITE BACKGROUND

Several historical releases have been documented at the Site. An it was taken out of service in 1994 and subsequently remediated between evious operator. Reports documenting these activities were submitted to sued a letter to the operator on January 24, 1997, approving pit closure and remediation. Additionally, Burlington Resources (Burlington) encountered historical petroleum hydrocarbon-impacted soil during Site construction activities in 2003. Burlington ultimately excavated 9,443 cubic yards of impacted soil in attempts to remediate the Site. Burlington was unable to remove all impacted soil from the Site and impacted soils were left in place at depth. Groundwater was encountered in the excavation at a depth of approximately 25 feet below ground surface (bgs). In order to address the remaining impacts, Burlington sprayed approximately 80 barrels (bbls) of potassium permanganate into the excavation prior to backfilling in hopes of enhancing degradation of the petroleum hydrocarbon impacts.

After completion of the excavation, monitoring well MW-1 was installed in 2003 at a downgradient location from the center of the excavation (Figure 2). Groundwater monitoring included analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX), as well as total petroleum hydrocarbons (TPH), with analytical results indicating the presence of benzene and total xylenes

above regulatory standards. At the request of the NMOCD, monitoring wells MW-2, MW-3, and MW-4 were installed at the Site in August 2008. Additionally, two domestic water wells located downgradient of the Site (DW-1 and DW-2 shown on Figure 2) were included in yearly sampling events to verify impacted groundwater was not migrating off-Site and onto adjacent properties.

Based on the presence of dissolved-phase petroleum hydrocarbons in groundwater, a mobile-dual phase extraction event was conducted in August 2013 and removed approximately 1,300 gallons of impacted groundwater. In order to assess potential soil and groundwater impacts originating from the on-Site above ground storage tanks (shown on Figure 2), monitoring well MW-5 was installed in September 2015. Groundwater analytical data from MW-5 indicated there were petroleum hydrocarbon constituents exceeding regulatory standards in this area. In order to further enhance remediation of residual petroleum hydrocarbons at the Site, GHD (former environmental consultant for the Site) conducted an in-situ chemical oxidation (ISCO) event in October of 2016. GHD injected a 15 percent (%) PersulfOx® oxidant solution into wells MW-1 and MW-5 to promote oxidation of soluble metals and petroleum hydrocarbons in groundwater. Since 2016, groundwater at the Site has been continually gauged and monitored for BTEX, dissolved iron, and dissolved manganese constituents.

In 2024, the NMOCD approved conditions outlined in the 2021 *Annual Groundwater Monitoring Report* to reduce sampling for wells MW-1 through MW-5 to a semi-annual schedule. Semi-annual monitoring will continue until constituents of concern (COCs) are reduced below the Closure Criteria. Once COCs fall below the Closure Criteria, sampling frequency will increase to quarterly and continue until eight consecutive sampling events meet the Closure Criteria. The NMOCD also approved discontinuing sampling of MW-2 for all constituents except manganese, as all other parameters have consistently met New Mexico Water Quality Control Commission (NMWQCC) standards since sampling began in 2008. Additionally, the NMOCD approved the suspension of sampling at wells DW-1 and DW-2.

SITE GROUNDWATER CLEANUP STANDARDS

The NMOCD requires groundwater quality standards be met as presented by the NMWQCC and listed in Title 20, Chapter 6, Part 2, Section 3103 (20.6.2.3103) of the New Mexico Administrative Code (NMAC). The following standards are presented for the COCs at the Site in milligrams per liter (mg/L).

- Benzene: 0.005 mg/L
- Toluene: 1.0 mg/L
- Ethylbenzene: 0.70 mg/L
- Total Xylenes: 0.62 mg/L
- Dissolved Iron: 1.0 mg/L
- Dissolved Manganese: 0.20 mg/L

GROUNDWATER SAMPLING ACTIVITIES AND RESULTS

Groundwater level measurements and samples were collected from wells MW-1 through MW-5 in January, April, and August 2024. Approval from the NMOCD to reduce the sampling frequency to semi-annual was granted after completing the first and second quarter sampling events. Therefore, results from these three sampling events are presented in this report. Starting in 2025, wells will be sampled on a semi-annual basis. Groundwater level measurements were not collected from MW-1 in 2024 because the well could not be located. Based on the location of the

well, it is assumed that the well monument was buried during grading operations at the Site. Additionally, samples were not collected from MW-4 for laboratory analysis in January or April 2024 due to insufficient water volume in the well. Well MW-2 was analyzed only for dissolved manganese during the third quarter of 2024, following NMOCD approval to suspend analysis of BTEX and dissolved iron at this well. Sampling at domestic water wells DW-1 and DW-2 was also suspended in 2024 with NMOCD approval.

Static groundwater-level monitoring included recording depth-to-groundwater measurements of each monitoring well using a Keck oil/water interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with distilled water prior to each measurement to prevent cross-contamination. Groundwater elevations measured in monitoring wells during the 2024 sampling events, as presented in Table 1, were used to create semi-annual groundwater potentiometric surface maps from data collected during the first and third quarters of 2024 (Figures 3 and 4, respectively). The inferred groundwater flow direction is to the south-southeast with a hydraulic gradient of 0.003 feet per foot.

GROUNDWATER SAMPLING

Groundwater from each monitoring well was purged and sampled using a disposable bailer. Purging was accomplished by removing three casing volumes of stagnant groundwater from the monitoring well prior to collecting a sample. Field measurements of groundwater quality parameters, including temperature, pH, total dissolved solids, and electrical conductivity, were collected during the purging process, and are presented in Table 2.

Following well purging, groundwater samples were placed directly into laboratory-provided containers and labeled with the date and time of collection, well designation, project name, sample collector's name, and parameters to be analyzed. Samples were immediately sealed with zero headspace and packed on ice to preserve samples. Samples were submitted to Eurofins Environmental Testing Laboratory (Eurofins) in Albuquerque, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8260B and dissolved manganese and dissolved iron following EPA Method 200.7. Proper chain-of-custody procedures were followed documenting the date and time sampled, sample number, type of sample, sample collector's name, preservative used, analyses required, and sample collector's signature.

GROUNDWATER ANALYTICAL RESULTS

Based on data collected in 2024, benzene, ethylbenzene, and total xylene concentrations in groundwater from well MW-5 exceeded the NMWQCC standard during the August 2024 sampling event. Dissolved iron concentrations exceeded the NMWQCC standard in MW-5 during one or more sampling events. Lastly, dissolved manganese concentrations exceeded NMWQCC standards in wells MW-2, MW-3, MW4, and MW-5 during one or more sampling events. A summary of analytical results is presented in Table 3 and depicted on Figure 5, with complete laboratory analytical reports attached as Appendix A.

CONCLUSIONS

Overall, the presence of BTEX concentrations in groundwater have decreased over time at the Site. BTEX concentrations in groundwater have not been detected above NMWQCC standards since 2019 in well MW-4 and since 2020 in MW-3. Benzene concentrations in MW-5 have been greatly reduced and have fluctuated above and below the NMWQCC standard for the last several years. Specifically, benzene concentrations detected between February 2020 and August 2024

have ranged between non-detect to 0.014 mg/L in well MW-5. MW-1 was observed to be dry throughout all of 2023 and 2024. Data collected at the Site suggests the petroleum hydrocarbon plume is stable and overall reducing in size and magnitude through natural attenuation.

Concentrations of dissolved iron and manganese continue to be detected above NMWQCC standards in wells MW-2, MW-3 MW-4, and MW-5. Elevated dissolved iron and manganese concentrations are often a biproduct of petroleum hydrocarbon biodegradation. Biodegradation of petroleum hydrocarbons can often create anaerobic and reducing conditions in groundwater, which can result in the dissolution of iron and manganese from the surrounding soil and rock strata and consequently elevate concentrations of these inorganic constituents. Analytical data collected at the Site indicates dissolved iron and manganese are present in groundwater in the same wells with historically elevated BTEX concentrations, demonstrating these constituents are likely related to the degradation of the petroleum hydrocarbon plume. As groundwater conditions at the Site continue to equilibrate and dissolved oxygen increases, groundwater conditions will become increasingly aerobic. As this happens, dissolved iron and manganese have the ability to precipitate out of solution leading to decreased concentrations in groundwater.

RECOMMENDATIONS

Based on current and historical data gathered at the Site, Ensolum/Hilcorp recommend the following actions:

- Continued semi-annual sampling for wells MW-1, MW-3, MW-4, and MW-5 for BTEX, dissolved iron, and dissolved manganese. Once concentrations decrease to below NMWQCC standards, sampling frequency will be increased to quarterly until eight consecutive quarters show compliance with applicable standards.
- Eliminate analysis of BTEX in wells MW-2 and MW-3, as concentrations have been in compliance with NMWQCC standards since sampling began in 2008. MW-2 and MW-3 will continue to be sampled for dissolved iron and manganese until eight consecutive quarters show compliance with applicable standards.

Ensolum appreciates the opportunity to provide these environmental services to Hilcorp. Please contact either of the undersigned with any questions.

Sincerely,

Ensolum, LLC

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Stuart Hyde,
Senior Geologist
(970) 903-1607
shyde@ensolum.com

Attachments:

Figure 1: Site Location Map
Figure 2: Site Map
Figure 3: Q1 2024 Groundwater Elevation Map
Figure 4: Q3 2024 Groundwater Elevation Map
Figure 5: 2024 Annual Groundwater Analytical Results

Table 1: Groundwater Elevations
Table 2: Groundwater Quality Measurements
Table 3: Groundwater Analytical Results

Appendix A: Analytical Laboratory Reports

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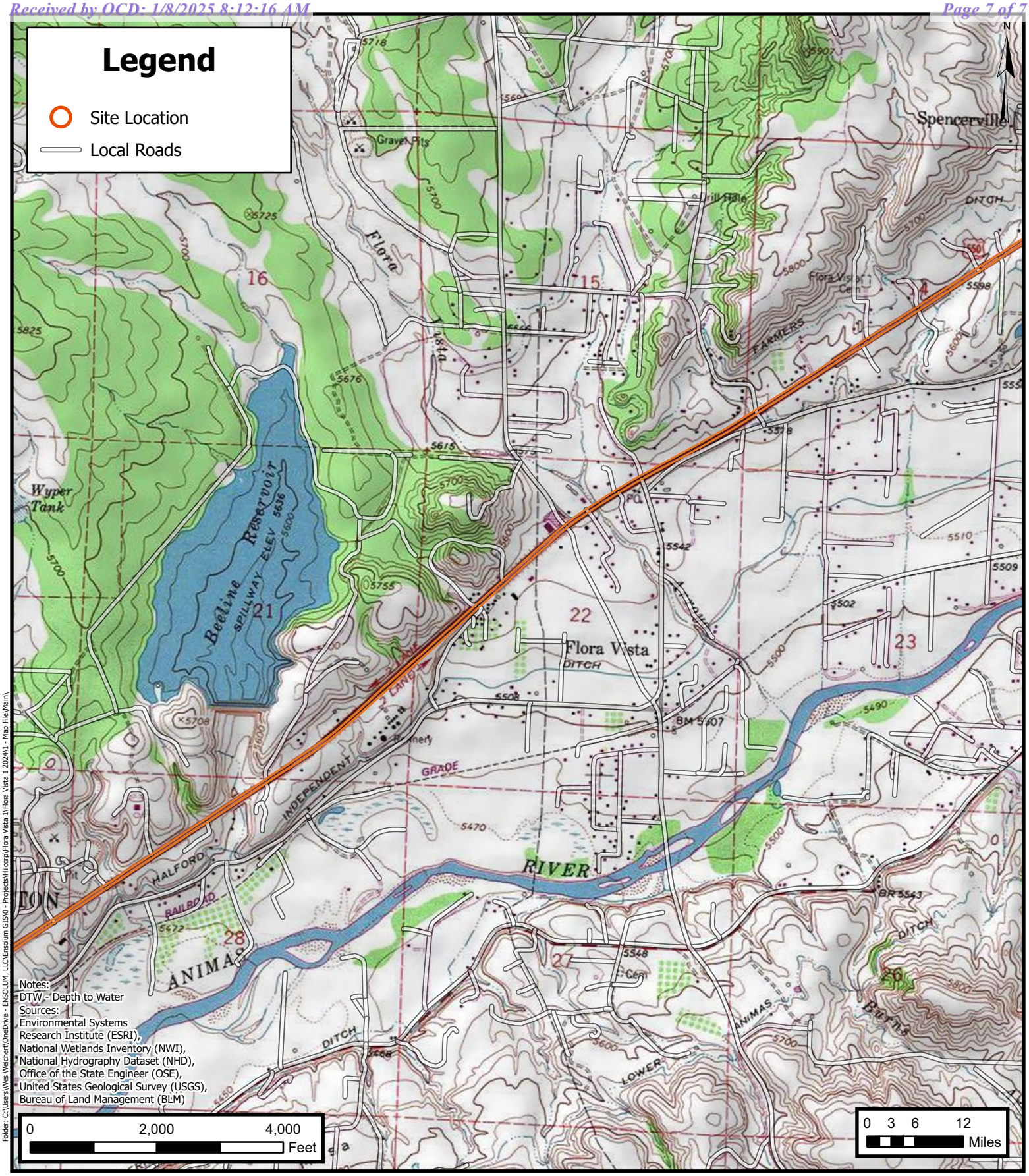
FIGURES



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Environmental, Engineering and Hydrogeologic Consultants

Site Location Map

Hilcorp Energy Company
Flora Vista #1
36.79852, -108.08759
San Juan County, New Mexico

FIGURE 1

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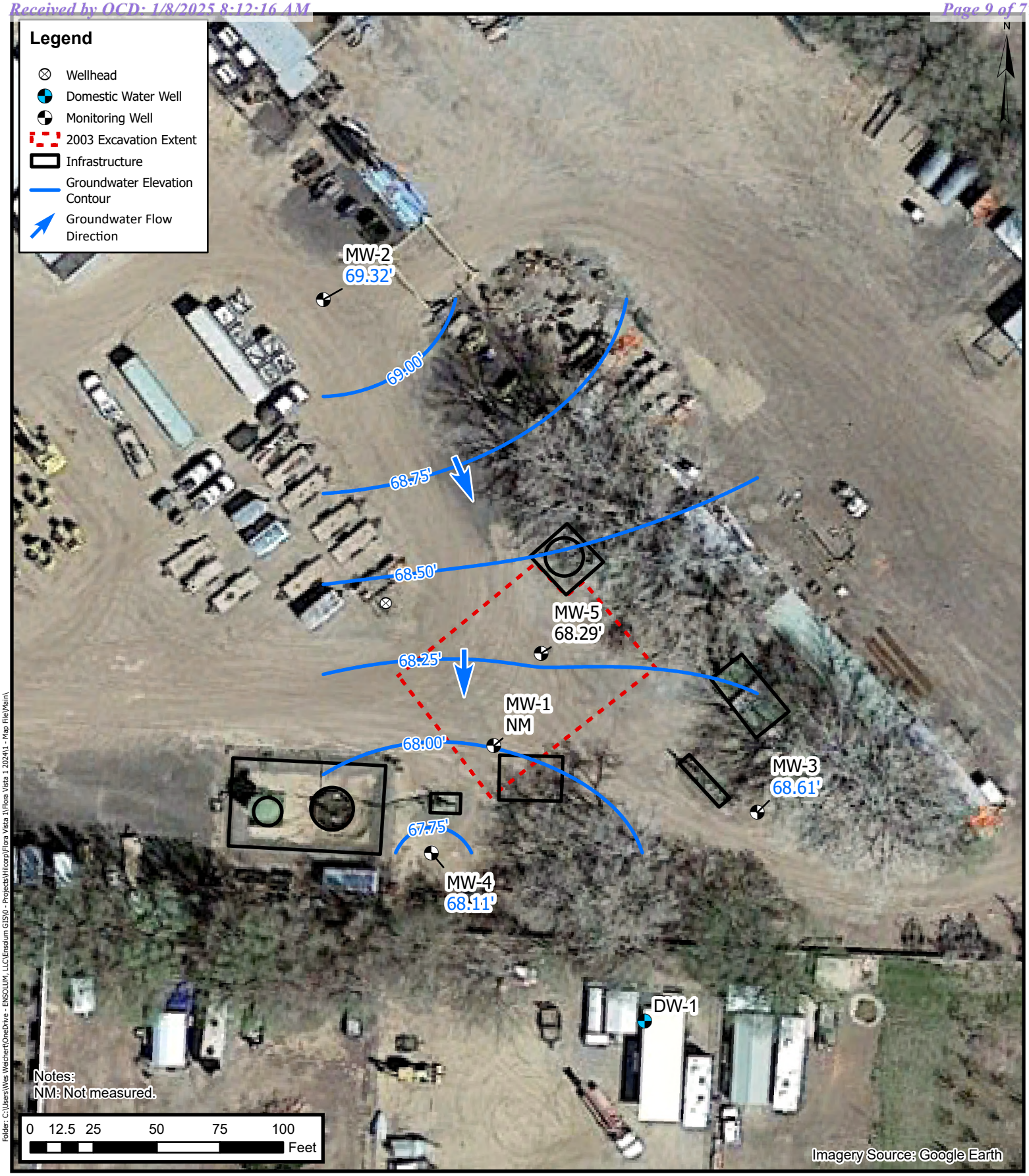
Environmental, Engineering and Hydrogeologic Consultants

Site Map

Hilcorp Energy Company
Flora Vista #1
36.79852, -108.08759
San Juan County, New Mexico

FIGURE 2



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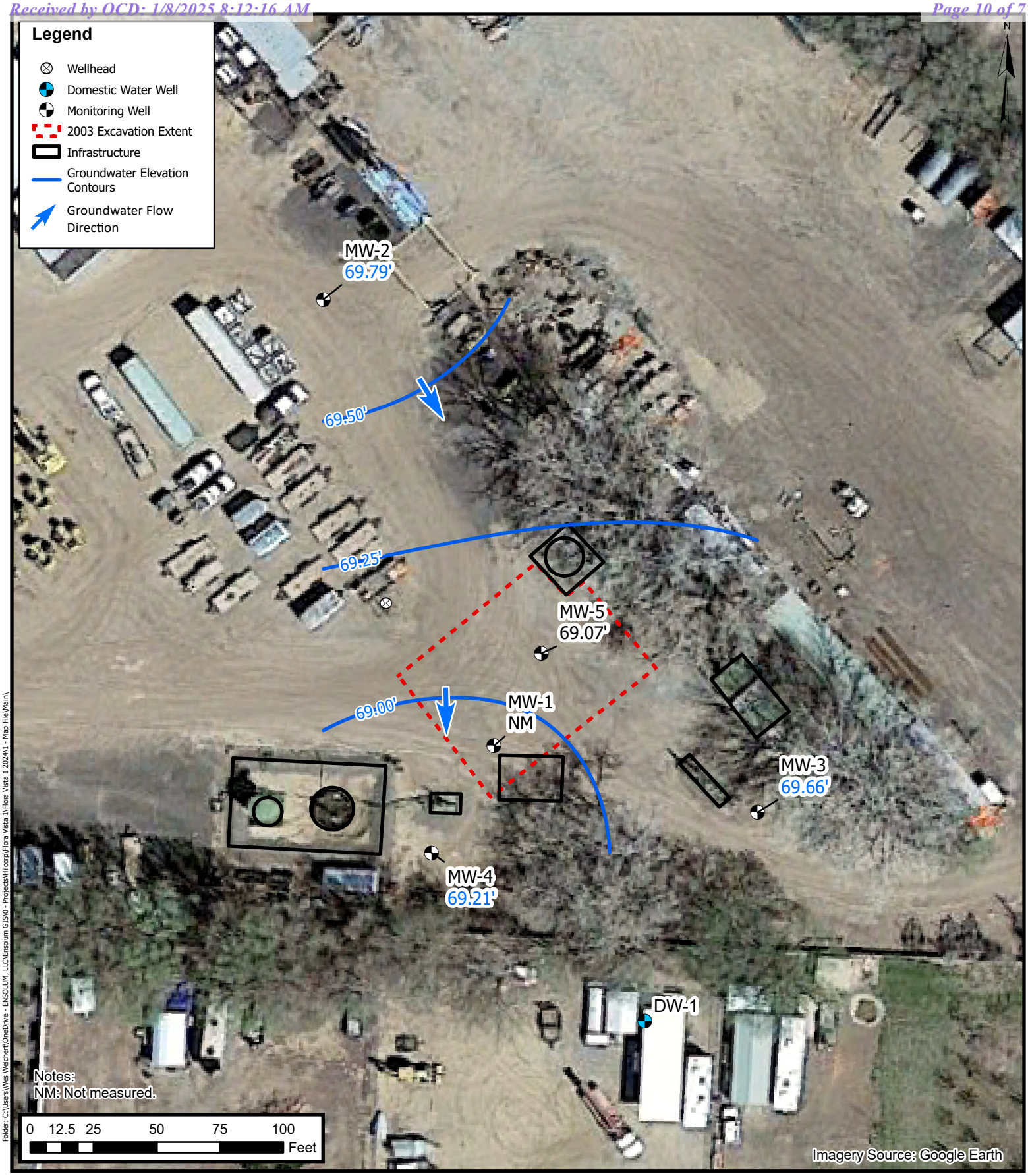
Environmental, Engineering and Hydrogeologic Consultants

Groundwater Elevation Contour Map
Q1 2024
Hilcorp Energy Company
Flora Vista #1
36.79852, -108.08759
San Juan County, New Mexico

FIGURE 3



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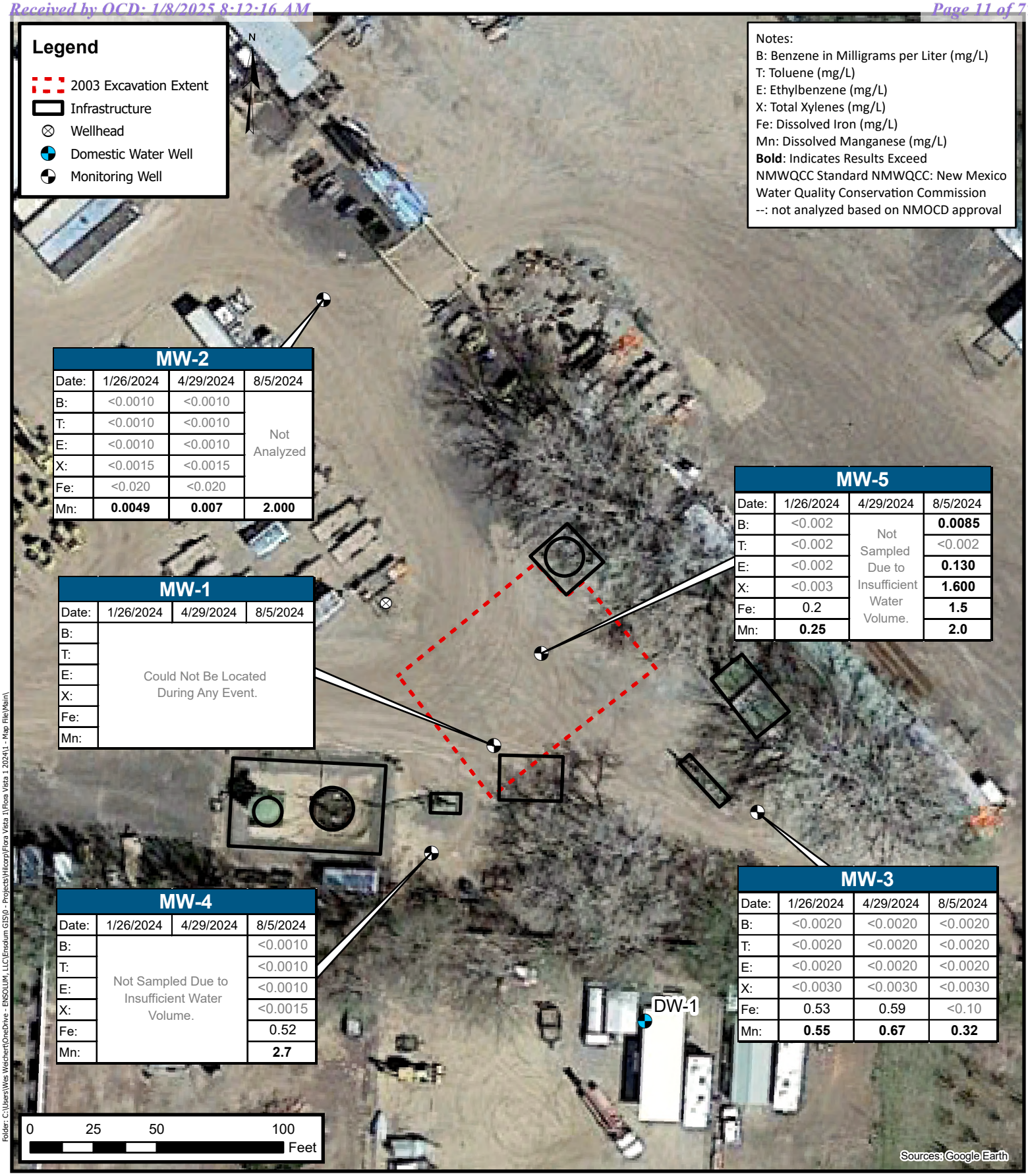
Groundwater Elevation Contour Map
Q3 2024
Hilcorp Energy Company
Flora Vista #1
36.79852, -108.08759
San Juan County, New Mexico

FIGURE 4



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2024 Groundwater Analytical Results

Hilcorp Energy Company
Flora Vista #1
36.79852, -108.08759
San Juan County, New Mexico

FIGURE 5

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TABLES

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TABLE 1
GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-1	26.02	94.38	6/20/2003	--	--
			9/23/2003	17.03	77.35
			12/16/2003	20.11	74.27
			3/16/2004	23.69	70.69
			6/21/2004	19.92	74.46
			9/30/2004	16.82	77.56
			12/13/2004	20.40	73.98
			3/22/2005	24.32	70.06
			6/22/2005	--	--
			10/24/2005	--	--
			12/13/2005	21.24	73.14
			3/22/2006	24.75	69.63
			6/22/2006	20.48	73.90
			10/20/2006	19.13	75.25
			12/13/2006	21.24	73.14
			11/9/2007	19.71	74.67
			1/15/2008	--	--
			3/19/2008	24.35	70.03
			7/23/2008	19.89	74.49
			10/21/2008	19.48	74.90
			1/28/2009	23.96	70.42
			9/30/2009	18.16	76.22
			6/10/2010	21.64	72.74
			9/27/2010	19.31	75.07
			12/14/2010	21.41	72.97
			3/17/2011	24.95	69.43
			6/24/2011	22.55	71.83
			9/29/2011	18.37	76.01
			12/14/2011	20.63	73.75
			3/9/2012	24.12	70.26
			6/7/2012	23.08	71.30
			9/19/2012	18.94	75.44
			12/13/2012	21.22	73.16
			3/20/2013	24.79	69.59
			6/12/2013	22.51	71.87

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TABLE 1
GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-1	26.02	94.38	9/11/2013	18.34	76.04
			12/13/2013	21.53	72.85
			3/19/2014	25.26	69.12
			6/17/2014	21.55	72.83
			9/18/2014	19.58	74.80
			12/18/2014	**Well inaccessible**	
			3/19/2015	25.18	-25.18
			6/18/2015	23.56	-23.56
			9/17/2015	21.85	-21.85
			12/3/2015	22.65	-22.65
			3/31/2016*	26.02	-26.02
			6/20/2016	23.52	-23.52
			9/6/2016	20.98	-20.98
			11/29/2016	21.90	-21.90
			3/9/2017	24.72	-24.72
			6/15/2017	23.90	-23.90
			9/27/2017	21.57	-21.57
			12/5/2017	22.30	-22.30
			3/15/2018	**Well Dry**	
			6/27/2018	**Well Dry**	
			9/6/2018	22.75	-22.75
			12/20/2018	23.10	-23.10
			3/6/2019	25.20	-25.20
			6/12/2019	25.82	-25.82
			9/6/2019	23.26	-23.26
			12/9/2019	23.01	-23.01
			3/16/2020	25.62	-25.62
			6/10/2020	26.11	-26.11
			8/28/2020	26.11	-26.11
			11/5/2020	21.89	-21.89
			2/8/2021	24.68	-24.68
			6/28/2021	24.66	-24.66
			9/20/2021	DRY	--
			11/5/2021	22.42	-22.42

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TABLE 1
GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-1	26.02	94.38	2/7/2022	25.13	-25.13
			4/25/2022	26.03	-26.03
			7/28/2022	24.90	-24.90
			10/27/2022	23.62	-23.62
			1/26/2023	25.29	-25.29
			5/10/2023	25.74	-25.74
			7/21/2023	25.47	-25.47
			10/20/2023	**Could not Locate Well**	
			1/26/2024	**Could not Locate Well**	
			4/29/2024	**Could not Locate Well**	
			8/5/2024	**Could not Locate Well**	
MW-2	31.35	97.10	10/21/2008	20.71	76.39
			1/28/2009	22.75	74.35
			9/30/2009	18.83	78.27
			6/11/2010	22.09	75.01
			9/27/2010	20.12	76.98
			12/14/2010	--	--
			3/17/2011	--	--
			6/24/2011	22.50	74.60
			9/29/2011	18.95	78.15
			12/14/2011	21.79	75.31
			3/9/2012	25.60	71.50
			6/7/2012	22.46	74.64
			9/19/2012	17.70	79.40
			12/13/2012	22.43	74.67
			3/20/2013	26.49	70.61
			6/12/2013	22.13	74.97
			9/11/2013	17.95	79.15
			12/13/2013	22.78	74.32
			3/19/2014	26.99	70.11
			6/17/2014	20.31	76.79
			9/18/2014	19.87	77.23
			12/18/2014	23.00	74.10
			3/19/2015	26.92	70.18

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TABLE 1
GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-2	31.35	97.10	6/18/2015	23.24	73.86
			9/17/2015	22.78	74.32
			12/3/2015	24.23	72.87
			3/31/2016	28.20	68.90
			6/20/2016	25.67	71.43
			9/6/2016	23.57	73.53
			11/29/2016	23.69	73.41
			3/9/2017	26.70	70.40
			6/15/2017	**Well inaccessible**	
			9/27/2017	23.84	73.26
			12/5/2017	**Well inaccessible**	
			3/15/2018	27.65	69.45
			6/27/2018	26.36	70.74
			9/6/2018	25.03	72.07
			12/20/2018	25.20	71.90
			3/7/2019	27.51	69.59
			6/13/2019	27.43	69.67
			9/6/2019	25.45	71.65
			12/10/2019	25.19	71.91
			3/26/2020	28.29	68.81
			6/10/2020	27.59	69.51
			8/28/2020	25.31	71.79
			11/5/2020	24.17	72.93
			2/8/2021	26.78	70.32
			6/28/2021	26.57	70.53
			9/20/2021	25.40	71.70
			11/5/2021	24.51	72.59
			2/8/2022	27.23	69.87
			4/25/2022	29.28	67.82
			7/28/2022	27.04	70.06
			10/27/2022	**Well Dry**	
			1/26/2023	27.63	69.47
			5/10/2023	29.68	67.42
			7/21/2023	27.50	69.60
			10/20/2023	25.73	71.37

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GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-2	31.35	97.10	1/26/2024	27.78	69.32
			4/29/2024	30.12	66.98
			8/5/2024	27.31	69.79
MW-3	30.87	92.9	10/21/2008	17.92	74.98
			1/28/2009	21.53	71.37
			9/30/2009	16.43	76.47
			6/10/2010	19.71	73.19
			9/27/2010	17.81	75.09
			12/14/2010	19.61	73.29
			3/17/2011	23.32	69.58
			6/24/2011	20.55	72.35
			9/29/2011	16.84	76.06
			12/14/2011	19.13	73.77
			3/9/2012	22.51	70.39
			6/7/2012	20.93	71.97
			9/19/2012	17.48	75.42
			12/13/2012	19.78	73.12
			3/20/2013	23.18	69.72
			6/12/2013	20.68	72.22
			9/11/2013	16.90	76.00
			12/13/2013	20.11	72.79
			3/19/2014	23.64	69.26
			6/17/2014	19.85	73.05
			9/18/2014	18.01	74.89
			12/18/2014	**Well inaccessible**	
			3/19/2015	23.55	69.35
			6/18/2015	21.84	71.06
			9/17/2015	20.18	72.72
			12/3/2015	21.10	71.80
			3/31/2016	24.81	68.09
			6/20/2016	21.66	71.24
			9/6/2016	19.18	73.72
			11/29/2016	20.39	72.51
			3/9/2017	23.35	69.55
			6/15/2017	22.03	70.87

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TABLE 1
GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-3	30.87	92.43	9/27/2017	Well inaccessible	
			12/5/2017	20.89	72.01
			3/15/2018	24.28	68.62
			6/27/2018	22.42	70.48
			9/6/2018	21.16	71.74
			12/20/2018	21.60	71.30
			3/6/2019	24.13	68.77
			6/12/2019	23.71	69.19
			9/5/2019	21.50	71.40
			12/10/2019	21.55	71.35
			3/16/2020	24.61	68.29
			6/10/2020	23.80	69.10
			8/27/2020	21.41	71.49
			11/5/2020	20.27	72.63
			2/5/2021	23.29	69.61
			6/28/2021	22.96	69.94
			9/20/2021	21.60	71.30
			11/5/2021	20.85	72.05
			2/7/2022	23.76	69.14
			4/25/2022	25.70	67.20
			7/28/2022	23.04	69.86
			10/27/2022	Well Dry	
			1/26/2023	24.14	68.76
			5/10/2023	25.92	66.98
			7/21/2023	23.42	69.48
			10/20/2023	21.78	71.12
			1/26/2024	24.29	68.61
			4/29/2024	26.43	66.47
			8/5/2024	23.24	69.66
MW-4	30.42	93.60	10/21/2008	18.06	75.54
			1/28/2009	24.55	69.05
			9/30/2009	17.89	75.71
			6/10/2010	21.02	72.58
			9/27/2010	18.93	74.67
			12/14/2010	21.04	72.56

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TABLE 1
GROUNDWATER ELEVATIONS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-4	30.42	93.60	3/17/2011	24.58	69.02
			6/24/2011	21.80	71.80
			9/29/2011	17.94	75.66
			12/14/2011	20.28	73.32
			3/9/2012	23.70	69.90
			6/7/2012	22.19	71.41
			9/19/2012	18.60	75.00
			12/13/2012	20.96	72.64
			3/20/2013	24.38	69.22
			6/12/2013	21.81	71.79
			9/11/2013	18.89	74.71
			12/13/2013	21.28	72.32
			3/19/2014	24.88	68.72
			6/17/2014	21.21	72.39
			9/18/2014	19.16	74.44
			12/18/2014	21.41	72.19
			3/19/2015	24.80	68.80
			6/18/2015	23.09	70.51
			9/17/2015	21.37	72.23
			12/3/2015	22.29	71.31
			3/31/2016	26.05	67.55
			6/20/2016	22.95	70.65
			9/6/2016	20.40	73.20
			11/29/2016	21.59	72.01
			3/9/2017	24.58	69.02
			6/15/2017	23.40	70.20
			9/27/2017	21.25	72.35
			12/5/2017	22.05	71.55
			3/15/2018	25.54	68.06
			6/27/2018	23.67	69.93
			9/6/2018	22.29	71.31
			12/20/2018	22.75	70.85
			3/6/2019	25.33	68.27
			6/12/2019	24.93	68.67

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Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-4	30.42	93.17	9/5/2019	22.71	70.89
			12/9/2019	22.68	70.92
			3/16/2020	25.84	67.76
			6/10/2020	24.93	68.67
			8/27/2020	22.51	71.09
			11/5/2020	21.34	72.26
			2/5/2021	24.48	69.12
			6/28/2021	24.12	69.48
			9/20/2021	23.00	70.60
			11/4/2021	21.91	71.69
			2/7/2022	24.97	68.63
			4/25/2022	26.97	66.63
			7/28/2022	24.13	69.47
			10/27/2022	23.11	70.49
			1/26/2023	--	--
			5/10/2023	27.09	66.51
			7/21/2023	24.46	69.14
			10/20/2023	22.83	70.77
			1/26/2024	25.49	68.11
			4/29/2024	--	--
			8/5/2024	24.39	69.21
MW-5	29.68	93.82	9/17/2015	21.59	72.23
			12/3/2015	22.41	71.41
			3/31/2016	26.18	67.64
			6/20/2016	23.18	70.64
			9/6/2016	20.67	73.15
			11/29/2016	21.72	72.10
			3/9/2017	25.04	68.78
			6/15/2017	23.61	70.21
			9/27/2017	**Well inaccessible**	
			12/5/2017	21.96	71.86
			3/15/2018	25.55	68.27
			6/27/2018	23.93	69.89
			9/6/2018	22.54	71.28
			12/20/2018	22.84	70.98

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GROUNDWATER ELEVATIONS
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San Juan County, New Mexico

Well Identification	Total Depth (feet)	Top of Casing Elevation (1)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (1)
MW-5	29.68	93.82	3/7/2019	25.39	68.43
			6/13/2019	24.75	69.07
			9/6/2019	22.78	71.04
			12/10/2019	22.84	70.98
			3/26/2020	26.17	67.65
			6/10/2020	25.25	68.57
			8/28/2020	22.87	70.95
			11/5/2020	21.21	72.61
			2/8/2021	24.62	69.20
			6/28/2021	24.24	69.58
			9/20/2021	23.00	70.82
			11/5/2021	22.15	71.67
			2/8/2022	25.06	68.76
			4/25/2022	27.00	66.82
			7/28/2022	24.57	69.25
			10/27/2022	**Well Dry**	
			1/26/2023	--	--
			5/10/2023	27.27	66.55
			7/21/2023	24.90	68.92
			10/20/2023	23.14	70.68
			1/26/2024	25.53	68.29
			4/29/2024	26.13	67.69
			8/5/2024	24.75	69.07

Notes:

(1): surface elevation based on an arbitrary datum of 100 feet set at the gas well head

bgs: below ground surface

BTOC: below top of casing

--: indicates no GWEL or PSH measured

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TABLE 2
GROUNDWATER QUALITY MEASUREMENTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-1	3/31/2016	No parameters or sample collected due to low well volume						
	6/20/2016	16.70	6.34	--	1,070	0.41	-132.7	0.25
	9/7/2016	15.55	6.30	0.027	3,700	9.16	-66.6	1.50
	3/9/2017	No parameters or sample collected due to low well volume						
	6/15/2017	No parameters or sample collected due to low well volume						
	12/5/2017	15.07	6.94	4.785	7,364	4.69	-183.5	0.50
	3/15/2018	No parameters or sample collected due to low well volume						
	6/27/2018	No parameters or sample collected due to low well volume						
	9/6/2018	16.08	7.10	--	7,138	2.51	-117.9	0.50
	3/6/2019	14.60	7.63	0.640	1,260	--	-40.8	0.25
	6/12/2019	No parameters or sample collected due to low well volume						
	9/6/2019	21.30	6.99	1.220	2,430	--	-4.0	1.25
	12/9/2019	--	6.25	1.110	2,230	0.60	-17.8	1.00
	3/16/2020	22.40	6.33	1.820	3,630	8.08	-14.1	--
	6/10/2020	No parameters or sample collected due to low well volume						
	8/28/2020	No parameters or sample collected due to low well volume						
	11/5/2020	14.70	6.65	1.880	3,750	4.80	-12.6	--
	2/8/2021	13.80	6.22	0.600	1,200	1.14	7.0	
	6/28/2021	No parameters taken due to equipment not functional						
	9/20/2021	No parameters or sample collected due to low well volume						
	11/5/2021	11.70	6.78	--	2,870	--	--	1.75
	2/7/2022	11.60	6.56	--	2,990	--	--	0.25
	4/25/2022	No parameters or sample collected due to low well volume						
	7/28/2022	No parameters or sample collected due to low well volume						
	10/27/2022	13.20	6.75	1.090	2,170	--	--	0.50
	1/26/2023	No parameters or sample collected due to low well volume						
	5/10/2023	No parameters or sample collected due to low well volume						
	7/21/2023	No parameters or sample collected due to low well volume						
	10/20/2023	No parameters or sample collected due to low well volume						

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TABLE 2
GROUNDWATER QUALITY MEASUREMENTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-1	1/26/2024	No parameters or sample collected due to low well volume						
	4/29/2024	No parameters or sample collected due to low well volume						
	8/5/2024	No parameters or sample collected due to low well volume						
MW-2	3/31/2016	No parameters or sample collected due to low well volume						
	6/20/2016	17.00	6.40	--	870	2.32	-104.0	1.50
	9/7/2016	15.00	6.57	0.571	879	3.67	-19.9	4.00
	11/29/2016	14.78	7.21	--	909	4.51	-17.1	--
	3/9/2017	No parameters or sample collected due to low well volume						
	3/15/2018	15.24	7.06	--	977	0.93	56.3	2.00
	6/27/2018	No parameters or sample collected due to low well volume						
	9/6/2018	16.05	7.30	--	929	1.15	-0.80	3.50
	3/7/2019	19.40	6.96	0.510	1,020	--	-23.7	2.25
	6/13/2019	20.60	6.62	0.500	1,000	--	-10.2	2.00
	9/6/2019	21.00	6.77	0.520	1,030	--	-20.8	3.00
	12/10/2019	--	6.36	0.550	1,120	0.36	-23.3	3.00
	3/26/2020	16.40	6.18	0.530	1,060	8.47	-9.1	--
	6/10/2020	16.50	6.37	0.500	1,000	2.39	-15.1	--
	8/28/2020	14.70	6.67	0.500	1,010	2.21	-12.9	--
	11/5/2020	17.90	6.08	0.490	960	2.30	-7.0	--
	2/8/2021	15.70	6.06	0.520	1,040	0.58	-5.9	
	6/28/2021	No parameters taken due to equipment not functional						
	9/20/2021	17.40	6.90	--	2,960	--	--	3.18
	11/5/2021	18.80	5.94	--	1,000	--	--	3.50
	2/8/2022	14.10	6.38	--	970	--	--	2.25
	4/25/2022	16.60	6.21	0.460	930	--	--	1.27
	7/28/2022	20.40	6.61	0.450	900	--	--	2.25
	10/27/2022	No parameters or sample collected due to low well volume						
	1/26/2023	11.10	6.67	0.460	920	--	--	2.00
	5/10/2023	17.80	6.53	0.450	900	--	--	1.00

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GROUNDWATER QUALITY MEASUREMENTS
Flora Vista #1
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San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-2	7/21/2023	34.77	7.28	0.750	1,152	2.28	-175.90	1.00
	10/20/2023	26.18	7.49	0.760	1,175.6	2.47	-89.20	1.25
	1/26/2024	17.74	7.85	0.620	948.6	3.01	-50.60	0.75
	4/29/2024	25.71	7.64	0.600	917.9	3.42	-61.20	0.00
	8/5/2024	32.71	7.65	0.590	912.5	0.94	-104.60	2.25
MW-3	3/31/2016	14.68	7.13	0.510	800	4.66	-13.0	2.50
	6/20/2016	14.90	7.05	--	750	2.02	83.2	4.00
	9/7/2016	14.19	6.02	0.467	719	5.55	12.5	5.00
	11/29/2016	13.68	7.41	--	725	5.03	-11.4	--
	3/9/2017	14.44	7.06	0.675	1,038	1.38	-199.9	--
	6/15/2017	13.90	7.67	0.470	723	4.06	-79.1	1.00
	12/5/2017	12.80	7.10	0.513	788	2.09	-135.4	4.00
	3/15/2018	14.54	7.22	--	702	2.71	59.2	2.50
	6/27/2018	15.30	7.12	--	680	2.58	-16.8	3.75
	9/6/2018	14.81	7.49	--	639	4.77	-20.0	4.00
	3/6/2019	--	7.30	0.380	770	--	-21.6	2.5
	6/12/2019	19.40	6.91	0.360	740	--	-57.0	2.00
	9/5/2019	20.00	7.15	0.360	720	--	-29.4	3.25
	12/10/2019	--	6.36	0.390	780	1.36	-1.9	3.00
	3/16/2020	19.60	6.44	0.380	780	8.65	-25.2	--
	6/10/2020	17.60	6.2	0.380	760	2.77	-22.8	--
	8/27/2020	24.10	6.43	0.590	1,180	1.46	-10.7	--
	11/5/2020	14.40	6.43	0.400	800	4.45	-14.3	--
	2/5/2021	23.29	6.42	0.350	700	1.79	-25.8	
	6/28/2021	**No parameters taken due to equipment not functional**						
	9/20/2021	17.80	6.86	--	1,923	--	--	3.96
	11/5/2021	15.10	6.1	--	690	--	--	4.25
	2/7/2022	12.80	6.67	--	660	--	--	2.50
	4/25/2022	16.00	6.52	0.360	730	--	--	2.00

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Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-3	7/28/2022	19.30	6.82	0.340	670	--	--	3.00
	10/27/2022	No parameters or sample collected due to low well volume						
	1/26/2023	8.00	6.92	0.390	700	--	--	2.50
	5/10/2023	18.30	6.72	0.350	700	--	--	1.00
	7/21/2023	33.67	7.48	0.660	1,019	0.96	-100.9	3.00
	10/20/2023	19.92	7.53	0.690	1,068.8	1.19	-82.7	3.75
	1/26/2024	10.36	7.74	0.570	874.2	1.35	-176.1	2.50
	4/29/2024	24.32	7.73	0.420	646.1	0.62	-67.1	0.25
	8/5/2024	30.37	8.04	0.390	601.3	30.37	-141.2	3.00
MW-4	3/31/2016	15.60	6.98	0.700	1,030	5.73	-47.0	2.25
	6/20/2016	15.20	6.79	--	1,040	1.06	-60.8	3.50
	9/7/2016	14.55	6.40	0.655	1,008	2.48	-59.8	4.50
	11/29/2016	13.58	7.16	--	903	3.04	-80.9	--
	3/9/2017	14.45	6.96	0.753	1,159	1.69	-133.5	--
	6/15/2017	13.63	7.00	1.769	2,721	5.00	-114.3	3.50
	12/5/2017	13.88	6.84	1.721	2,647	1.13	-135.7	4.00
	3/15/2018	15.04	7.04	--	1,180	--	-100.2	2.25
	6/27/2018	15.21	6.80	--	1,315	0.55	-79.0	3.00
	9/6/2018	15.15	7.11	--	1,394	1.05	-73.1	4.00
	3/6/2019	15.90	7.21	0.620	1,260	--	-7.5	2.50
	6/12/2019	19.80	6.66	0.710	1,410	--	6.9	2.50
	9/5/2019	18.10	7.04	0.530	1,070	--	2.7	3.50
	12/9/2019	--	6.10	0.770	1,550	0.00	3.8	3.00
	3/16/2020	13.90	6.48	0.660	1,310	6.03	7.2	--
	6/9/2020	16.70	6.33	0.550	1,060	1.85	16.1	--
	8/27/2020	22.00	6.47	0.510	1,050	1.45	14.6	--
	11/5/2020	14.10	6.09	0.500	1,000	1.76	18.9	--
	2/5/2021	10.70	6.50	0.550	1,100	1.57	12.7	
	6/28/2021	No parameters taken due to equipment not functional						

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San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-4	9/20/2021	17.10	6.73	--	2,370	--	--	3.60
	11/4/2021	15.30	6.01	--	1,080	--	--	4.00
	2/7/2022	11.70	6.43	--	1,020	--	--	2.50
	4/25/2022	16.30	6.16	0.490	1,000	--	--	1.50
	7/28/2022	18.50	6.54	0.360	730	--	--	3.00
	10/27/2022	11.30	6.61	0.400	810	--	--	3.50
	1/26/2023	No parameters taken due to inacessable well						
	5/10/2023	No parameters taken due to inacessable well						
	7/21/2023	31.77	7.09	0.560	858	1.41	-66	0.00
	10/20/2023	15.56	7.29	0.600	921.46	2.14	-79.5	1.25
	1/26/2024	No parameters taken due to insufficient volume to sample						
	4/29/2024	No parameters taken due to insufficient volume to sample						
MW-5	3/31/2016	16.16	7.13	0.600	980	4.74	-97.0	1.75
	6/20/2016	15.90	6.88	--	1,030	0.68	-99.7	3.25
	9/7/2016	14.96	6.34	0.599	918	1.51	-130.2	4.50
	3/9/2017	15.29	7.35	0.793	1,255	8.83	-124.9	--
	6/15/2017	14.56	7.06	3.143	4,842	2.19	-132.6	2.00
	12/5/2017	15.11	6.76	0.706	1,086	0.52	-160.5	2.25
	3/15/2018	14.70	6.75	--	2,400	0.39	-9.2	0.50
	6/27/2018	No parameters or sample collected due to low well volume						
	9/6/2018	16.47	7.17	--	1,460	1.65	-125.0	1.00
	3/7/2019	19.60	6.92	0.480	940	--	0.3	0.75
	6/13/2019	19.50	6.58	1.460	2,930	--	0.3	1.00
	9/6/2019	26.00	6.50	1.000	2,000	--	17.5	2.00
	12/10/2019	--	6.53	0.240	490	0.47	-3.4	2.00
	3/26/2020	16.10	6.01	0.400	780	9.37	33.1	--
	6/10/2020	14.50	5.99	1.400	2,810	1.69	26.3	--
	8/28/2020	19.10	6.19	1.610	3,190	1.15	12.2	--
	11/5/2020	18.10	6.14	0.880	1,780	3.65	11.4	--

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Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-5	2/8/2021	15.00	6.04	0.210	430	1.14	33.3	
	6/28/2021	**No parameters taken due to equipment not functional**						
	9/20/2021	18.80	6.93	--	4,001	--	--	2.77
	11/5/2021	17.10	5.91	--	840	--	--	2.25
	2/8/2022	12.90	6.09	--	670	--	--	0.25
	4/25/2022	**No parameters or sample collected due to low well volume**						
	7/28/2022	19.70	6.32	1.230	2,450	--	--	1.00
	10/27/2022	**No parameters or sample collected due to low well volume**						
	1/26/2023	**No parameters taken due to inacessable well**						
	5/10/2023	**No parameters or sample collected due to low well volume**						
	7/21/2023	34.44	7.30	2.400	3,695	0.30	-268.60	0.50
	10/20/2023	21.45	7.40	0.950	1,454.8	0.40	-94.50	2.50
	1/26/2024	11.57	7.45	0.270	413.5	4.39	-69.30	1.00
	4/29/2024	**No parameters or sample collected**						
	8/5/2024	30.45	7.53	0.850	1,300.8	0.66	-217.30	0.50

Notes:

°C: degrees Celcius

DO: dissolved oxygen

g/L: grams per liter

uS/cm: microsiemens per centimeter

mg/L: milligrams per liter

mV: millivolts

ORP: oxidation-reduction potential

TDS: total dissolved solids

--: data not collected

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
NMWQCC Standards			**0.005**	**1.00**	**0.70**	**0.62**	**1.0**	**0.20**
MW-1	6/20/2003	(orig)	**1.7**	0.3	0.49	**5.09**	--	--
	9/23/2003	(orig)	**7.5**	0.02	0.66	**9.22**	--	--
	12/16/2003	(orig)	**7.93**	0.01	**1.18**	**0.864**	--	--
	3/16/2004	(orig)	**6.86**	ND	**1.16**	**8.47**	--	--
	6/21/2004	(orig)	**4.14**	ND	0.43	**3.12**	--	--
	9/30/2004	(orig)	**9.08**	0.03	**1.41**	**9.98**	--	--
	12/13/2004	(orig)	**8.52**	ND	**1.34**	**9.39**	--	--
	3/22/2005	(orig)	**4.55**	ND	**0.85**	**5.95**	--	--
	6/22/2005	(orig)	--	0.02188	--	--	--	--
	10/24/2005	(orig)	**6.39**	ND	**1.01**	**7.42**	--	--
	12/13/2005	(orig)	**6.17**	ND	**1.01**	**7.57**	--	--
	3/22/2006	(orig)	**3.58**	ND	**0.77**	**5.84**	--	--
	6/22/2006	(orig)	**3.1**	ND	0.5	**3.5**	--	--
	10/20/2006	(orig)	**6.6**	0.01	**1.22**	**8.91**	--	--
	12/13/2006	(orig)	**4.23**	0.01	**1.09**	**8.13**	--	--
	3/27/2007	(orig)	**2.37**	0.007	0.504	**3.75**	--	--
	6/25/2007	(orig)	**2.87**	0.14	0.51	**3.89**	--	--
	11/9/2007	(orig)	**5.6**	< 0.0007	**0.91**	**6.8**	--	--
	1/15/2008	(orig)	**4.2**	< 0.0007	**0.89**	**5.7**	--	--
	3/19/2008	(orig)	**2.7**	< 0.005	0.59	**4.7**	--	--
	7/23/2008	(orig)	**2**	< 0.005	0.38	**1.4**	--	--
	10/21/2008	(orig)	**4.5**	< 0.005	0.63	**5.3**	--	--
	1/28/2009	(orig)	**4**	< 0.005	**0.88**	**8.7**	--	--
	9/30/2009	(orig)	**4.2**	0.0016	0.53	**5.1**	**2.08**	**1.09**
	6/10/2010	(orig)	**1.7**	0.0012	0.33	**0.99**	0.126	**1.28**
	9/27/2010	(orig)	**3.2**	0.002	0.53	**4.20**	**7.73**	**1.19**
	12/14/2010	(orig)	**3.2**	0.0012	0.62	**5.30**	**4.13**	**0.888**
	3/17/2011	(orig)	**1.7**	0.0037	0.48	**4.31**	**1.11**	**1.07**
	6/24/2011	(orig)	**2.1**	0.0025	0.494	**2.03**	< 0.1	**0.894**
	6/24/2011	(Duplicate)	**1.97**	0.0026	0.458	**1.94**	--	--
	9/29/2011	(orig)	**2.44**	< 0.005	0.519	**3.65**	**25.2**	**1.02**
	12/14/2011	(orig)	**2.31**	0.0055	0.508	**3.93**	**25.4**	**0.945**
	3/9/2012	(orig)	**1.59**	< 0.001	0.636	**5.04**	**25.3**	**1.03**
	6/7/2012	(orig)	**1.77**	0.127	0.182	**0.633**	**21.4**	**0.914**
	9/19/2012	(orig)	**1.52**	< 0.020	0.414	**2.49**	**19**	**0.86**
	12/13/2012	(orig)	**2.02**	< 0.025	**0.809**	**5.02**	**23.8**	**0.75**
	3/20/2013	(orig)	**0.182**	< 0.002	0.0406	0.0914	**9.39**	**1.08**
	6/12/2013	(orig)	**0.698**	< 0.001	0.160	**0.873**	**12.8**	**1.12**
	9/11/2013	(orig)	**1.05**	< 0.020	**0.831**	**5.1**	**18.0**	**1.05**
	12/13/2013	(orig)	**0.591**	0.0015	0.670	**1.79**	**25.4**	**0.88**
	3/19/2014	(orig)	**0.0822**	< 0.001	0.039	0.271	--	--
	6/17/2014	(orig)	**0.522**	< 0.001	0.189	0.398	**17.4**	**0.896**
	9/18/2014	(orig)	**0.849**	< 0.001	0.299	**1.23**	**23.4**	**1.01**
	12/18/2014	**Well was obstructed and inaccessible due to TRC operations**						
	3/19/2015	**No parameters or sample collected due to low well volume**						
	6/18/2015	(orig)	**0.213**	< 0.001	0.116	**0.691**	**5.72**	**0.542**
	6/18/2015	(Duplicate)	**0.17**	< 0.001	0.0684	0.533	--	--
	9/17/2015	(orig)	**0.0673**	< 0.001	0.0859	0.362	**4.22**	**0.614**
	12/3/2015	(orig)	**0.0908**	< 0.001	**0.0612**	0.138	**2.69**	**0.63**
	3/31/2016	**No parameters or sample collected due to low well volume**						
	6/20/2016	(orig)	**0.834**	< 0.025	0.533	**2.06**	**40.8**	**2.17**
	9/7/2016	(orig)	**0.525**	< 0.020	0.416	**1.62**	**17.6**	**1.51**
	10/25/2016	**ISCO Injection-15% PersulfOx solution**						
	3/9/2017	**No parameters or sample collected due to low well volume**						
	6/15/2017	(orig)	**0.0371**	<1.0	0.0404	0.157	--	--
	9/27/2017	(orig)	**0.0231**	<1.0	0.0306	0.118	**24.2**	**3.13**
	12/5/2017	(orig)	**0.288**	<1.0	0.444	**1.07**	**19.9**	**3.27**
	3/15/2018	**No parameters or sample collected due to low well volume**						
	6/27/2018	**No parameters or sample collected due to low well volume**						
	9/6/2018	(orig)	**0.0313**	<1.0	0.1730	0.365	**11.70**	**5.83**
	12/20/2018	(orig)	**0.0827**	<0.001	0.1560	0.468	0.4870	0.0241
	3/6/2019	(orig)	**0.0093**	<0.005	0.0088	0.0355	0.4970	**0.4940**
	6/13/2019	**No parameters or sample collected due to low well volume**						
	9/6/2019	(orig)	**0.0174**	0.0014	0.0124	0.119	**1.38**	**2.75**
	12/9/2019	(orig)	**0.0195**	<0.001	<0.001	0.0567	**4.54**	**1.38**

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
NMWQCC Standards			**0.005**	**1.00**	**0.70**	**0.62**	**1.0**	**0.20**
MW-1	3/16/2020	(orig)	**0.0196**	<0.001	0.0174	0.106	--	--
	6/10/2020		**No parameters or sample collected due to low well volume**					
	8/28/2020		**No parameters or sample collected due to low well volume**					
	11/5/2020	(orig)	**0.0426**	<0.001	0.0505	0.345	<0.10	--
	2/8/2021	(orig)	0.0033	<0.001	0.0025	0.022	**12.90**	**1.65**
	6/28/2021	(orig)	**0.0350**	<0.005	0.0540	0.200	**2.00**	**1.80**
	9/20/2021		**No parameters or sample collected due to low well volume**					
	11/5/2021	(orig)	**0.0160**	0.0230	0.0260	0.130	**1.20**	**2.20**
	2/7/2022	(orig)	**0.0160**	<0.005	<0.005	0.046	--	--
	4/25/2022		**No parameters or sample collected due to low well volume**					
	7/28/2022		**No parameters or sample collected due to low well volume**					
	10/27/2022	(orig)	**0.0260**	<0.005	0.035	0.17	0.62	**1.8**
	1/26/2023		**No parameters or sample collected due to low well volume**					
	5/10/2023		**No parameters or sample collected due to low well volume**					
	7/21/2023		**No parameters or sample collected due to low well volume**					
	1/26/2024		**No parameters or sample, well could not be located**					
	4/29/2024		**No parameters or sample, well could not be located**					
	8/5/2024		**No parameters or sample, well could not be located**					
MW-2	10/21/2008	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--
	1/28/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	ND	ND
	9/30/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0223	< 0.005
	6/11/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	< 0.005
	9/27/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	< 0.005
	6/24/2011	(orig)	< 0.0010	< 0.0010	< 0.0010	< 0.0030	0.191	< 0.015
	9/29/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	< 0.005
	12/14/2011	(orig)	0.00031 J	< 0.001	0.0002 J	0.0022 J	0.0133 J	0.0022 J
	3/9/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	< 0.005
	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0822	0.0052
	9/19/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	< 0.005
	12/13/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.05	< 0.005
	3/20/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	< 0.005
	6/12/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0665	< 0.005
	9/11/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	< 0.005
	12/13/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	< 0.005
	3/19/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	0.024
	6/17/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	< 0.005
	9/18/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0656	< 0.005
	12/18/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.709	0.006
	3/19/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.883	0.043
	6/18/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	< 0.005
	9/17/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	< 0.005
	12/3/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.050	< 0.005
	3/31/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	0.0585	<0.005
	6/20/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	9/7/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	0.0512	< 0.005
	11/29/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	9/27/2017	(orig)	<0.001	<0.001	<0.001	< 0.003	<0.50	0.013
	3/15/2018	(orig)	<0.001	<0.001	<0.001	< 0.003	<0.50	0.011
	6/27/2018	(orig)	<0.001	<0.001	<0.001	< 0.003	0.0512	0.017
	9/6/2018	(orig)	<0.001	<0.001	<0.001	< 0.003	0.104	**0.270**
	12/20/2018	(orig)	<0.001	< 0.003	< 0.002	< 0.004	<0.10	<0.01
	3/7/2019	(orig)	--	--	--	--	--	<0.01
	6/13/2019	(orig)	--	--	--	--	<0.10	0.013
	9/6/2019	(orig)	--	--	--	--	--	0.085
	12/10/2019	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	<0.01
	3/26/2020	(orig)	<0.001	<0.001	< 0.001	<0.003	<0.10	<0.01
	6/10/2020	(orig)	<0.001	<0.001	<0.003	<0.003	<0.10	--
	8/28/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	--
	11/5/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	--
	2/8/2021	(orig)	<0.001	<0.001	<0.001	< 0.003	<0.10	<0.01
	6/28/2021	(orig)	<0.001	<0.001	<0.001	<0.0015	0.75	**0.51**
	9/20/2021	(orig)	<0.001	<0.001	<0.001	<0.002	0.88	**0.72**
	11/5/2021	(orig)	<0.001	<0.001	<0.001	<0.0015	0.06	0.080
	2/7/2022	(orig)	<0.001	<0.001	<0.001	<0.0015	<0.020	0.046
	4/25/2022	(orig)	<0.001	<0.001	<0.001	<0.0015	<0.020	0.030

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
NMWQCC Standards			**0.005**	**1.00**	**0.70**	**0.62**	**1.0**	**0.20**
MW-2	7/28/2022	(orig)	<0.001	<0.001	<0.001	<0.0015	<0.020	<0.0020
	10/27/2022	(orig)	<0.001	<0.001	<0.001	<0.0015	<0.020	0.026
	1/26/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	0.067	0.0084
	5/10/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	<0.020	<0.0020
	7/21/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	<0.020	0.0023
	10/20/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	<0.020	**0.71**
	1/26/2024	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	<0.020	**0.0049**
	4/29/2024	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	<0.020	**0.007**
	8/5/2024	(orig)	--	--	--	--	--	**2.000**
MW-3	10/21/2008	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--
	1/28/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	ND	ND
	9/30/2009	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0543	< 0.005
	6/10/2010	(orig)	< 0.0005	< 0.001	< 0.001	< 0.001	0.0425	< 0.005
	9/27/2010	(orig)	<0.001	<0.001	<0.001	< 0.001	< 0.02	< 0.005
	12/14/2010	(orig)	<0.001	<0.001	<0.001	< 0.001	< 0.02	< 0.005
	3/17/2011	(orig)	<0.001	<0.001	<0.001	< 0.001	< 0.02	< 0.005
	6/24/2011	(orig)	<0.001	<0.001	<0.001	< 0.0030	0.189	< 0.015
	9/29/2011	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.05	0.0063
	12/14/2011	(orig)	<0.001	<0.001	<0.001	< 0.003	0.0288 J	0.0207
	6/7/2012	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.05	< 0.005
	9/19/2012	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.05	< 0.005
	12/13/2012	(orig)	<0.001	<0.001	<0.001	< 0.003	0.0605	0.026
	3/20/2013	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.05	0.0149
	6/12/2013	(orig)	<0.001	<0.001	<0.001	< 0.003	0.189	0.0094
	9/11/2013	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	12/13/2013	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	0.013
	3/19/2014	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	6/17/2014	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	9/18/2014	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	12/18/2014	**Wellhead inaccessible due to standing water.**						
	3/19/2015	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	6/18/2015	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	9/17/2015	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	12/3/2015	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	0.0258
	3/31/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	0.138	**0.368**
	6/20/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	0.0078
	9/7/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	11/29/2016	(orig)	<0.001	<0.001	<0.001	< 0.003	0.103	0.197
	3/9/2017	(orig)	--	--	--	--	0.878	**0.904**
	6/15/2017	(orig)	--	--	--	--	< 0.050	< 0.005
	12/5/2017	(orig)	--	--	--	--	< 0.050	0.106
	3/15/2018	(orig)	<0.001	<0.001	<0.001	< 0.003	0.0642	< 0.005
	6/27/2018	(orig)	<0.001	<0.001	<0.001	< 0.003	< 0.050	< 0.005
	9/6/2018	(orig)	<0.001	<0.001	<0.001	< 0.003	0.85	**0.249**
	12/20/2018	(orig)	<0.001	< 0.003	< 0.002	< 0.004	<0.10	0.0153
	3/6/2019	(orig)	--	--	--	--	--	0.0412
	6/13/2019	(orig)	--	--	--	--	<0.10	<0.010
	9/6/2019	(orig)	--	--	--	--	--	0.0127
	12/10/2019	(orig)	<0.001	<0.001	<0.001	<0.003	0.707	**0.682**
	3/16/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	<0.010
	6/9/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	<0.010
	8/27/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	<0.010
	11/5/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	<0.010
	2/5/2021	(orig)	<0.001	<0.001	<0.001	< 0.003	<0.10	< 0.010
	6/28/2021	(orig)	<0.001	<0.001	<0.001	< 0.0015	< 0.020	0.006
	9/20/2021	(orig)	<0.001	<0.001	<0.001	< 0.002	**7.1***	0.12
	11/5/2021	(orig)	<0.001	<0.001	<0.001	< 0.0015	0.077	0.13
	2/7/2022	(orig)	<0.001	<0.001	<0.001	< 0.0015	< 0.020	0.098
	4/25/2022	(orig)	<0.001	<0.001	<0.001	< 0.0015	< 0.020	0.018
	7/28/2022	(orig)	<0.001	<0.001	<0.001	<0.0015	0.021	0.10
	10/27/2022	**No parameters or sample collected due to low well volume.**						
	1/26/2023	(orig)	<0.0020	<0.0020	<0.0020	<0.0030	0.57	**0.54**
	5/10/2023	(orig)	<0.0020	<0.0020	<0.0020	<0.0030	0.13	**0.43**
	7/21/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	0.13	**0.77**
	10/20/2023	(orig)	<0.0010	0.019	<0.0010	<0.0015	0.071	**0.75**

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
NMWQCC Standards			0.005	1.00	0.70	0.62	1.0	0.20
MW-3	1/26/2024	(orig)	<0.0020	<0.0020	<0.0020	<0.0030	0.53	**0.55**
	4/29/2024	(orig)	<0.0020	<0.0020	<0.0020	<0.0030	0.59	**0.67**
	8/5/2024	(orig)	<0.0020	<0.0020	<0.0020	<0.0030	<0.10	**0.32**
MW-4	10/21/2008	(orig)	**0.039**	< 0.0005	0.031	0.18	--	--
	1/28/2009	(orig)	**0.66**	< 0.0005	0.064	0.583	ND	ND
	9/30/2009	(orig)	**0.34**	< 0.0005	0.054	0.572	0.148	**4.48**
	6/10/2010	(orig)	**0.14**	< 0.001	0.027	0.252	0.0566	**4.65**
	9/27/2010	(orig)	**0.033**	< 0.001	0.041	0.274	**1.22**	**4.34**
	12/14/2010	(orig)	**0.13**	< 0.001	0.093	**0.899**	**1.75**	**4.69**
	3/17/2011	(orig)	**0.017**	< 0.001	0.018	0.1966	0.0852	**4.46**
	6/24/2011	(orig)	**0.0296**	< 0.0010	0.0371	0.472	**1.5**	**4.9**
	9/29/2011	(orig)	**0.0392**	< 0.001	0.0039	0.0536	**2.55**	**4.1**
	9/29/2011	(Duplicate)	**0.043**	< 0.001	0.0035	0.0483	--	--
	12/14/2011	(orig)	**0.101**	< 0.001	0.0443	0.378	**2.62**	**4.58**
	12/14/2011	(Duplicate)	**0.104**	< 0.005	0.0437	0.372	--	--
	3/9/2012	(orig)	**0.0264**	< 0.001	0.0066	0.0651	**2.46**	**4.73**
	3/9/2012	(Duplicate)	**0.0234**	< 0.001	0.0056	0.058	--	--
	6/7/2012	(orig)	**0.044**	< 0.001	0.0245	0.303	**2.07**	**4.02**
	6/7/2012	(Duplicate)	**0.026**	< 0.001	0.0124	0.155	--	--
	9/19/2012	(orig)	0.0029	< 0.001	0.0048	0.0576	**1.93**	**4.5**
	9/19/2012	(Duplicate)	0.0028	< 0.001	0.0045	0.0551	--	--
	12/13/2012	(orig)	**0.0941**	< 0.002	0.0399	0.385	**2.92**	**4.9**
	12/13/2012	(Duplicate)	**0.197**	< 0.001	0.0712	0.55	--	--
	3/20/2013	(orig)	0.0035	< 0.001	0.002	0.0211	**1.82**	**4.37**
	3/20/2013	(Duplicate)	0.0034	< 0.001	0.0022	0.0212	--	--
	6/12/2013	(orig)	**0.0588**	< 0.005	0.0509	0.545	**1.53**	**4.29**
	6/12/2013	(Duplicate)	**0.0215**	< 0.001	0.0213	0.218	--	--
	9/11/2013	(orig)	**0.0166**	< 0.001	0.0231	0.226	**3.1**	**4.35**
	9/11/2013	(Duplicate)	**0.0156**	< 0.001	0.0162	0.158	--	--
	12/13/2013	(orig)	**0.0362**	< 0.001	0.0199	0.169	**2.7**	**4.8**
	12/13/2013	(Duplicate)	**0.0357**	< 0.001	0.0185	0.16	--	--
	3/19/2014	(orig)	< 0.001	< 0.001	< 0.001	0.0046	**1.33**	**4.19**
	3/19/2014	(Duplicate)	< 0.001	< 0.001	< 0.001	0.0049	--	--
	6/17/2014	(orig)	**0.0069**	< 0.001	< 0.001	< 0.003	**2.68**	**4.01**
	6/17/2014	(Duplicate)	**0.0063**	< 0.001	< 0.001	< 0.003	--	--
	9/18/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	**3.43**	**4.63**
	9/18/2014	(Duplicate)	0.0018	< 0.001	< 0.001	< 0.003	--	--
	12/18/2014	(orig)	**0.0398**	< 0.001	0.0062	0.0486	**4.02**	**4.46**
	12/18/2014	(Duplicate)	**0.0296**	< 0.001	0.0048	0.0354	--	--
	3/19/2015	(orig)	0.0012	< 0.001	< 0.001	< 0.003	**1.57**	**4.02**
	3/19/2015	(Duplicate)	0.0011	< 0.001	< 0.001	< 0.003	--	--
	6/18/2015	(orig)	**0.067**	< 0.001	0.0102	0.0563	**3.02**	**4.35**
	9/17/2015	(orig)	**0.0319**	< 0.001	0.0297	0.178	**3.03**	**3.75**
	11/29/2015	(Duplicate)	**0.0318**	< 0.001	0.027	0.162	--	--
	12/3/2015	(orig)	**0.0676**	< 0.01	0.0526	0.354	**4.34**	**4.12**
	12/3/2015	(Duplicate)	**0.0489**	< 0.01	0.0396	0.263	--	--
	3/31/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	**1.44**	**3.9**
	6/20/2016	(orig)	**0.0428**	<0.001	0.0112	0.0397	**4.88**	**3.87**
	9/7/2016	(orig)	**0.0081**	< 0.001	< 0.001	< 0.003	**4.01**	**3.84**
	11/29/2016	(orig)	**0.0346**	< 0.001	0.0077	0.0237	**4.31**	**3.88**
	3/9/2017	(orig)	<0.001	<0.001	<0.001	<0.003	<0.050	**3.06**
	6/15/2017	(orig)	**0.0224**	<0.001	0.0045	0.0206	**15.5**	**11.1**
	9/27/2017	(orig)	**0.0131**	<0.001	0.0043	0.0108	**22.7**	**7.68**
	12/5/2017	(orig)	**0.0247**	<0.001	0.0074	0.0161	**21.1**	**6.2**
	3/15/2018	(orig)	<0.001	<0.001	<0.001	<0.003	**5.68**	**1.64**
	6/27/2018	(orig)	**0.0114**	<0.001	0.0014	0.0031	<0.050	**3.83**
	9/6/2018	(orig)	**0.0179**	<0.001	0.0047	0.0068	**10.5**	**4.58**
	12/20/2018	(orig)	**0.0253**	<0.001	0.0132	0.0236	0.146	**4.82**
	3/6/2019	(orig)	0.00147	<0.001	<0.001	<0.003	<0.10	**2.29**
	6/12/2019	(orig)	0.0048	<0.001	<0.001	<0.003	<0.10	**3.55**
	9/6/2019	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	**3.11**
	12/9/2019	(orig)	**0.0318**	<0.001	0.0121	0.012	0.169	**4.43**
	3/16/2020	(orig)	<0.001	<0.001	<0.001	<0.003	0.222	**2.39**
	6/9/2020	(orig)	0.00155	<0.001	<0.001	<0.003	<0.10	--
	8/27/2020	(orig)	0.00311	<0.001	0.00125	<0.003	<0.10	--

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
NMWQCC Standards			**0.005**	**1.00**	**0.70**	**0.62**	**1.0**	**0.20**
MW-4	11/5/2020	(orig)	0.00181	<0.001	--	<0.003	<0.10	--
	2/5/2021	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	**3.26**
	6/28/2021	(orig)	< 0.001	< 0.001	< 0.001	< 0.0015	**6.2**	**2.9**
	9/20/2021	(orig)	< 0.001	< 0.001	< 0.001	< 0.002	**5.2**	**3.3**
	11/4/2021	(orig)	0.0012	< 0.001	< 0.001	< 0.0015	0.22	**4.2**
	2/7/2022	(orig)	0.0016	< 0.001	< 0.001	< 0.0015	**1.6**	**3.4**
	4/25/2022	(orig)	0.0016	< 0.001	< 0.001	< 0.0015	**1.6**	**4.0**
	7/28/2022	(orig)	< 0.001	<0.001	<0.001	<0.0015	**2.7**	**3.1**
	10/27/2022	(orig)	<0.001	<0.001	<0.001	<0.0015	**4.0**	**2.9**
	1/26/2023	**No parameters or sample collected due to inaccessible well**						
	5/10/2023	**No parameters or sample collected due to inaccessible well**						
	7/21/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	0.93	**2.8**
	10/20/2023	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	<0.020	**2.8**
	1/26/2024	**No parameters or sample due to insufficient well volume**						
	4/29/2024	**No parameters or sample due to insufficient well volume**						
	8/5/2024	(orig)	<0.0010	<0.0010	<0.0010	<0.0015	0.52	**2.7**
MW-5	9/17/2015	(orig)	**0.0182**	< 0.001	0.571	**4.95**	**2.72**	**2.94**
	12/3/2015	(orig)	**0.128**	< 0.001	**1.15**	**12.4**	**20.9**	**0.366**
	3/31/2016	(orig)	< 0.010	< 0.01	0.101	**0.936**	**2.06**	**2.18**
	3/31/2016	(Duplicate)	< 0.010	< 0.01	0.136	**1.26**	--	--
	6/20/2016	(orig)	**0.0404**	< 0.025	0.16	**2.48**	**6.48**	**2.68**
	9/7/2016	(orig)	**0.0229**	< 0.01	0.332	**3.45**	**4.6**	**2.07**
	9/7/2016	(Duplicate)	**0.0216**	< 0.010	0.393	**4.46**	--	--
	10/26/2016	**ISCO Injection-15% PersulfOx solution**						
	3/9/2017	(orig)	**0.0865**	<0.010	0.267	**3.65**	**24.6**	**11.8**
	6/15/2017	(orig)	**0.0369**	<0.010	0.0956	0.533	**7.43**	**6.26**
	12/5/2017	(orig)	**0.0562**	<0.010	0.51	**5.95**	**10.3**	**3.89**
	12/5/2017	(Duplicate)	**0.05**	<0.010	0.444	**5.97**	--	--
	3/15/2018	(orig)	< 0.020	< 0.020	0.388	**1.46**	--	--
	6/27/2018	(orig)	**0.0371**	< 0.020	0.123	**2.13**	**7.08**	**3.97**
	9/6/2018	(orig)	**0.0511**	<0.010	0.233	**1.94**	**4.9**	**2.31**
	12/20/2018	(orig)	**0.0568**	0.00136	0.448	**4.48**	0.748	**3.79**
	3/7/2019	(orig)	**0.0124**	<.002	0.003	0.146	**3.61**	**1.42**
	6/13/2019	(orig)	0.009	<0.001	0.054	0.376	<0.10	**3.00**
	9/6/2019	(orig)	**0.032**	<.001	<.001	**1.67**	**8.29**	**3.43**
	12/10/2019	(orig)	**0.0024**	<0.001	0.0414	0.236	0.829	**0.795**
	3/26/2020	(orig)	**0.0171**	<0.001	0.0133	0.579	**9.16**	**0.67**
	6/10/2020	(orig)	**0.00505**	<0.005	<0.005	0.296	**15.5**	--
	8/28/2020	(orig)	**0.0196**	<0.005	0.0389	**0.91**	**10.5**	--
	11/5/2020	(orig)	**0.0141**	0.00208	0.0987	**1.1**	**3.49**	--
	2/8/2021	(orig)	**0.00946**	<0.001	0.0314	0.316	**2.08**	**0.509**
	6/28/2021	(orig)	**0.013**	< 0.001	0.065	**0.93**	**30**	**2.9**
	9/20/2021	(orig)	**0.0090**	0.0053	0.033	0.43	**21**	**8.0**
	11/5/2021	(orig)	**0.0092**	0.041	0.076	**0.91**	**4.1**	**1.9**
	2/8/2022	(orig)	**0.0063**	0.0087	0.047	**0.62**	**3.2**	**1.6**
	4/25/2022	**No parameters or sample collected due to low well volume**						
	7/28/2022	(orig)	0.0036	< 0.001	0.0067	0.172	**22**	**5.2**
	10/27/2022	**No parameters or sample collected due to low well volume**						
	1/26/2023	**No parameters or sample collected due to inaccessible well**						
	5/10/2023	**No parameters or sample collected due to low well volume**						
	7/21/2023	(orig)	**0.0066**	0.0011	0.110	**1.100**	**2.4**	**3.9**
	10/20/2023	(orig)	**0.014**	<0.002	**0.250**	**2.200**	**1.1**	**3.8**
	1/26/2024	(orig)	<0.002	<0.002	<0.002	<0.003	0.2	**0.25**
	4/29/2024	**No parameters or sample collected**						
	8/5/2024	(orig)	**0.0085**	<0.002	**0.130**	**1.600**	**1.5**	**2.0**
DW-1	12/16/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--
	6/24/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	7/27/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	6/12/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	12/18/2014	**Attempt to contact landowner regarding well sampling. No response.**						
	6/18/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	6/20/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	9/27/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	6/27/2018	**Unable to sample, homeowner away**						

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS
Flora Vista #1
Hilcorp Energy Company
San Juan County, New Mexico

Well ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Manganese (dissolved) (mg/L)
NMWQCC Standards			**0.005**	**1.00**	**0.70**	**0.62**	**1.0**	**0.20**
DW-1	5/29/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	<0.010
	6/9/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--
	6/28/2021	(orig)	< 0.001	< 0.001	< 0.001	< 0.0015	< 0.020	0.12
	7/28/2022	**Attempt to contact landowner regarding well sampling. No response.**						
	7/21/2023	**Attempt to contact landowner regarding well sampling. No response.**						
DW-2	6/10/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--
	3/17/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--
	6/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	6/12/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	12/18/2014	**Attempt to sample well but landowner had shut well in for the winter months**						
	6/18/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	6/20/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	9/27/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	6/27/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--
	8/2/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	<0.010
	6/9/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--
	6/28/2021	**Attempt to sample well but well not functional**						
	7/28/2022	**Attempt to contact landowner regarding well sampling. No response.**						
	7/21/2023	**Attempt to contact landowner regarding well sampling. No response.**						

Notes:

mg/L: milligrams per liter

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

ND: not detected, practical quantitation limit unknown

NMWQCC: New Mexico Water Quality Control Commission

--: not analyzed

**: anomalous result*

<0.037: indicates result less than the stated laboratory reporting limit (RL)

*Concentrations in **bold** and shaded exceed the New Mexico Water Quality Control Commission Standards, 20.6.2 of the New Mexico Administrative Code*

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APPENDIX A

Laboratory Analytical Reports

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 22, 2024

Mitch Killough
HILCORP ENERGY
PO Box 4700
Farmington, NM 87499
TEL: (505) 564-0733
FAX:

RE: Flora Vista 1 OrderNo.: 2401B54

Dear Mitch Killough:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 1/30/2024 for the analyses presented in the following report.

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

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2401B54**
Date Reported: **2/22/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** MW-2
Project: Flora Vista 1 **Collection Date:** 1/26/2024 2:00:00 PM
Lab ID: 2401B54-001 **Matrix:** AQUEOUS **Received Date:** 1/30/2024 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **VP**
Iron	ND	0.020		mg/L	1	1/31/2024 2:15:56 PM
Manganese	0.0049	0.0020		mg/L	1	1/31/2024 2:15:56 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JR**
Benzene	ND	1.0		µg/L	1	2/8/2024 2:59:08 PM
Toluene	ND	1.0		µg/L	1	2/8/2024 2:59:08 PM
Ethylbenzene	ND	1.0		µg/L	1	2/8/2024 2:59:08 PM
Xylenes, Total	ND	1.5		µg/L	1	2/8/2024 2:59:08 PM
Surr: 1,2-Dichloroethane-d4	123	70-130		%Rec	1	2/8/2024 2:59:08 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	2/8/2024 2:59:08 PM
Surr: Dibromofluoromethane	111	70-130		%Rec	1	2/8/2024 2:59:08 PM
Surr: Toluene-d8	97.0	70-130		%Rec	1	2/8/2024 2:59:08 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2401B54**
Date Reported: **2/22/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY **Client Sample ID:** MW-3
Project: Flora Vista 1 **Collection Date:** 1/26/2024 1:30:00 PM
Lab ID: 2401B54-002 **Matrix:** AQUEOUS **Received Date:** 1/30/2024 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **VP**
Iron	0.53	0.020	*	mg/L	1	2/14/2024 4:35:20 PM
Manganese	0.55	0.0020	*	mg/L	1	2/14/2024 4:35:20 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JR**
Benzene	ND	2.0		µg/L	2	2/8/2024 3:26:53 PM
Toluene	ND	2.0		µg/L	2	2/8/2024 3:26:53 PM
Ethylbenzene	ND	2.0		µg/L	2	2/8/2024 3:26:53 PM
Xylenes, Total	ND	3.0		µg/L	2	2/8/2024 3:26:53 PM
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	2	2/8/2024 3:26:53 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	2	2/8/2024 3:26:53 PM
Surr: Dibromofluoromethane	111	70-130		%Rec	2	2/8/2024 3:26:53 PM
Surr: Toluene-d8	103	70-130		%Rec	2	2/8/2024 3:26:53 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2401B54**
Date Reported: **2/22/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY
Client Sample ID: MW-5
Project: Flora Vista 1
Collection Date: 1/26/2024 1:00:00 PM
Lab ID: 2401B54-003 **Matrix:** AQUEOUS **Received Date:** 1/30/2024 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **VP**
Iron	0.20	0.020		mg/L	1	1/31/2024 2:34:15 PM
Manganese	0.25	0.0020	*	mg/L	1	1/31/2024 2:34:15 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JR**
Benzene	ND	2.0		µg/L	2	2/8/2024 4:50:05 PM
Toluene	ND	2.0		µg/L	2	2/8/2024 4:50:05 PM
Ethylbenzene	ND	2.0		µg/L	2	2/8/2024 4:50:05 PM
Xylenes, Total	14	3.0		µg/L	2	2/8/2024 4:50:05 PM
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	2	2/8/2024 4:50:05 PM
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	2	2/8/2024 4:50:05 PM
Surr: Dibromofluoromethane	94.6	70-130		%Rec	2	2/8/2024 4:50:05 PM
Surr: Toluene-d8	97.5	70-130		%Rec	2	2/8/2024 4:50:05 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B54**

22-Feb-24

Client: HILCORP ENERGY

Project: Flora Vista 1

Sample ID: **MB-A**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A102784**	RunNo: **102784**
Prep Date:	Analysis Date: **1/31/2024**	SeqNo: **3797687** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCSLL-A**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **A102784**	RunNo: **102784**
Prep Date:	Analysis Date: **1/31/2024**	SeqNo: **3797688** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020	0.02000	0	98.6	50	150			
Manganese	0.0020	0.0020	0.002000	0	101	50	150			

Sample ID: **LCS-A**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A102784**	RunNo: **102784**
Prep Date:	Analysis Date: **1/31/2024**	SeqNo: **3797689** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	99.5	85	115			
Manganese	0.51	0.0020	0.5000	0	101	85	115			

Sample ID: **2401B54-003BMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-5**	Batch ID: **A102784**	RunNo: **102784**
Prep Date:	Analysis Date: **1/31/2024**	SeqNo: **3798002** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.71	0.020	0.5000	0.1970	103	70	130			
Manganese	0.75	0.0020	0.5000	0.2539	99.4	70	130			

Sample ID: **2401B54-003BMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-5**	Batch ID: **A102784**	RunNo: **102784**
Prep Date:	Analysis Date: **1/31/2024**	SeqNo: **3798006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.70	0.020	0.5000	0.1970	100	70	130	2.15	20	
Manganese	0.75	0.0020	0.5000	0.2539	98.5	70	130	0.588	20	

Sample ID: **MB-C**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **C103095**	RunNo: **103095**
Prep Date:	Analysis Date: **2/14/2024**	SeqNo: **3811411** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B54**

22-Feb-24

Client: HILCORP ENERGY

Project: Flora Vista 1

Sample ID: **MB-C**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **C103095**	RunNo: **103095**
Prep Date:	Analysis Date: **2/14/2024**	SeqNo: **3811411** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCSLL-C**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **C103095**	RunNo: **103095**
Prep Date:	Analysis Date: **2/14/2024**	SeqNo: **3811412** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.023	0.020	0.02000	0	116	50	150			
Manganese	0.0020	0.0020	0.002000	0	100	50	150			

Sample ID: **LCS-C**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **C103095**	RunNo: **103095**
Prep Date:	Analysis Date: **2/14/2024**	SeqNo: **3811413** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	97.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.1	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B54**

22-Feb-24

Client: HILCORP ENERGY

Project: Flora Vista 1

Sample ID: **100NG LCS**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL102970**	RunNo: **102970**
Prep Date:	Analysis Date: **2/8/2024**	SeqNo: **3805562** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	25	1.0	20.00	0	127	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		113	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.3	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: **2401b54-002ams**	SampType: **MS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **MW-3**	Batch ID: **SL102970**	RunNo: **102970**
Prep Date:	Analysis Date: **2/8/2024**	SeqNo: **3805565** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	46	2.0	40.00	0	115	70	130			
Toluene	37	2.0	40.00	0	93.1	70	130			
Surr: 1,2-Dichloroethane-d4	22		20.00		109	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		99.8	70	130			
Surr: Dibromofluoromethane	20		20.00		101	70	130			
Surr: Toluene-d8	20		20.00		97.8	70	130			

Sample ID: **2401b54-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **MW-3**	Batch ID: **SL102970**	RunNo: **102970**
Prep Date:	Analysis Date: **2/8/2024**	SeqNo: **3805566** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	45	2.0	40.00	0	113	70	130	1.50	20	
Toluene	37	2.0	40.00	0	92.6	70	130	0.571	20	
Surr: 1,2-Dichloroethane-d4	23		20.00		115	70	130	0	0	
Surr: 4-Bromofluorobenzene	19		20.00		93.1	70	130	0	0	
Surr: Dibromofluoromethane	21		20.00		106	70	130	0	0	
Surr: Toluene-d8	21		20.00		103	70	130	0	0	

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL102970**	RunNo: **102970**
Prep Date:	Analysis Date: **2/8/2024**	SeqNo: **3805568** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2401B54**

22-Feb-24

Client: HILCORP ENERGY

Project: Flora Vista 1

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL102970**	RunNo: **102970**
Prep Date:	Analysis Date: **2/8/2024**	SeqNo: **3805568** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		115	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.5	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: HILCORP ENERGY Work Order Number: 2401B54 RcptNo: 1

Received By: Juan Rojas 1/30/2024 7:45:00 AM

Completed By: Desiree Dominguez 1/30/2024 8:45:33 AM

Reviewed By: 1/30/24

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
   Samples not frozen
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preserved added to bottles? Yes ☑ No ☐ NA ☐
   HNO3
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 3 (<2 or >12 unless noted)
Adjusted? yes
Checked by: JR 1/30/24

Special Handling (if applicable)

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

Person Notified: ____ Date: ____
By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: ____
Client Instructions: ____

16. Additional remarks: Filtered JR 1/30/24

Poured off and ~~Filered~~ from unpreserved volume for all samples (Lot # 180 60480) and added ~0.4mls HNO3 (Chem # 7342) to all samples - Used 4 filters. JR 1/30/24

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

email or Fax#: Brandon.Sinclair@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name: Flora Vista 1

Project #:

Project Manager: Mitch Killough

Sampler: Brandon Sinclair

On Ice: ~~☐ Yes~~ ☐ No

# of Coolers: 1 4 deg C

Cooler Temp(including CF): 1.9-0.1=1.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2401854	Dissolved Mn and Fe 500ml HDPE*	BTEX 8260 40ml VOA HCl
		Water	~~MW-1~~	Various	Various		X	X
1-26	1400	Water	MW-2	Various	Various	-001	X	X
1-26	1330	Water	MW-3	Various	Various	-002	X	X
		Water	~~MW-4~~	Various	Various		X	X
1-26	1300	Water	MW-5	Various	Various	-003	X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1-29	1649	B Sinclair	CM Wan		1/29/24	1649
1/29/24	1728	CM Wan		courier	1/30/24	7:45

Remarks: *Dissolved Mn and Fe are to be filtered and preserved in the lab.

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 5/9/2024 3:49:28 PM

JOB DESCRIPTION

Flora Vista 1

JOB NUMBER

885-3843-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
5/9/2024 3:49:28 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Laboratory Job ID: 885-3843-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Flora Vista 1

Job ID: 885-3843-1

Job ID: 885-3843-1 Eurofins Albuquerque

Job Narrative
885-3843-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 5/2/2024 7:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.3°C.

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Client Sample ID: MW-2

Date Collected: 04/29/24 12:20
Date Received: 05/02/24 07:20

Lab Sample ID: 885-3843-1

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/06/24 20:23	1
Ethylbenzene	ND		1.0		ug/L			05/06/24 20:23	1
Toluene	ND		1.0		ug/L			05/06/24 20:23	1
Xylenes, Total	ND		1.5		ug/L			05/06/24 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*05/06/24 20:23*	*1*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*05/06/24 20:23*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*05/06/24 20:23*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*05/06/24 20:23*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.0070**		0.0020		mg/L			05/08/24 09:22	1
Iron	ND		0.020		mg/L			05/08/24 09:22	1

Client Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Client Sample ID: MW-3

Date Collected: 04/29/24 11:45
Date Received: 05/02/24 07:20

Lab Sample ID: 885-3843-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			05/06/24 20:52	2
Ethylbenzene	ND		2.0		ug/L			05/06/24 20:52	2
Toluene	ND		2.0		ug/L			05/06/24 20:52	2
Xylenes, Total	ND		3.0		ug/L			05/06/24 20:52	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*05/06/24 20:52*	*2*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*05/06/24 20:52*	*2*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/06/24 20:52*	*2*
Toluene-d8 (Surr)	*84*		*70 - 130*		*05/06/24 20:52*	*2*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.67**		0.010		mg/L			05/08/24 10:11	5
Iron	**0.59**		0.10		mg/L			05/08/24 10:11	5

QC Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-4462/3
Matrix: Water
Analysis Batch: 4462

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			05/06/24 09:54	1
Ethylbenzene	ND		1.0		ug/L			05/06/24 09:54	1
Toluene	ND		1.0		ug/L			05/06/24 09:54	1
Xylenes, Total	ND		1.5		ug/L			05/06/24 09:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*05/06/24 09:54*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*05/06/24 09:54*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*05/06/24 09:54*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*05/06/24 09:54*	*1*

Lab Sample ID: LCS 885-4462/2
Matrix: Water
Analysis Batch: 4462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.1	20.3		ug/L		101	70 - 130		
Toluene			20.2	17.6		ug/L		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*87*		*70 - 130*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 885-4586/18
Matrix: Water
Analysis Batch: 4586

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0020		mg/L			05/08/24 07:05	1
Iron	ND		0.020		mg/L			05/08/24 07:05	1

Lab Sample ID: LCS 885-4586/20
Matrix: Water
Analysis Batch: 4586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Manganese			0.500	0.505		mg/L		101	85 - 115		
Iron			0.500	0.504		mg/L		101	85 - 115		

Lab Sample ID: LLCS 885-4586/19
Matrix: Water
Analysis Batch: 4586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Manganese			0.00200	0.00193	J	mg/L		97	50 - 150		

QC Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LLCS 885-4586/19
Matrix: Water
Analysis Batch: 4586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	0.0200	0.0187	J	mg/L		94	50 - 150

Lab Sample ID: MRL 885-4586/15
Matrix: Water
Analysis Batch: 4586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.00200	0.00197	J	mg/L		99	50 - 150
Iron	0.0200	0.0205	J	mg/L		102	50 - 150

Lab Sample ID: 885-3843-1 MS
Matrix: Water
Analysis Batch: 4586

Client Sample ID: MW-2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.0070		0.500	0.537		mg/L		106	70 - 130
Iron	ND		0.500	0.524		mg/L		105	70 - 130

Lab Sample ID: 885-3843-1 MSD
Matrix: Water
Analysis Batch: 4586

Client Sample ID: MW-2
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	0.0070		0.500	0.538		mg/L		106	70 - 130	0	20
Iron	ND		0.500	0.523		mg/L		105	70 - 130	0	20

Lab Sample ID: 885-3843-2 MS
Matrix: Water
Analysis Batch: 4586

Client Sample ID: MW-3
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.67		0.500	1.17		mg/L		100	70 - 130
Iron	0.59		0.500	1.10		mg/L		102	70 - 130

Lab Sample ID: 885-3843-2 MSD
Matrix: Water
Analysis Batch: 4586

Client Sample ID: MW-3
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	0.67		0.500	1.24		mg/L		114	70 - 130	6	20
Iron	0.59		0.500	1.19		mg/L		120	70 - 130	8	20

QC Association Summary

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

GC/MS VOA

Analysis Batch: 4462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3843-1	MW-2	Total/NA	Water	8260B	
885-3843-2	MW-3	Total/NA	Water	8260B	
MB 885-4462/3	Method Blank	Total/NA	Water	8260B	
LCS 885-4462/2	Lab Control Sample	Total/NA	Water	8260B	

Metals

Filtration Batch: 4347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3843-1	MW-2	Dissolved	Water	Filtration	
885-3843-2	MW-3	Dissolved	Water	Filtration	
885-3843-1 MS	MW-2	Dissolved	Water	Filtration	
885-3843-1 MSD	MW-2	Dissolved	Water	Filtration	
885-3843-2 MS	MW-3	Dissolved	Water	Filtration	
885-3843-2 MSD	MW-3	Dissolved	Water	Filtration	

Analysis Batch: 4586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3843-1	MW-2	Dissolved	Water	200.7 Rev 4.4	4347
885-3843-2	MW-3	Dissolved	Water	200.7 Rev 4.4	4347
MB 885-4586/18	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 885-4586/20	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LLCS 885-4586/19	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
MRL 885-4586/15	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
885-3843-1 MS	MW-2	Dissolved	Water	200.7 Rev 4.4	4347
885-3843-1 MSD	MW-2	Dissolved	Water	200.7 Rev 4.4	4347
885-3843-2 MS	MW-3	Dissolved	Water	200.7 Rev 4.4	4347
885-3843-2 MSD	MW-3	Dissolved	Water	200.7 Rev 4.4	4347

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Client Sample ID: MW-2

Lab Sample ID: 885-3843-1

Date Collected: 04/29/24 12:20
Matrix: Water
Date Received: 05/02/24 07:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	4462	JR	EET ALB	05/06/24 20:23
Dissolved	Filtration	Filtration			4347	TC	EET ALB	05/03/24 12:19
Dissolved	Analysis	200.7 Rev 4.4		1	4586	VP	EET ALB	05/08/24 09:22

Client Sample ID: MW-3

Lab Sample ID: 885-3843-2

Date Collected: 04/29/24 11:45
Matrix: Water
Date Received: 05/02/24 07:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	4462	JR	EET ALB	05/06/24 20:52
Dissolved	Filtration	Filtration			4347	TC	EET ALB	05/03/24 12:19
Dissolved	Analysis	200.7 Rev 4.4		5	4586	VP	EET ALB	05/08/24 10:11

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-3843-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

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

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4		Water	Iron
200.7 Rev 4.4		Water	Manganese
8260B		Water	Benzene
8260B		Water	Ethylbenzene
8260B		Water	Toluene
8260B		Water	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

email or Fax#: Brandon.Sinclair@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

Flora Vista 1

Project #:

Project Manager:

Mitch Killough

Sampler: Brandon Sinclair

On Ice: X Yes ☐ No

# of Coolers: 1 marty

Cooler Temp(including CF): 5.3+0 = 5.3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87

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

885-3843 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	Analysis Request: Dissolved Mn and Fe 500ml HDPE*	Analysis Request: BTEX 8260 40ml VOA HCl
		~~Water~~	~~MW-1~~	Various	Various		X	X
4-29	1220	Water	MW-2	Various	Various		X	X
4-29	1145	Water	MW-3	Various	Various		X	X
		~~Water~~	~~MW-4~~	Various	Various		X	X
		~~Water~~	~~MW-5~~	~~Various~~	Various		X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/1/24	1700				5/1/24	1700
5/1/24	1745			courier	5/2/24	7:20

Remarks: *Dissolved Mn and Fe are to be filtered and preserved in the lab.

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

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

email or Fax#: Brandon.Sinclair@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

Flora Vista 1

Project #:

Project Manager:

Mitch Killough

Sampler: Brandon Sinclair

On Ice: X Yes ☐ No

# of Coolers: 1 marty

Cooler Temp(including CF): 5.3+0 = 5.3 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87

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

885-3843 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	Dissolved Mn and Fe 500ml HDPE*	BTEX 8260 40ml VOA HCl
		~~Water~~	~~MW-1~~	Various	Various		X	X
4-29	1220	Water	MW-2	Various	Various		X	X
4-29	1145	Water	MW-3	Various	Various		X	X
		~~Water~~	~~MW-4~~	Various	Various		X	X
		~~Water~~	~~MW-5~~	~~Various~~	Various		X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/1/24	1700				5/1/24	1700
Date:	Time:	Relinquished by:	Received by:	Via: courier	Date	Time
5/1/24	1745				5/2/24	7:20

Remarks: *Dissolved Mn and Fe are to be filtered and preserved in the lab.

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-3843-1

Login Number: 3843 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Dominguez, Desiree

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mitch Killough
Hilcorp Energy
PO BOX 4700
Farmington, New Mexico 87499

Generated 8/22/2024 5:39:03 PM

JOB DESCRIPTION

Flora Vista 1

JOB NUMBER

885-9202-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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8/22/2024 5:39:03 PM

Authorized for release by
Michelle Garcia, Project Manager
michelle.garcia@et.eurofinsus.com
(505)345-3975

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Laboratory Job ID: 885-9202-1

Table of Contents

Definitions/Glossary

Client: Hilcorp Energy
Job ID: 885-9202-1
Project/Site: Flora Vista 1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Hilcorp Energy
Project: Flora Vista 1

Job ID: 885-9202-1

Job ID: 885-9202-1 Eurofins Albuquerque

Job Narrative
885-9202-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 8/6/2024 6:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

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

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

Client Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Client Sample ID: MW-2

Date Collected: 08/05/24 15:10
Date Received: 08/06/24 06:40

Lab Sample ID: 885-9202-1

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.0		0.010		mg/L			08/21/24 11:21	5

Client Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Client Sample ID: MW-3

Date Collected: 08/05/24 14:30
Date Received: 08/06/24 06:40

Lab Sample ID: 885-9202-2

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			08/13/24 04:21	2
Ethylbenzene	ND		2.0		ug/L			08/13/24 04:21	2
Toluene	ND		2.0		ug/L			08/13/24 04:21	2
Xylenes, Total	ND		3.0		ug/L			08/13/24 04:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/13/24 04:21*	*2*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/13/24 04:21*	*2*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/13/24 04:21*	*2*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/13/24 04:21*	*2*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.32**		0.010		mg/L			08/21/24 11:23	5
Iron	ND		0.10		mg/L			08/21/24 11:23	5

Client Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Client Sample ID: MW-4

Date Collected: 08/05/24 14:00
Date Received: 08/06/24 06:40

Lab Sample ID: 885-9202-3

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/13/24 04:45	1
Ethylbenzene	ND		1.0		ug/L			08/13/24 04:45	1
Toluene	ND		1.0		ug/L			08/13/24 04:45	1
Xylenes, Total	ND		1.5		ug/L			08/13/24 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*08/13/24 04:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/13/24 04:45*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/13/24 04:45*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/13/24 04:45*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**2.7**		0.020		mg/L			08/21/24 12:02	10
Iron	**0.52**		0.20		mg/L			08/21/24 12:02	10

Client Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Client Sample ID: MW-5

Date Collected: 08/05/24 15:35
Date Received: 08/06/24 06:40

Lab Sample ID: 885-9202-4

Matrix: Water

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.5**		2.0		ug/L			08/13/24 05:10	2
Ethylbenzene	**130**		2.0		ug/L			08/13/24 05:10	2
Toluene	ND		2.0		ug/L			08/13/24 05:10	2
Xylenes, Total	**1600**		30		ug/L			08/14/24 14:56	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/13/24 05:10*	*2*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/13/24 05:10*	*2*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/13/24 05:10*	*2*
Toluene-d8 (Surr)	*120*		*70 - 130*		*08/13/24 05:10*	*2*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**2.0**		0.020		mg/L			08/21/24 12:10	10
Iron	**1.5**		0.20		mg/L			08/21/24 12:10	10

QC Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 885-10078/34
Matrix: Water
Analysis Batch: 10078

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/13/24 01:06	1
Ethylbenzene	ND		1.0		ug/L			08/13/24 01:06	1
Toluene	ND		1.0		ug/L			08/13/24 01:06	1
Xylenes, Total	ND		1.5		ug/L			08/13/24 01:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*08/13/24 01:06*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*08/13/24 01:06*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*08/13/24 01:06*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/13/24 01:06*	*1*

Lab Sample ID: MB 885-10078/4
Matrix: Water
Analysis Batch: 10078

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/12/24 12:51	1
Ethylbenzene	ND		1.0		ug/L			08/12/24 12:51	1
Toluene	ND		1.0		ug/L			08/12/24 12:51	1
Xylenes, Total	ND		1.5		ug/L			08/12/24 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*08/12/24 12:51*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/12/24 12:51*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/12/24 12:51*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/12/24 12:51*	*1*

Lab Sample ID: STOBLK 885-10078/49
Matrix: Water
Analysis Batch: 10078

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	STOBLK Result	STOBLK Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/13/24 07:36	1
Ethylbenzene	ND		1.0		ug/L			08/13/24 07:36	1
Toluene	ND		1.0		ug/L			08/13/24 07:36	1
Xylenes, Total	ND		1.5		ug/L			08/13/24 07:36	1

Surrogate	*STOBLK %Recovery*	*STOBLK Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/13/24 07:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/13/24 07:36*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/13/24 07:36*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/13/24 07:36*	*1*

QC Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 885-10078/33
Matrix: Water
Analysis Batch: 10078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.1	22.4		ug/L		111	70 - 130		
Toluene			20.2	20.5		ug/L		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 885-10258/4
Matrix: Water
Analysis Batch: 10258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/14/24 12:05	1
Ethylbenzene	ND		1.0		ug/L			08/14/24 12:05	1
Toluene	ND		1.0		ug/L			08/14/24 12:05	1
Xylenes, Total	ND		1.5		ug/L			08/14/24 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*08/14/24 12:05*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*08/14/24 12:05*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/14/24 12:05*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*08/14/24 12:05*	*1*

Lab Sample ID: LCS 885-10258/3
Matrix: Water
Analysis Batch: 10258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			20.1	22.1		ug/L		110	70 - 130		
Toluene			20.2	20.7		ug/L		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 885-10706/86
Matrix: Water
Analysis Batch: 10706

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0020		mg/L			08/21/24 11:04	1
Iron	ND		0.020		mg/L			08/21/24 11:04	1

QC Sample Results

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LCS 885-10706/88
Matrix: Water
Analysis Batch: 10706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.500	0.478		mg/L		96	85 - 115
Iron	0.500	0.476		mg/L		95	85 - 115

Lab Sample ID: LLCS 885-10706/89
Matrix: Water
Analysis Batch: 10706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.00200	0.00179	J	mg/L		89	50 - 150
Iron	0.0200	0.0226		mg/L		113	50 - 150

Lab Sample ID: MRL 885-10706/14
Matrix: Water
Analysis Batch: 10706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	0.00200	0.00186	J	mg/L		93	50 - 150
Iron	0.0200	0.0170	J	mg/L		85	50 - 150

QC Association Summary

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

GC/MS VOA

Analysis Batch: 10078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9202-2	MW-3	Total/NA	Water	8260B	
885-9202-3	MW-4	Total/NA	Water	8260B	
885-9202-4	MW-5	Total/NA	Water	8260B	
MB 885-10078/34	Method Blank	Total/NA	Water	8260B	
MB 885-10078/4	Method Blank	Total/NA	Water	8260B	
STOBLK 885-10078/49	Method Blank	Total/NA	Water	8260B	
LCS 885-10078/33	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 10258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9202-4	MW-5	Total/NA	Water	8260B	
MB 885-10258/4	Method Blank	Total/NA	Water	8260B	
LCS 885-10258/3	Lab Control Sample	Total/NA	Water	8260B	

Metals

Filtration Batch: 9806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9202-1	MW-2	Dissolved	Water	Filtration	
885-9202-2	MW-3	Dissolved	Water	Filtration	
885-9202-3	MW-4	Dissolved	Water	Filtration	
885-9202-4	MW-5	Dissolved	Water	Filtration	

Analysis Batch: 10706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-9202-1	MW-2	Dissolved	Water	200.7 Rev 4.4	9806
885-9202-2	MW-3	Dissolved	Water	200.7 Rev 4.4	9806
885-9202-3	MW-4	Dissolved	Water	200.7 Rev 4.4	9806
885-9202-4	MW-5	Dissolved	Water	200.7 Rev 4.4	9806
MB 885-10706/86	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 885-10706/88	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LLCS 885-10706/89	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
MRL 885-10706/14	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

Lab Chronicle

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Client Sample ID: MW-2

Lab Sample ID: 885-9202-1
Matrix: Water
Date Collected: 08/05/24 15:10
Date Received: 08/06/24 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			9806	TC	EET ALB	08/06/24 11:26
Dissolved	Analysis	200.7 Rev 4.4		5	10706	VP	EET ALB	08/21/24 11:21

Client Sample ID: MW-3

Lab Sample ID: 885-9202-2
Matrix: Water
Date Collected: 08/05/24 14:30
Date Received: 08/06/24 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	10078	CM	EET ALB	08/13/24 04:21
Dissolved	Filtration	Filtration			9806	TC	EET ALB	08/06/24 11:26
Dissolved	Analysis	200.7 Rev 4.4		5	10706	VP	EET ALB	08/21/24 11:23

Client Sample ID: MW-4

Lab Sample ID: 885-9202-3
Matrix: Water
Date Collected: 08/05/24 14:00
Date Received: 08/06/24 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	10078	CM	EET ALB	08/13/24 04:45
Dissolved	Filtration	Filtration			9806	TC	EET ALB	08/06/24 11:26
Dissolved	Analysis	200.7 Rev 4.4		10	10706	VP	EET ALB	08/21/24 12:02

Client Sample ID: MW-5

Lab Sample ID: 885-9202-4
Matrix: Water
Date Collected: 08/05/24 15:35
Date Received: 08/06/24 06:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		2	10078	CM	EET ALB	08/13/24 05:10
Total/NA	Analysis	8260B		20	10258	CM	EET ALB	08/14/24 14:56
Dissolved	Filtration	Filtration			9806	TC	EET ALB	08/06/24 11:26
Dissolved	Analysis	200.7 Rev 4.4		10	10706	VP	EET ALB	08/21/24 12:10

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Hilcorp Energy
Project/Site: Flora Vista 1

Job ID: 885-9202-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

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

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4		Water	Iron
200.7 Rev 4.4		Water	Manganese
8260B		Water	Benzene
8260B		Water	Ethylbenzene
8260B		Water	Toluene
8260B		Water	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Chain-of-Custody Record

Client: Hilcorp Farmington NM

Mailing Address: 382 Road 3100 Aztec, NM 87410

Billing Address: PO Box 61529 Houston, TX 77208

Phone #: 505-486-9543

email or Fax#: Brandon.Sinclair@hilcorp.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

Flora Vista 1

Project #:

Project Manager:

Mitch Killough

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.1 - 0.1 = 2.0 °C

yogi

HALL ENVIRONMENTAL ANALYSIS LABOR

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 8710

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

885-9202 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	Dissolved Mn and Fe 500ml HDPE*	BTEX 8260 40ml VOA HCl	Dissolved Mn
~~8-5~~	~~1510~~	~~Water~~	~~MW-1~~	Various	~~Various~~		X	X	
8-5	1510	Water	MW-2	(1) 500ml Plastic	Cool	1			X
"	1430	Water	MW-3	Various	Various	2	X	X	
"	1400	Water	MW-4	Various	Various	3	X	X	
"	1535	Water	MW-5	Various	Various	4	X	X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/5/24	1553				8/5/24	1553
8/5/24	1720			Courier	8/16/24	10:40

Remarks: *Dissolved Mn and Fe are to be filtered and preserved in the lab.

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

Login Sample Receipt Checklist

Client: Hilcorp Energy Job Number: 885-9202-1

Login Number: 9202 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 418269
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Flora Vista #1 Annual Groundwater Report for 2024: content unsatisfactory 1. OCD notes that MW-1 has not been sampled since 2022 due to low volume in the well or well could not be located. Please propose a contingency plan for sampling the well once located, or re-drill well, or drill an adjacent well. MW-1 still conveys concentrations for BTEX above WQCC regulatory standards. 2. Due to drinking water standards per EPA, documentation is required showing attempt to contact landowner to sample domestic wells. Please provide proof of that during next sampling event. 3. Continue to sample groundwater monitoring wells: MW-1, MW-3, MW-4, MW-5 for BTEX, dissolved iron and manganese, on a semi annual schedule. 4. Submit the 2025 annual groundwater monitoring report to OCD by April 1, 2026.	4/29/2025